

**For discussion
on 23 January 2018**

Legislative Council Panel on Development

365WF – Siu Ho Wan water treatment works extension

PURPOSE

This paper briefs Members on the proposal to upgrade part of **365WF**, entitled “**Siu Ho Wan water treatment works extension**” (the Project) to Category A at an estimated cost of \$111.5 million in money-of-the-day (MOD) prices to carry out investigation study, design and associated site investigation works for the Siu Ho Wan water treatment works (SHWWTW) extension.

PROJECT SCOPE

2. The part of **365WF** which we propose to upgrade to Category A comprises:-

- (a) detailed study on the water treatment process and operation of the SHWWTW and its proposed extension, and on the raw water transfer systems to cater for the proposed increase in the output of SHWWTW;
- (b) environmental review, impact assessment on traffic, geotechnical, drainage, hydraulic and other relevant assessments¹;

¹ Other relevant assessments include assessments to the condition of existing waterworks facilities in associated with the operation of the SHWWTW, such as the condition of the existing raw water mains along South Lantau Road.

- (c) detailed design for the proposed extension of the SHWWTW, and the Siu Ho Wan raw water booster pumping station, improvement and uprating of the existing raw water supply systems; and other associated works including engineering, environmental mitigation works and landscaping works;
- (d) associated site investigation works and supervision; and
- (e) preparation of tender documents and assessment of tenders for the associated site investigation works and the future construction works for the Project.

A location plan of the Project is at **Enclosure 1**.

3. Subject to funding approval of the Finance Committee (FC), we plan to engage consultants to carry out the investigation study, design and associated site investigation works in the second quarter of 2018 for completion in the second quarter of 2021.

4. We will retain the remainder of **365WF** in Category B, which mainly comprises the construction of the proposed works described in paragraph 2(c) above. We will seek funding for the remainder of **365WF** at a later stage.

JUSTIFICATION

5. The SHWWTW was commissioned in 1996 with a design water treatment capacity of 150 000 cubic metres (m³) per day to provide reliable fresh water supply to developments in North Lantau including the Hong Kong International Airport and the Tung Chung New Town.

6. Subsequent to the launching of development proposals in North Lantau, including the Hong Kong International Airport Three-Runway System, the increase in water demand will render the existing water treatment capacity of the SHWWTW be exceeded by 2025. In view of this, WSD proposes to implement the Project to expand the water treatment capacity of the SHWWTW to 300 000 m³ per day, which could meet the ultimate water demand of North Lantau, and increase

correspondingly the transfer capacity of the associated raw water supply systems. Expansion strategy to tie in with future water demand buildup will be formulated in this investigation study.

7. To meet the programme of the above-mentioned development proposals, we need to commence the site investigation and detailed design for the Project in the second quarter of 2018 for completion by the second quarter of 2021. We propose to engage consultants to undertake the proposed investigation study and detailed design, as well as to supervise the associated site investigation works.

FINANCIAL IMPLICATIONS

8. We estimate the cost of the proposed investigation study, design and site investigation works to be \$111.5 million in MOD prices.

PUBLIC CONSULTATION

9. We consulted the Tourism, Agriculture, Fisheries and Environmental Hygiene Committee of the Islands District Council on 27 November 2017 on the proposed investigation study, design and associated site investigation works. Members generally supported the proposal.

ENVIRONMENTAL IMPLICATIONS

10. The proposed investigation study, design and associated site investigation works are not designated projects under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499), but form part of the “Siu Ho Wan water treatment works extension” project which is a designated project under Schedule 2 of the EIA Ordinance. We carried out an EIA study² for uprating the SHWWTW from a capacity of 150 000 m³ per day to 300 000 m³ per day and the EIA report was approved by the Director of Environmental Protection in December 2004 with an Environmental

² We carried out an investigation study, which included an EIA study, in 2004 for uprating the SHWWTW (see paragraph 15).

Permit issued in January 2005. With the implementation of the recommended pollution control measures, the approved EIA report concluded that the proposed site investigation and construction activities will not cause any adverse environmental impacts. We have included in the project estimate the cost of implementing suitable mitigation measures to control short-term environmental impacts arising from the site investigation works.

11. The proposed site investigation works will only generate very little construction waste. We will require the consultants to fully consider measures to minimise the generation of construction waste and to reuse or recycle construction waste as much as possible in the future implementation of the Project.

HERITAGE IMPLICATIONS

12. The proposed investigation study, design and associated site investigation works 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

13. The proposed investigation study, design and site investigation works will not require any land acquisition.

TRAFFIC IMPLICATIONS

14. The proposed investigation study, design and associated site investigation works will not have significant impact on traffic.

BACKGROUND

15. In view of the potential development and thus anticipated water demand increase in the North Lantau based on forecast made in 2001, we carried out an investigation study in 2004 for upgrading the SHWWTW from a water treatment capacity of 150 000 m³ to 300 000 m³ per day. The investigation study was funded by block allocation **Subhead 9100WX** “Waterworks, studies and investigations for items in Category D of the Public Works Programme” at an amount of \$9.8 million. The investigation study was completed in 2005.

