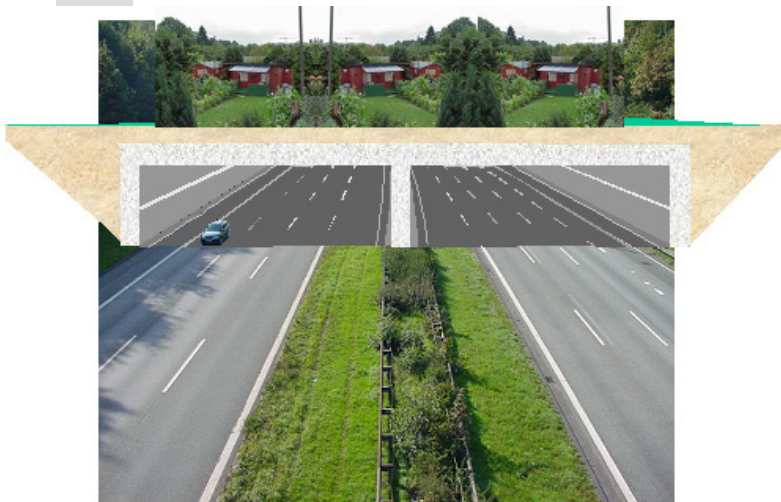


## Reference projects

- Project:** Federal Motorway A7 – Noise control within the area Othmarschen/Bahrenfeld  
- Comparative study regarding the costing
- Project duration:** September 2003 to September 2004
- Order volume:** 130,000 Euros
- Production costs:** 108 to 211m Euros
- Client:** Free and Hanseatic City of Hamburg, Department for Urban Development and Environment (BSU), Office for Construction and Operation, Structural Engineering
- Short description:** The Federal Transport Network Plan 2003 provides for an extension of the Federal Motorway A7 from three to four lanes for each direction, starting at the interchange Bordesholm and reaching to the junction Hamburg-Othmarschen. The scheme is classified as „high priority“. It will be financed according to the operator model (so called A-model).
- In the course of a comparative study and on the basis of existing noise precaution designs between the junction Hamburg-Volkspark and the junction Hamburg-Othmarschen, an independent cost assessment has to be prepared for different alternatives, as for example, conventional noise abatement walls, tunnel structures on which other structures can be built and translucent overhead noise barriers.



In detail, the following services were rendered:

- Design of tunnel options in massive concrete structure
  - Design of overhead noise barrier alternatives with translucent ceiling constructions
  - Market research regarding overhead noise barriers
  - Determination of the operational equipment
- Evaluation of the quantities and costs for the different alternatives of the structural and systems engineering
  - Evaluation of the replacement costs (total cash value) from the construction, maintenance, renewal as well as operating costs
  - Compilation of the additional costs for the Free and Hanseatic City of Hamburg

- Presentation of the results during a colloquium with the responsible specialised authorities, the political councils of Altona, the Hamburg Chamber of Commerce and the action groups.