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Transport and **Housing Bureau Government Secretariat**

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9 June 2014 By Email and Fax

本局檔號 OUR REF.:

THB(T) L4/6/291 來承檔號 YOUR REF.:

Secretary General Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road Central, Hong Kong (Attn.: Ms Sophie LAU)

(Fax no.: 2978 7569)

Dear Ms Lau,

Legislative Council Panel on Transport Meeting on 11 April 2014 855TH – Road Improvement Works for **West Kowloon Reclamation Development (Phase 1)**

Supplementary Information

At the meeting of the Legislative Council Panel on Transport on 11 April 2014, some members requested the Administration to provide supplementary information on the captioned project. Our reply is as follows –

(1) Comparison of the Volume/Capacity Ratio before and after Completion of the Proposed Road Improvement Schemes

Generally speaking, the traffic management ability of a road system depends on the number of lanes provided by the road, or the reserve capacity (RC)¹ or design flow/capacity (DFC) ratio² of the road junction.

The traffic condition of a signal-controlled junction is indicated by its reserve capacity (RC). A positive RC figure indicates the junction is operating with spare capacity. A negative RC figure indicates the junction is overloaded, resulting in traffic queues and longer travel time.

As regards a relatively long carriageway without any junctions (e.g. the North Lantau Highway), its volume/capacity (v/c) ratio³ can better indicate the traffic management ability. However, in an urban road network, the traffic management ability of the roads concerned largely depends on the traffic situation of the road junctions.

As the road network of the West Kowloon Reclamation Development (WKRD) area covers various signal-controlled junctions, changes in the RC of the key junctions can reflect more effectively the traffic benefits brought about by the current proposed project. Therefore, we provided the relevant figures in paragraph 7 of the paper submitted for the captioned meeting.

(2) Cost of the Proposed Road Improvement Schemes

The scope of the construction of non-railway works for the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (i.e. 57TR project) covers the implementation of essential public infrastructure works, such as construction of footbridges, subways, a depressed road system and roads, but not the four road improvement schemes under the proposed project. The approved estimate of the 57TR project does not include the funding of \$813.1 million being sought for the current road improvement schemes.

(3) Findings of the Traffic Study Report

To cater for the traffic demand generated by the WKRD area, the Transport Department completed the "West Kowloon Reclamation Development Traffic Study" in 2009. A copy of the report was submitted to the Legislative Council Secretariat on 30 November 2009. The study report recommended a series of traffic improvement schemes, including the current road improvement schemes for which funding is being sought, with a view to relieving the anticipated congestion in some road junctions of the WKRD area in due course.

Subject to the support of the Public Works Subcommittee and the funding approval of the Finance Committee, we plan to commence construction works in mid-2014 and expect to complete the major works by 2017. Upon

Design flow/capacity (DFC) ratio is a design parameter which measures the degree of saturation of traffic at a priority junction (controlled by "Stop" or "Give Way" traffic signs and/or the associated road markings). A DFC ratio above 1 indicates the presence of traffic queues. A DFC ratio of 0.85 is generally used in junction design where possible.

Volume/capacity (v/c) ratio is an indication of the traffic conditions of roads during peak hours. A v/c ratio equal to or less than 1.0 is considered acceptable. A v/c ratio between 1.0 and 1.2 indicates a manageable degree of congestion. A v/c ratio above 1.2 indicates more serious congestion.

completion of the relevant improvement works, the traffic in the WKRD area would be significantly improved.

Yours sincerely,

(Nicky NG) for Secretary for Transport and Housing

c.c.

Director of Highways (Attn.: Mr Raymond KONG) (Fax. no.: 2714 5198)