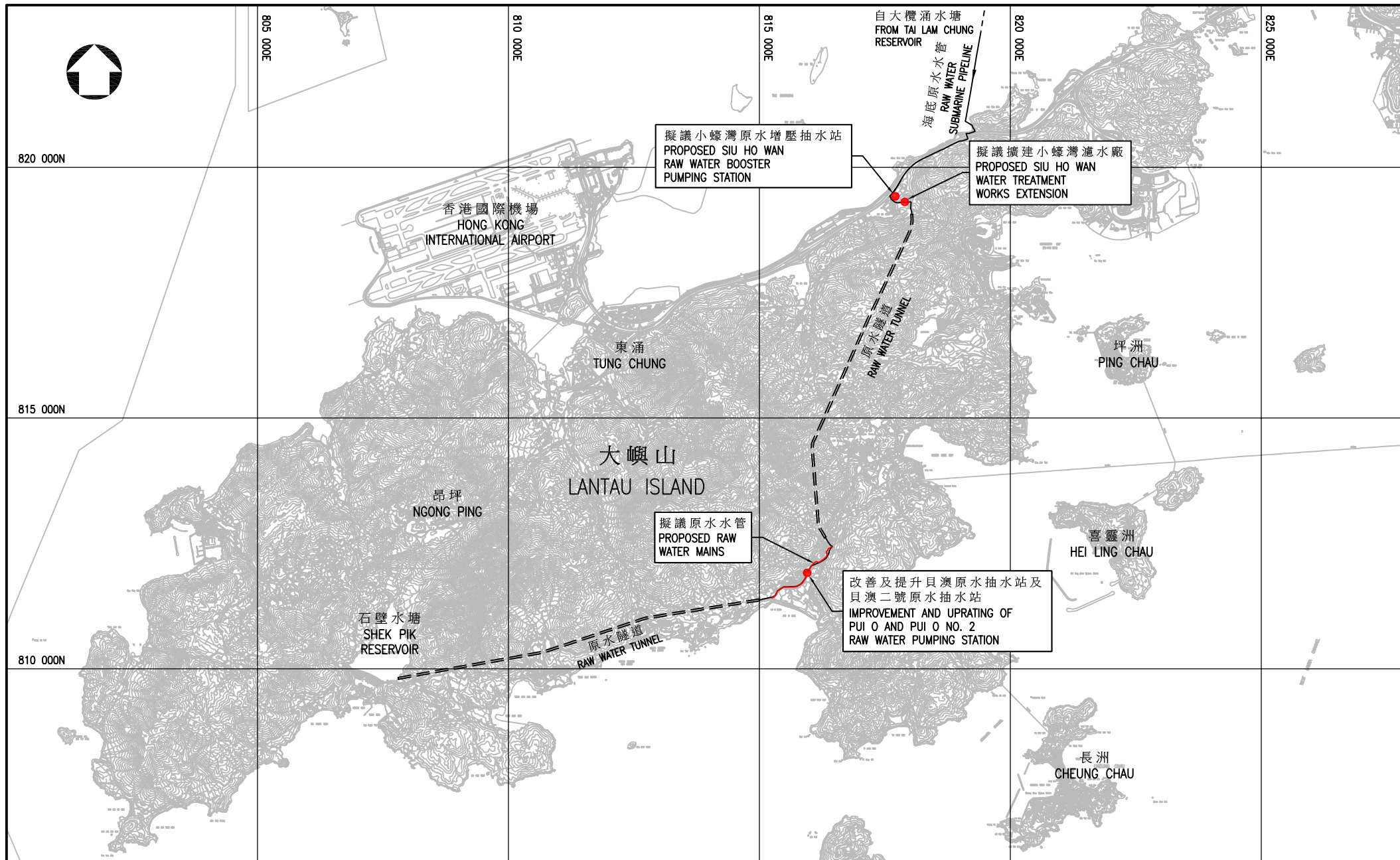
16. We upgraded **365WF** to Category B in October 2017.

17. The proposed investigation study, design and associated site investigation works will not involve any tree removal or planting proposals. We will require the consultant to take into consideration the need for tree preservation during the planning and design stages of the project. We will also incorporate tree planting proposals, where possible, in the construction phase in the future.

WAY FORWARD

18. We will seek support of the Public Works Subcommittee for the approval from the FC to upgrade part of **365WF** to Category A and will invite tenders in parallel to enable early commencement of the proposed investigation study, design and associated site investigation works. We will only award the contract after obtaining FC’s funding approval.

Development Bureau
Water Supplies Department
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工務計劃項目第 365WF 號 - 小蠔灣濾水廠擴展工程
P.W.P. ITEM NO. 365WF - SIU HO WAN WATER TREATMENT WORKS EXTENSION

 **水務署**
Water Supplies Department

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附件一 ENCLOSURE 1