

TECHNICAL REPORT – MODERNIZATION OF STREETS, SETTING UP CYCLE TRACKS IN THE TOWN OF JIMBOLIA

Goal of the project

Examination of the works realized on the streets and cycle tracks in the town of Jimbolia, from the point of view of the conformity of the technical characteristics and the materials with the specifications of the technical documentation based on which the works had been performed

Short description of the project

The non-conformities presented in detail in the reception report drawn up at the completion of the works were verified based on the design characteristics stipulated by the project.

Project implemented by

The City Hall of the town of Jimbolia

Implementation period

2015-2016

Main activities

- site inspection of the works;
- sampling of 400 x 400mm square cores;
- sampling of Ø 100mm cylindrical cores;
- realization of open soundings in the road pavement, down to the formation level, on the location where square cores were taken;
- determination of the road pavement composition (types of layers, thicknesses of layers);
- determination of the bituminous pavement thickness;
- verification of the quality of the asphalt mixture in the bituminous layers through laboratory tests on the samples takes (bitumen content, particle size distribution in the natural aggregate, apparent density, rate of compaction, water absorption, Marshall stability, flow index, stability-flow ratio).

Financed through/by

City Hall of the town of Jimbolia



Results

- the bitumen content of the cores sampled from the realized pavement is inferior to the one stipulated by the standard SR 174 - 1 - 2009 (5,5...7,0%) on several streets (7 samples out of the 9 analyzed).
- the bitumen content on the samples taken from the realized pavement is generally inferior to the one stipulated by the standard SR 174 - 1 - 2009 (5,5...7,0% for B.A. 25, and respectively 6,5...7,5% for B.A. 8);
- the rate of compaction does not range between the limits stipulated by the technical prescriptions (min. 96 %, according to SR 174 - 1 - 2009);
- the real water absorption (on samples taken from the bituminous layers) does not range between the limits stipulated by the technical norms (2...5% vol., according to SR 174 - 1 - 2009);

Applicability and transferability of the results

Alternative technical solutions are taken into consideration in order to valorize the realized works, taking adequate maintenance and operations measures. The realized works can be accepted provided that their operation behavior is carefully watched during the entire design life. To this purpose, a concrete follow up program is to be drawn up. The administrator of the realized transport infrastructures will take the due measures to implement the follow up program of the time behavior, and to perform the required maintenance works respectively.

Research Centre

Research Centre of Infrastructures for Constructions and Transportation – ICT-

Research team

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