

Abstract

Engineering geological conditions of selected road cuts of the D7 highway between Prague and Louny.

The aim of the thesis is to evaluate the engineering geological conditions of selected cut sections of the D7 highway and the continuing road I/7 on the track between Prague and Louny, respectively between road kilometers 9 and 49. Due to many influences, there are significant engineering geological phenomena occurring in the line sections of line constructions, which in many cases have an adverse effect on the maintenance of road and traffic. In the framework of this thesis archive research of geological map, project and electronic materials were done, on the basis of which the general characteristics of the territory of interest were processed. Geomorphological, geological and hydrogeological conditions were described, influenced by historical mining, slope deformations and anthropogenic activity were included. Field reconnaissance and geological documentation of cut sections including available outcrops were continuously conducted. General description of individual cut sections and detailed engineering geological documentation of selected sections was elaborated. Documentation also includes the processing of characteristic engineering geological sections. The results of the diploma thesis could be further used for the optimisation of cut sections in similar areas, proposal of remediation measures and in some cases also as a basis for the extension of cut sections within the transformation of the first class road to the D7 highway.