



Regional Road North Part (Section 1) – Interchange 1 & 5

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Summary

The Ministry of Public Works in Kuwait awarded a contract for the Study, Design and Supervision of the Construction and Maintenance of the Regional Road North Part (Section 1) to the joint venture of Louis Berger SAS and Al Dowailah. Apia XXI has been assigned by Louis Berger SAS to undertake the design of the Interchanges 1 & 5.

Interchange 1, situated between South Access of Mutla City and Southeast Link Road is a four level semi-directional junction. The interchange is formed by 8 ramps and 2 main bridges.

Interchange 5, located between Abdaly Road and West-Northeast Link Road is also a four level semi-directional junction composed of 6 ramps, two main bridges, 2 flyovers and 2 bridges over the existing rail lines.

Keywords: Prestressing, ramps, interchange, bents, rheological phenomena, Kuwait

1. Introduction

The Study, Design and Supervision of the Construction and Maintenance of the Regional Road North Part (Section 1) is about the design of a high capacity motorway (4 lanes each way) between Mutla city and Irak border line. The mission of this project is to develop the north area of the country where population is expected to grow significantly.

As proposed, the Regional Road will ultimately provide a high speed and high capacity link between Kuwait's trading partners, the international axis being linked with the metropolitan road network (the 6th, 7th and 8th Ring Roads) via a series of grade separated, free flow interchanges.

Along the link roads, there are interchanges at existing road crossings, required to provide access to existing military and oil industry facilities as well as to the proposed Mutla'a City. (west access to Mutla'a). There are 21 interchanges along the motorway. Most of the interchanges are 2-level interchanges or roundabouts which require short bridges (2 or 3 spans). However, interchanges 1 and 5 are 4-level interchanges which require very long ramp bridges. Interchanges 1&5 are the first 4-level interchanges designed so far in Kuwait.