

NH-2 from Varanasi to Aurangabad, India



Services:

- Feasibility Study
- Topographical Surveys With GPS
- Traffic Surveys
- Soils And Materials Investigations
- Environmental Impact Assessment
- Environmental Monitoring Plan
- Socio-Economic Survey / Resettlement Plan
- Preliminary And Detailed Design
- Tender Documents (World Bank Format)

Project period: 1998 - 2001

Client: National Highways Authority of India

Financing: World Bank

The work was carried out by COWI in joint venture with SPAN Consultants, Private Limited, New Delhi.

The project, located in Uttar Pradesh and Bihar involves the expansion and strengthening of the existing two lane stretches of the Delhi - Calcutta section of National Highway No. 2 from Varanasi in Uttar Pradesh to Aurangaba in Bihar from two to four lanes - totally 191 km. The widening included design of more than 60 bridges and an additional 3 km road brigdes across River Sone and includes the longest bridge in India - 3,061 m- as well as 4-5 other bridges with spans 60-100 m.

The alignment of the NH2 dates back to the 16th century and was origingly built by the emperor Sher Shah Suri to link Calcutta with Delhi and further to Peshawar. Today the highway is an important link from Delhi to Calcutta and the north-eastern provinces.

The entire section traverses the flat flood plains of Ganga and Sone rivers. The surrounding terrain is rich agriculture land with a number of small townships. The road carries a heavy traffic, mainly consisting of lorries.

Both flexible and rigid pavement design was used to increase the

roads bearing capacity. The flexible pavement consisted of bituminous concrete wearing course, overlaying a dense bituminous macadam. The rigid pavement was designed using IRC 58-1988 for a 30 year life. The rigid pavement consisted of a portland cement concrete layer overlaying a dry lean concrete layer.

