

23 December 2015

**By Post & by Email**

Our Ref: G3232/11/1814

Hong Kong Special Administrative Region of  
the People's Republic of China  
Legislative Council  
Legislative Council Complex  
1 Legislative Council Road  
Central  
HONG KONG

For the attention of Ms Sophie LAU (Clerk to Select Committee)

Dear Ms Lau,

**Select Committee to Inquire into the Background of and  
Reasons for the Delay of the Construction of the Hong Kong Section of the  
Guangzhou-Shenzhen-Hong Kong Express Rail Link ("Select Committee")  
Request for Further Information**

We refer to your letter ref. CB7/SC/13 dated 13 November 2015 requesting further information in respect of the 3 question as listed in the Appendix of your letter. We are pleased to reply as follows:

**Question (a)**

**Paragraph 92 of the joint Written Statement of Mr Anthony KING and Mr. William NG formally produced at the hearing on 10 November 2015 ("the Written Statement") mentioned that, in the Monthly Progress Report ("MPR") of March 2012 provided to the Highways Department ("HyD"), Jacobs ".....would strongly recommend that the MTR Corporation Limited ("the Corporation") now undertakes a complete appraisal of the overall Project Programme and the current delay situation throughout the whole of the Project." Please advise: -**

- (i) **the number of times Jacobs had requested (both verbally and in writing), through HyD, the "overall Project Programme" from the Corporation up to mid-April 2014 and the relevant dates and the feedback from, or follow-up actions taken by, HyD, if any, and when;**
1. Jacobs recommended that MTRCL either provide or up-date the Project Master Programme (PMP) on at least 17 occasions from April 2011 to April 2014 through Monthly Progress Reports to HyD. In that period Jacobs also commented on PMP related issues, the Track Related Installation Programme (TRIP) and Testing and Commissioning (T&C) proposals.
  2. Jacobs raised similar programme related issues through the "Issue List". The "Issue List" was updated regularly and sent to HyD. HyD forwarded the issue lists to MTRCL and requested MTRCL to respond to the issues raised by Jacobs, including the provision of the updated PMP. HyD requested Jacobs to review MTRCL's responses and note for future M&V if necessary.

3. In August 2011, following a Request for Documents (RFD), Jacobs received a copy of the programme entitled "MTRCL's Master Programme for XRL Project (July 2011)" from MTRCL via HyD. Jacobs carried out a review of that Programme. In its review, Jacobs raised concerns regarding 16 issues it believed were deficiencies in the Programme, including that it was not an integrated and co-ordinated programme but a collection of individual contract programmes for Civil and E&M works.
4. Jacobs requested copies of three PMP related programmes through the RFD process in April 2013. However, MTRCL advised that it was not appropriate to issue these as the overall programme was not finalized.
5. Jacobs also raised comments, similar to those raised in Jacobs monthly progress report, in briefing notes for the monthly Project Supervision Committee (PSC) meetings.
6. Jacobs received feedback from HyD when Jacobs presented and discussed the programme and progress information at the monthly progress meetings with HyD. In the discussion HyD indicated that they had taken account of our concerns in their discussions with MTRCL.

**(ii) whether the aforementioned recommendation is one of the substantive issues considered by Jacobs that required response from the Corporation. If yes, whether the Corporation has responded to the recommendation and the details of the response, if any.**

1. The Independent Expert Panel, in its report of December 2014, recommended in Para 7.6 that MTRCL should develop and maintain an integrated master programme. The report then describes the details as well as how it should be used and reported to Government. Accordingly, Jacobs considers this a substantive issue.
2. MTRCL provided a PMP for Jacobs review in August 2011, which Jacobs reported on, as set out above. MTRCL also tabled the PMP at the Programme Audits. During those Audits, Jacobs discussed the PMP with MTRCL but copies were not retained by Jacobs at the end of the discussion.
3. MTRCL continued to report progress against percentage of works complete but without reference to the critical path. MTRCL advised in:
  - a. reports;
  - b. responses to the Issues List; and
  - c. comments at audit prior to 2013,

that it believed delays could be recovered by the use of delay recovery methods.

