

Jamaican Rum Train Tunnels Jamaica Railway Corporation (JRC)

Location:	Montego Bay, Jamaica
Date:	2017
Structure:	Existing Hard Rock Tunnels (9 tunnels)
Length:	2899 ft (884 m) (lined), 1457 ft (444 m) (unlined)
Cross-Section:	Varies
Geology:	Limestone
Cost:	~\$1-billion
Client:	HNTB
Owner:	Jamaica Railway Corporation (JRC)

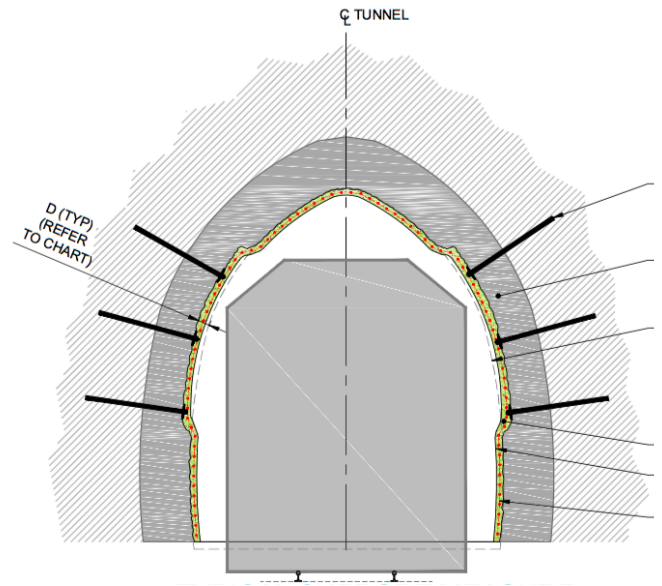


Figure 1. Example of optimized tunnel profiles for new clearance envelope.

Inspection and Engineering Support Services:

The Jamaican Rum Train is planned to be operated using the existing railroad alignment from Montego Bay to the Appleton Estate. The existing railroad from Porus to Montego Bay opened in 1894 and runs for a total length of 66 miles, which includes several tunnels and bridges. In order to assess the suitability of the existing rail infrastructure to accommodate the new rail line, a thorough evaluation of the conditions of the various structures was required. The \$1-billion cost estimate includes re-establishing of the old rail service including tracks, bridges, tunnels as well stations but also miscellaneous makeover projects such as a new road from Montego Bay, St James, to the Siloah location in St. Elizabeth.

Gall Zeidler Consultants (GZ) was retained by HNTB who in turn provided services to Construction Company Herzog to assess the conditions of the existing tunnels and provide rehabilitation measures at a conceptual level to achieve the required clearance and allow for safe operation of the new rail line through the existing tunnels. This early stage design was used to develop a rough order construction cost estimate (ROM) to evaluate the feasibility of the project for both JRC and Herzog.



Figure 2. Lined Ramble Tunnel.