

Memo

Onze referentie
999.20.00A/RZ/JV/M130046

Onderwerp
George Massey tunnel

Datum
8 April 2013

Aan
Board TEC

Betreft
Visit Report

Van
René Zijlstra
C.c.
HdW/TEC Archief

1 VISIT REPORT TEC

Organisation: Ministry of Transportation, British Columbia Canada
By: Hans de Wit, René Zijlstra
Date: 4 April 2013

2 INTRODUCTION

Last year a political announcement was made by the premier of the BC state to replace the George Massey tunnel. This immersed tunnel has been constructed in the late 50's. Concerns around it's capability to deal with seismic events, but for more important the heavy congestion that occurs daily, has led to the conclusion something has to be done. Delcan (a former DHV company) has approached TEC for this and we have suggested to make a presentation to the Client to introduce TEC and to update the Client on the state of art in immersed tunnelling. Delcan has arranged such a meeting subsequently.

3 PRESENTATION

A presentation has been prepared and with the help of senior staff of Delcan (Mark Mulvihill and Ken Curry) has been tailored to serve actual questions Client has regarding the structure. On April 3rd the presentation has been finalised and a visit to the Massey tunnel was arranged, allowing us to get a better understanding of the situation, structure and operation of the tunnel. April 4th a meeting was organised with 11 attendants from the Ministry of Transportation, among which a few important decision making officials, like the regional director, regional managers and the program director for the Massey Tunnel replacement. The presentation contained the following chapters:

- Introduction
- Recent developments in immersed tunnelling
- Massey tunnel
- Key issues and considerations
- Q&A

Besides general information about immersed tunnelling special attention has been given to tunnel safety, earthquake resistance design and comparison with bridge solutions, which are among the most important issues the Ministry is dealing with.

4 RESULT AND FOLLOW-UP

At the end of the meeting attendants, especially the high-ranking officials indicated the presentation was an eye-opener to them. They further indicated that with this information a tunnel option, either as full replacement or as addition to the existing one, again had become a viable option, where before they actually had disregarded that option, with a new bridge being the only viable solution.

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George Massey tunnel

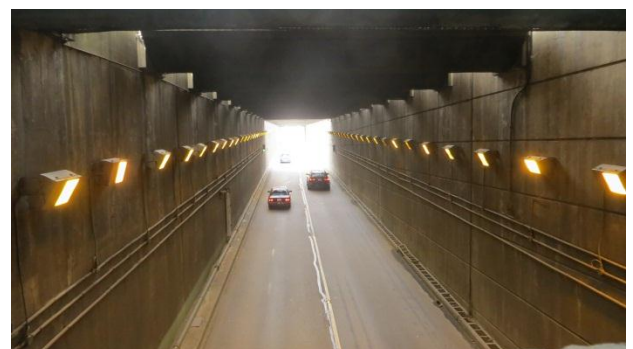
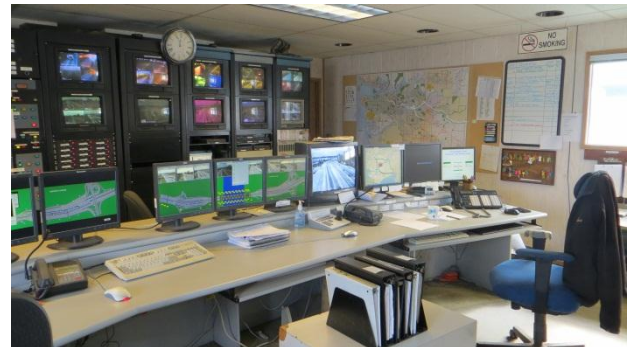
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Evaluating with Delcan's staff, we found the outcome to be very positive and promising. Based on the questions asked during the presentation, we may expect some small questions to be put to us, mainly aiming at understanding the current tunnel structure better. For sure, TEC's reputation as a highly knowledgeable company for immersed tunnels has been reinstated with the Ministry of Transportation.

Annex 1 – Photo's



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Annex 2 – List of participants of BC Ministry of Transport

Name	Title
Kevin Baskin	Chief Bridge Engineer
Derek Drummond	Assistant regional manager
Geoff Freer	Executive Director, South Fraser Perimeter Road
Don Gillespie	Manager Geotechnical Engineering
Lina Halwani	Regional Manager Egeineering
Wim Jellema	Manager bridges&structural engineering
Patrick Livolsi	Regional Director
Timothee Merle d'Aubigne	Associate Project Director
David Mintak	Regional Manager
Jay Porter	Senior Project Manager
Ian Sturrock	Senior Bridge design&construction