## Question (b)

**Mr. Anthony KING referred to paragraph 51 of the Written Statement at the hearing which provides, inter alia, that prior to a site visit Jacobs will advise any particular part of the works or activity that it wishes to observe and nominates particular site records it wishes to see. Please advise the particular part of the works or activity that Jacobs has observed during each site visit, the summary of observations or comments made by Jacobs relating to each site visit and the feedbacks from or follow-up actions taken by HyD, if any.**

1. Up to April 2014, with HyD, Jacobs made 611 visits to the XRL construction sites. A schedule, up to April 2014, is attached.
2. Jacobs would have verbal communication with the MTRCL construction teams for the different contracts, prior to the preparation of the monthly site visit programme. Jacobs would advise MTRCL the locations and works Jacobs/HyD would like to visit and discuss the availability of all those locations and works. The format of these visits was normally a presentation by the MTRCL site specific Contract Management (CM) team followed by a site walk to look at specific areas. The visits were to interface with MTRCL site personnel, observe site activities, verify against MTRCL's reporting and to gain a better understanding of certain identified construction issues.
3. Jacobs' reports were factual, setting out observations on site to support information gathered from other sources to use in Jacobs reporting to HyD.

## Question (c)

**In a letter dated 12 January 2010, Jacobs informed HyD that according to its further review report no. G/3152/213/069 review on Consultancy Agreement No. C801 Civil and Structural Scheme Design Report Geotechnical Engineering Report (Deliverable No. 2.4A) for WKT (the West Kowloon Terminus), there of the additional observations made on the review were considered critical which needed the Corporation's earlier attention (see Annex). Please advise the details of the three observations which are considered critical by Jacobs and whether, in Jacobs' opinion, the issues and/or relevant works referred to in the three observations have attributed to the delay of the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project.**

The three observations included in that report arose from a review of the Civil and Structural Scheme Design Report – Geotechnical Engineering Report. They related to:-

- Rock bearing capacities adopted in the foundation design.

*"The results of 4 trial piles may not provide sufficient conclusive evidence that the presumed allowable vertical bearing capacities of Grade 111 or better rock and Grade 11 or better rock may be enhanced by 2,500 kPa in each case given that the current allowable bearing capacities in the COP for Foundations are based on extensive empirical correlations. Evidence of the ongoing consultation with BD and GEO on the recommended site specific allowable bearing pressures should be provided."*

- Formation of rock sockets for DWalls.

*"The report proposes that diaphragm walls be adopted as temporary and permanent lateral support of the WKT sub-surface structures. The diaphragm walls are also proposed to support part of the vertical compression loads of the structure and hence will be founded on rock. However the report proposes that the diaphragm walls are not socketed into the rock owing to the difficulty in forming the sockets but does not elaborate the difficulty or justify the reason for not specifying sockets."*

- Structural faults in the bedrock.

*"The report mentions that the possibility of the presence of structural faults in the bedrock and associated deep weathering will result in substantial variations in the founding levels of foundations. Although the report provides inferred rockhead contour plans derived from borehole data, it does not indicate any interpretation of faulting as may be derived from known regional faults and extrapolation of surface features from both sides of the harbour."*

MTRCL responded to these comments, which refer to structural design issues, by giving explanations of the further action they would take to ensure the integrity of the WKT structure. As such these issues were not of a programme nature.

We trust the above addresses your questions and if you require any further information, please do not hesitate to contact us.

Yours sincerely,  
For and on behalf of Jacobs China Limited



William NG  
Project Manager

WN/cyy

Encl. Site Visit Schedule Jan 2011 - Apr 2014

Site Visits Schedule from January 2011 - April 2014

	802	803A	803B	803C	803D	805	810A	810B	811A	811B	816A	816B	816C	816D	820	821	821 Shek Yam	822	822 Shing Mun	822 Pat Heung	823A	823B	824	825	826	826 Huangang Park	830	830 Nam Cheong	841A	845	856	847	849		
Jan-11	✓	✓	✓	✓	✓	✓			✓	✓					✓	✓		✓			✓	✓	✓	✓	✓										
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Sep-11	✓	✓	✓	✓	✓	✓		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
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Jan-14	✓					✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										
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