



Temburong Bridge, Brunei – A new 30km road link

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Summary

The new 30km Cadangan Projek Jambatan Temburong (Temburong Bridge Project) in Brunei will connect the relatively isolated district of Temburong with the more developed Brunei-Muara district. Improved connectivity will enhance the movement of labour, goods and services to and from Temburong, and will facilitate the development of eco-tourism in the area.

The paper describes the objectives of the project, the project planning, the procurement strategy and the design for the various structures. Details are provided on the overall design criteria following Eurocodes, the seismic analysis, and the construction planning.

Keywords: project planning, sea-crossing, procurement, Eurocodes

1. Introduction

Temburong District is isolated from the rest of Brunei by the Brunei Bay to the north, and Malaysian state of Sarawak to the south, east and west. Its only land-based access is the road that passes through Limbang, Sarawak. Its isolated location and lack of connectivity with the main commercial districts of Brunei and the associated port and airport infrastructure essential for global trade and commerce has constrained the economic growth in the district.

The Cadangan Projek Jambatan Temburong (Temburong Bridge Project) in Brunei will connect Temburong with the more developed Brunei-Muara district. Improved connectivity will enhance the movement of labour, goods and services to and from Temburong, and will facilitate the development of eco-tourism in the area.

The new 30km link will comprise 14,6km long marine viaducts and cable stayed bridges across Brunei Bay, 12km of elevated structures across the Temburong peat swamp forest and a small area of mangroves, and approximately 3,6km road in Brunei-Muara district where 3 lengths of tunnels are required as well as at-grade roads and viaduct ramps to link with the existing road network. The construction is planned to commence in 2014 with completion targeted in 2018. The key challenges include very soft ground conditions, shallow waters, difficult access, lack of local raw materials and the required fast-track programme.



Fig. 1: Layout Plan of Temburong Bridge