

Ethiopia Reference



Period: 2009-2011
Client: Ethiopian Roads Authority
Donor: Own financing
GMCB Contract: 1.5 mio. USD
Person Months: 35

Detailed Engineering Design and Supervision of Awash Bridge and Adaitu Bridge

Description

Awash Bridge (132 m) is located 225 km and Adaitu Bridge (113 m) is located 485 km from Addis Ababa on Addis Ababa-Djibouti Road.

Phase I: Detailed engineering design for rehabilitation measures for existing Awash Bridge and Adaitu Bridge comprising detailed condition survey, determination of residual load bearing capacity, recommendation on required bridge rehabilitation works, preparation of bill of quantities and cost estimate of rehabilitation measures. The two bridges are very critical for the important transport corridor and the Client wanted an additional bridge at each of the two deep river crossings. Proposals (comprising discussion and recommendation of new alternative river crossings, determination and recommendation of the optimum solution, preparation of preliminary and detailed engineering design of the selected alternatives, tender documents and cost estimate) were prepared for three alternative bridge

locations and bridge type at each of the two crossings.

Phase II: Construction supervision for rehabilitation works for existing and alternative new bridges.

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Phase I: For the detailed rehabilitation design of the two existing bridges structural condition survey is to be carried out to assess the adequacy of the structure for the waterways, load bearing capacity, service life, and evaluate the requirements for repair, rehabilitation and/or reconstruction of structures showing distress and identify any defect on the structure and evaluate the extent of damages. For the design of new alternative bridges geotechnical investigations, topographical survey, hydrology/hydraulics studies for 3 alternatives at each river crossing are to be carried out, followed by preparation of detailed design and tender documents for the selected alternatives and assist with the tender evaluation and contract negotiations.

Phase II: Supervision of construction works for the existing and new bridges.



For further information please visit our website or contact:

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