Kampala Flyovers – Structural Technical Review

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Abstract

The Kampala Flyovers Project is a major infrastructural scheme in Uganda, which will relieve congestion in the City's Metropolitan Area, allowing for the ease of traffic flow through the International Corridor linking Kenya with the land-locked central African countries. The conceptual and detailed structural design for the Project is independently reviewed and checked to assure the quality, feasibility and maintenance objectives are achieved. The value of the independent technical review and check is presented in this publication.

Keywords: structural technical review, post-tensioned concrete, viaduct, steel, footbridges.

1 Introduction

The Kampala Flyovers Project (Project) in Uganda will allow to mitigate congestion within the Greater Kampala Metropolitan Area. The Project consists of construction of the two major flyovers and multilevel crossings at Kitgum House and Clock Tower Junctions, construction of two landmark footbridges, widening of Mukwano Road and improvements of interfacing roads and junctions.

The Project is founded by the Japan International Cooperation Agency (JICA) and the detailed design works are carried out by the Joint Venture comprising Nippon Koei and ICS Engineering & Environment (Designer). The Ultimate Client (Client) Uganda National Roads Authority (UNRA) commissioned Arup (Reviewer) to undertake the structural technical review of the Project.



Figure 1. International Corridor through Kampala.

2 Structural technical review

The objectives of the independent structural technical review are to ensure that feasibility, durability and structural design complies with the Ugandan Design Standards and Eurocodes and follow the "good engineering practice". This is to give assurance that the design that is going to be constructed is best value for the Client.

The detailed design and the structural technical review to date have been undertaken for the Package 1 of the Project as shown in Figure 2.



Figure 2. Plan view of Kampala Flyovers Project.