



Design of the Bataan-Cavite Interlink Bridge (BCIB) Project in The Philippines

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Abstract

The new 32-kilometer Bataan–Cavite Interlink Bridge (BCIB) Project in the Philippines is poised to be a vital, enduring transportation link over the Manila Bay, providing a major opportunity for local economic growth and tourism while supporting the flourishing growth in population.

The proposed infrastructure will incorporate a marine bridge comprised of two cable-stayed bridges with main spans of 900 meters and 400 meters, respectively, and 25 kilometres of marine viaducts in tandem with an additional 5 kilometres of approach roads and land viaducts.

This paper describes how the bridge is being designed for longevity and durability under extreme events, including large earthquakes, typhoons, vessel collision, and hydrodynamic forces.

Keywords: cable-stayed bridges, high seismic zone, tsunami, innovations, long-span bridges



Figure 1. Bataan-Cavite Interlink Bridge Rendering (Credit: TYLin)

1 Introduction

Designed for a 100-year design life and durability under extreme events, including large earthquakes, typhoons, vessel collision, and hydrodynamic forces, the new Bataan–Cavite

Interlink Bridge (BCIB) in the Philippines is poised to be a vital, enduring transportation link over the famous Manila Bay. At 32 km in length, including two long-span cable-stayed bridges, this project significantly reduces travel times, traffic congestion, and emissions while providing a major opportunity for local economic growth and tourism.