

Explanatory note

I. GENERAL

This project is intended as part of the passive and active measures for protection and the approved technical solutions to ensure fire safety for the work performed onsite.

It has been developed pursuant to article 4, clause 1 of REGULATION No. Iz -1971 /29.10.2009 ref. CONSTRUCTION ENGINEERING NORMS AND RULES FOR FIRE SAFETY (effective as from 05-06-2010, promulgated in the official gazette DV No. 96/ 04.12.2009, amended DV No.17/ 02.03.2010).

The following shall be ensured for the purposes of fire safety onsite:

- Structural stability for a specific period of time;
- Measures required to confine propagation of fire and smoke through the site;
- Measures to confine fire distribution to adjacent construction sites;
- Conditions shall be provided for the employees working on the facilities to enable their exit from the site or be rescued using other means;
- Conditions shall be provided for safe access by rescue teams;
- Conditions shall be provided for protection of community's property;

This project was developed at the request of the Employer- Sandanski Municipality, based on:

- Structural project part ;
- Hydro engineering project part

The objective of this project is to specify actions required to ensure fire safety during preventive clearing and reinforcement of the banks and the riverbed of Sandanska Bistritsa River in the section at v. Lilyanovo, Sandanski municipality. The project is intended to provide the required flow of the river in the section upstream and downstream of the bridge via corrective concrete walls shaping the cross sectional profile of the river, 12 m wide. The project is category III as per the Territories development act. The walls have different lengths depending on the terrain and identical cross section and foundation depth, H=1,5, base of gravel and large boulders.

The first section of the riverbed has obstructions of the flow and potential hazard of bank erosion downstream the little bridge at the HMS No.51540 point. Only the left side bank is subjected to erosion and we have planned its reinforcement using a line of gabions 2x1x1 m, 37 m long.

The second section endangered by erosion is 400 m away from the bridge downstream, 20 m long; we have planned its reinforcement using gabions 2x1x1 m.

The third section endangered by erosion is also situated on the right side bank, 53 m long.

The project will be completed using materials with quality assessment and certificates of conformity with the significant requirements , as provided for in the Technical requirements to products act.

II. SPECIAL PART

1. Passive measures for fire safety

- 1.1 The structure of the corrective walls is degree 1 fire resistance, determined as per Table No.3 – article 12, clause 1 – regulation Iz-1971 ref. Construction engineering fire safety rules and standards, (promulgated DV No.96/year 2009)
- 1.2 As per article 8, clause 1, Table No.1, regulation Iz-1971 ref. Construction engineering fire safety rules and standards, the project is of functional fire class F5, category of fire hazard F5e.
- 1.3 The structure of the corrective walls is degree I of fire resistance, considering the parameters in Table No.3 -article 12, clause 1 of regulation Iz-1971 ref. Construction engineering fire safety rules and standards
- 1.4 The structure of the corrective walls and reinforcing facilities was designed based on readily available data from testing of construction materials and structures in reference to behavior in the conditions of fire.

2. Active measure for fire safety

2.1 As per appendix No.1- article 3, clause 1 - regulation Iz-1971 ref. Construction engineering fire safety rules and standards, there is no requirement for the subject site to be provided with a fixed fire annunciation system, therefore this type of system was excluded.

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2.3 No alarm system with a specific audible alarm is required for this site.

2.4 Facilities are ventilated naturally, no heating will be provided. No smoke and heat removal required.

2.5 Fire water supply

2.5.1 External source of firewater

As per regulation Iz-1971 ref. Construction engineering fire safety rules and standards, this site requires no external source of firewater supply; excluded from the project.

2.5.2 Onsite firewater supply

No onsite firewater supply is required; excluded from the project.

2.6 As per appendix No.2- article 3, clause 2 - regulation Iz-1971 ref. Construction engineering fire safety rules and standards, the site needs no technical devices for primary fire response . In the progress of reconstruction and rehabilitation, the site will be provided with a specific fire depot with

two dry powder fire extinguishers , ABC, 6 kg ; two CO2 fire extinguishers , 5 kg; and two water suction pumps with primers / two water based fire extinguishers 9 l. the location of the fire depot has been shown in the graphic part of the project.

2.7 Evacuation emergency lighting system is excluded from the project.

2.8 These facilities are group one "Normal fire hazard"

Prepared by: architect Bilyana Tumbeva

I, the undersigned Blaga Hadzhieva, Personal ID # 7105310010, do hereby certify that the foregoing translation from Bulgarian into English of the attached document, and namely: Explanatory note, is true and correct to the best of my knowledge. The translation comprises 3 (three) pages.

Translator:

Blaga Hadzhieva

Personal ID # 7105310010