For discussion on 15 January 2021

Legislative Council Panel on Transport

856TH – Flyover from Kwai Tsing Interchange Upramp to Kwai Chung Road

PURPOSE

This paper seeks Members' views on the funding application for upgrading **856TH** "Flyover from Kwai Tsing Interchange Upramp to Kwai Chung Road" (the Project) to Category A.

PROJECT SCOPE AND NATURE

- 2. The proposed scope of works under the Project includes
 - (a) widening of a section of Tsuen Wan Road southbound traffic lane of approximately 85 metres (m) in length between Kwai Tsing Interchange upramp and Kwai Chung Road;
 - (b) construction of a single-lane vehicular bridge of approximately 370 m in length connecting Tusen Wan Road southbound fast lane (near the Kwai Tsing Interchange upramp) to Kwai Chung Road;
 - (c) construction of noise barriers at the vehicular bridge as stated in item 2(b);
 - (d) demolition and reprovisioning of the existing Footbridge No. NF303 and provision of lifts;
 - (e) relocation of the bus stop next to Footbridge No. NF303 and associated footpath reconstruction;
 - (f) reconstruction of a section of road at Kwai Chung Road and Container Port Road South; and

- implementation of ancillary works including public lighting, drainage, landscaping, etc. and carrying out environmental mitigation measures and an environmental monitoring and audit programme (EM&A) for the works mentioned in items 2 (a) to (f) above.
- 3. A layout plan and artist's impression of the Project are at **Annex**.
- 4. We plan to commence the proposed works upon obtaining funding approval from the Finance Committee (FC) for target completion in around 4 years. To commence the construction works as soon as possible, the Highways Department (HyD) will initiate parallel tendering for the construction works contract in January 2021 but will only award the contract after obtaining funding approval from the FC.

JUSTIFICATIONS

- 5. Tsuen Wan Road carries substantial traffic flow from the Northwest New Territories to and from Kowloon via Tsuen Wan, and is an important part of the transportation network of Hong Kong. Vehicles travelling from Kwai Chung and Tsing Yi to Kowloon need to merge into the slow lane of Tsuen Wan Road via the Kwai Tsing Interchange upramp before entering Kwai Chung Road.
- 6. At present, the traffic at the section of Tsuen Wan Road (Kowloon-bound) between the Kwai Tsing Interchange upramp and Kwai Chung Road during the morning peak hours on weekdays is heavily congested, making it difficult for the large amount of vehicles travelling from Kwai Tsing Interchange upramp to merge into the slow lane of Tsuen Wan Road. The queue of vehicles waiting at the Kwai Tsing Interchange upramp to merge into Tsuen Wan Road occasionally extends to the nearby Hing Fong Road and Kwai Fuk Road, causing traffic congestion in the vicinity.
- 7. In view of the above, we propose to widen a section of Tsuen Wan Road southbound traffic lane between Kwai Tsing Interchange upramp and Kwai Chung Road and construct a single-lane vehicular bridge connecting Tsuen Wan Road southbound fast lane to Kwai Chung Road, so as to allow vehicles travelling on the fast lane of Tsuen Wan Road to access Kwai Chung Road via the new vehicular bridge. Upon completion of the

Project, vehicles travelling from the Kwai Tsing Interchange upramp will no longer need to merge into the slow lane of Tsuen Wan Road, which will reduce the traffic congestion at the Kwai Tsing Interchange upramp.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the Project to be about \$537.0 million in money-of-the-day (MOD) prices.

PUBLIC CONSULTATION

- 9. The Civil Engineering and Development Department (CEDD) consulted the Traffic and Transport Committee (the Committee) of the Kwai Tsing District Council on the Project on 11 December 2014, which was generally supported by the Committee members. Subsequently, the HyD continued to implement the Project and consulted the Committee on the design of the Project through circulation paper in March 2017, during which no objection was received.
- 10. We gazetted the scheme and plan of the Project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 3 and 10 November 2017. During the statutory period, no objection was received and the scheme was subsequently authorised. The relevant authorisation notice was gazetted on 2 and 9 February 2018.
- 11. The HyD has consulted the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS)¹ on the aesthetic design of the vehicular bridges and the footbridge of the Project. The ACABAS accepted the proposed aesthetic design.

ACABAS comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, the Architectural Services Department, the HyD, the Housing Department, the CEDD, and a representative from an architecture or relevant faculty of a local academic institution. It is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and enclosures, from the aesthetic and visual impact points of view.

