

KINGSVALE OVERHEAD BRIDGE

Client: Ministry of Transportation and Highways

Description: The Kingsvale Overhead on the Coquihalla Highway is a three span structure crossing rail and roadway built on a horizontal and vertical curve. The scope of work at the time included a design concept submission before a three span, simple span girder system was selected. Because of difficult access at the time of construction, the girders used were segmental precast beams, post-tensioned on site. It is interesting to note that the selection of a hammerhead pier design on this project was made to reduce the skew of the superstructure while maintaining the maximum possible clearance over the railway line. The pier caps projected up between the ends of the girders to provide sufficient structural depth and were prestressed to carry the dead weight of the deck and the live load. The prestressing of the pier heads did extend the construction time as the concrete was required to attain sufficient strength to permit the prestressing to take place.