National Road B 31 – The Realization of a Privately Financed Project

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Summary

One of the first privately financed projects in Germany was the national road B 31 East between Freiburg and Kirchzarten. This infrastructure project not only helps realize an efficient traffic concept but permits a further development of the infrastructure of the city of Freiburg as well.

As a direct result of the project, the overground East-West traffic is drastically reduced. This is achieved by directing the main traffic underground. Two double-cell tunnels (850 m and 1230 m) and two noise insulation galleries (275 m and 640 m) were planned. These have been built in the inner city part of the project. The outer city part of the infrastructure project consists of five bridges including a number of noise insulation walls.

The tunnels have been constructed using both the ‚cover and cut' as well as the ‚cut and cover' method. High security standards have been applied including a very sophisticated traffic control system.

These aspects, which are of importance in densely populated areas, are outlined in the paper.

Keywords: privately financed project, infrastructure, concrete bridges, tunnels.

1. History

The national road B 31 is the most important East-West connection in the south-western part of Germany. It links the motorway A 5 (Karlsruhe – Basel) with the A 81 (Stuttgart – Singen / Schaffhausen). The road B 31 East, which passes through the city of Freiburg and continues to Donaueschingen, plays a significant role in the Black Forest region from the touristic point of view as well.

The idea of an efficient bypass through the city of Freiburg was born a long time ago. Since 1978 extensive preliminary designs for traffic concepts have been carried out.

The concept was to unite the conflicting goals of efficient traffic flow with an improved quality of life while at the same time respecting the environment. The finally developed traffic concept includes the following goals:

- Lessening of traffic
- Promotion of public transport
- Promotion of bicycle paths
- Traffic channelling into specific lanes
- Management of parking spaces

Due to the importance of the project, a very time-consuming process of authorization of the preliminary design followed. During this process the requests of several organizations as well as the concerns of the

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