ENVIRONMENTAL IMPLICATIONS

- 12. The Project is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and an Environmental Permit (EP) is required for the construction and operation of the Project. The EIA report for the Project was approved on 3 August 2015 and an EP was issued on 2 August 2017 under the EIA Ordinance. The EIA report concluded that with the implementation of the recommended mitigation measures, the environmental impact of the Project could be controlled within the criteria under the EIA Ordinance and the Technical Memorandum on the EIA Process.
- 13. HyD implement the mitigation The shall measures recommended in the approved EIA report and the EM&A programme during the construction phase. These measures mainly include the adoption of quiet construction equipment and movable temporary noise barriers to minimise the noise impact brought by the construction, regular water spraying for dust control, the installation of temporary drainage pipes to control the run-off from the construction site, and setting up of community The mitigation measures to be implemented during the liaison groups. operation phase mainly include low-noise road surfacing and installation of noise barriers. The HyD has included the cost for the implementation of the necessary environmental mitigation measures and the EM&A programme in the project estimate.
- 14. During the planning and design stages, the HyD has considered all the design and construction procedures with a view to reducing the generation of construction waste as far as possible. In addition, the HyD will require the contractor to reuse inert construction waste (e.g. use of excavated materials for backfilling) on site or in other suitable construction sites as far as possible in order to minimise the disposal of inert construction waste at public fill reception facilities². The HyD will encourage the contractor to maximise the use of recycled / recyclable inert construction waste, and the use of non-timber formwork.
- During the construction stage, the HyD will require the contractor to submit for the Government's approval a plan setting out the waste management measures, which will include appropriate mitigation measures to avoid, reduce, reuse and recycle inert construction waste. The HyD will ensure that the day-to-day operations on site comply with the

Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

approved plan and will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The HyD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

16. The HyD estimates that the Project will generate an approximate total of 4,761 tonnes of construction waste. Of these, 1,053 tonnes (22.1%) of inert construction waste will be reused on site, while 3,090 tonnes (64.9%) of inert construction waste will be delivered to public fill reception facilities for subsequent reuse. The remaining 618 tonnes (13.0%) of non-inert construction waste will be disposed at landfills. The total cost for accommodating the construction waste at public fill reception facilities and landfill sites is estimated to be about \$342,990 for the Project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

17. The Project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

18. The Project does not require acquisition of private land.

TREE IMPLICATIONS

19. There are 162 trees within the project boundary, among which 32 trees will be preserved. The proposed works will involve removal of 130 trees, including 106 trees to be felled and 24 trees to be transplanted to the proximity of the project boundary. It has been confirmed that all affected trees are not important trees³. The HyD will incorporate planting proposals into the Project, including the compensatory planting of 106 new trees.

TRAFFIC IMPLICATIONS

20. The Project will not cause significant traffic impact during construction. To facilitate the related construction works, the HyD will implement temporary traffic arrangements (TTA) and set up a traffic management liaison group to discuss and vet the TTA. This group comprises representatives from the contractor, the Hong Kong Police Force, the Transport Department and other relevant government departments. The HyD will specify requirements for implementing the TTA in the works contracts to minimise the traffic impact during construction. The HyD will also display publicity boards on site, providing details of the TTA and the anticipated completion date of individual sections of works. In addition, the HyD will set up a telephone hotline for public enquiries or complaints.

BACKGROUND

21. The Project was upgraded to Category B in September 2011. The CEDD engaged an engineering consultant to undertake the investigation study from July 2012 to September 2016. The total cost of the investigation study is about \$3.77 million, funded by block allocation **Subhead 7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme".

[&]quot;Important trees" refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

⁽a) trees of 100 years old or above;

⁽b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of important events;

⁽c) trees of precious or rare species;

⁽d) trees of outstanding forms (taking account of overall tree sizes, shapes and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitats (e.g. old stone retaining walls); or

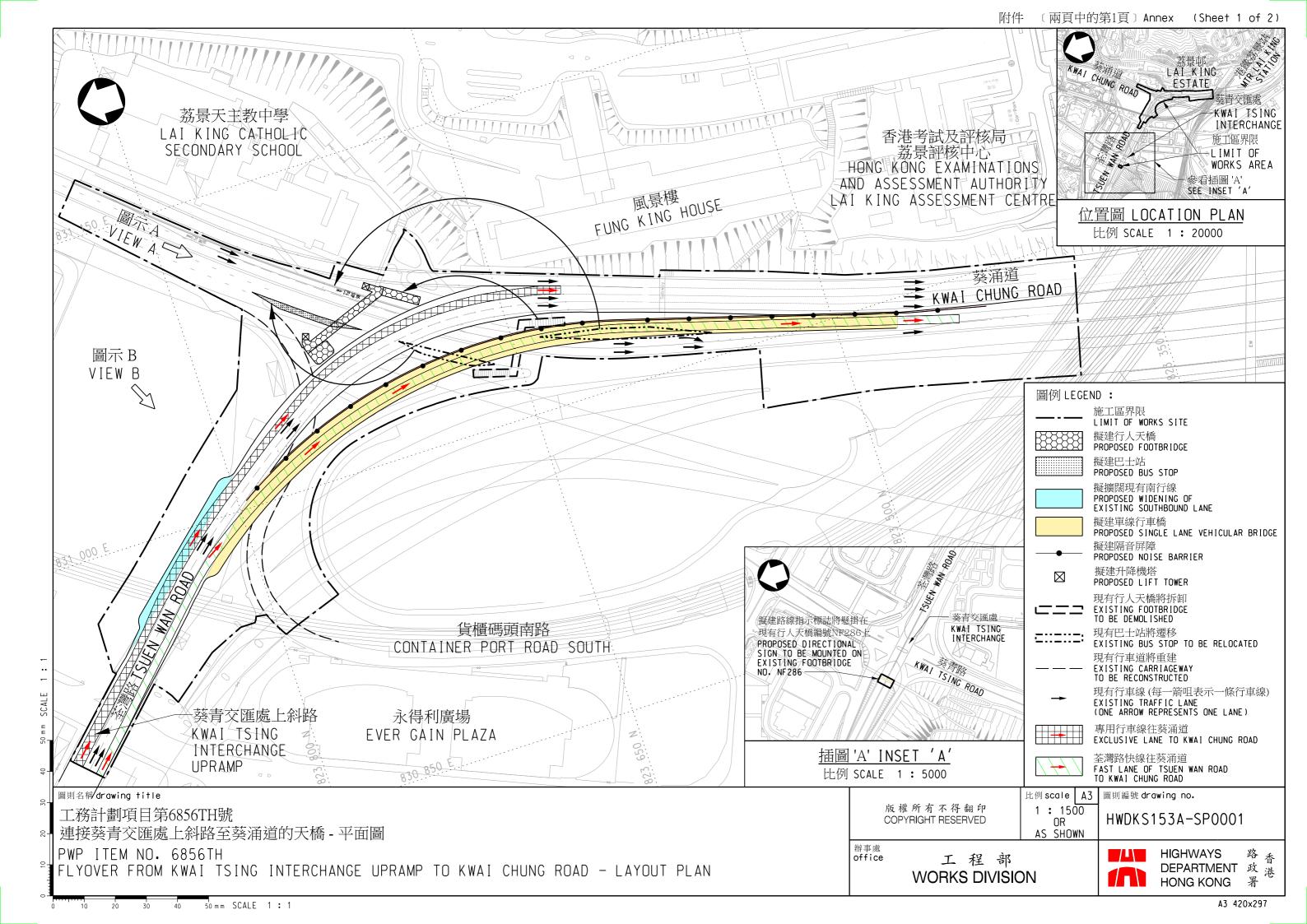
⁽e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

22. The HyD continued to implement the Project and engaged an engineering consultant in September 2016 to undertake the site investigation and detailed design works of the Project at a total cost of about \$5.2 million. This amount will be charged to block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". The site investigation and detailed design works have been completed.

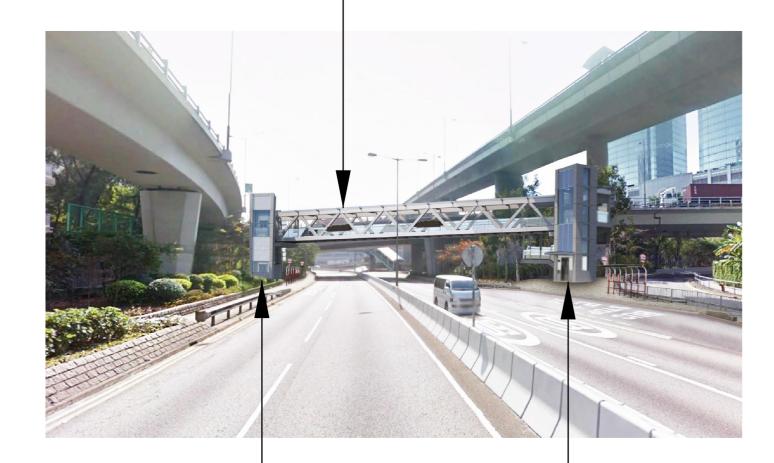
WAY FORWARD

After consulting the Panel on Transport, we plan to submit the proposal for upgrading the project of **856TH** as mentioned in paragraph 2 above to Category A to the Public Works Subcommittee to seek its support, and to seek funding approval from the FC in this legislative session.

Transport and Housing Bureau Highways Department January 2021



擬建單線行車橋 PROPOSED SINGLE LANE VEHICLUAR BRIDGE



擬建升降機塔及升降機 PROPOSED LIFT TOWER AND LIFT

擬建升降機塔及升降機 PROPOSED LIFT TOWER AND LIFT

擬建隔音屏障 PROPOSED NOISE BARRIER

擬擴闊現有南行線 PROPOSED WIDENING OF EXISTING SOUTHBOUND LANE

圖示 B VIEW B

圖示 A VIEW A

圖則名稱 drawing title

工務計劃項目第856TH號

連接葵青交匯處上斜路至葵涌道的天橋 - 構思圖

PWP ITEM NO. 856TH

FLYOVER FROM KWAI TSING INTERCHANGE UPRAMP TO KWAI CHUNG ROAD - ARTIST'S IMPRESSION

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比例 scale | A3 |

圖則編號 drawing no.

不適用 N/A

HWDKS153A-SP0002

辦事處 office

工程部 **WORKS DIVISION**



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