

For discussion

Legislative Council Panel on Development

347WF – Reprovisioning of Harcourt Road fresh water pumping station

PURPOSE

This paper briefs Members on the proposal to upgrade **347WF** “Reprovisioning of Harcourt Road fresh water pumping station” to Category A at an estimated cost of \$742.5 million in money-of-the-day (MOD) prices for the reprovisioning of the Harcourt Road fresh water pumping station.

PROPOSAL

2. The scope of works under **347WF** comprises –
 - (a) construction of a new pumping station at a site near the Central Fire Station on Cotton Tree Drive;
 - (b) laying of approximately 0.8 kilometers fresh water mains ranging from 700 millimeters (mm) to 1200 mm in diameter, primarily along Queensway, Cotton Tree Drive and Hennessy Road; and
 - (c) demolition of the existing Harcourt Road fresh water pumping station upon commissioning of the new pumping station.

———— A project layout plan is at **Enclosure 1**. The landscape layout plan, elevation and section views showing the proposed greening measures for the proposed new
———— pumping station are at **Enclosure 2**.

3. Subject to the approval of the Finance Committee (FC), we plan to commence the proposed works in December 2014 for completion in September 2019.

JUSTIFICATION

4. The Planning Department completed the “Urban Design Study for the New Central Harbourfront” (the UDS) in 2011. The existing Harcourt Road fresh water pumping station lies within the area covered by the UDS. Based on the recommendations of the UDS, office development is proposed at a site

currently occupied by the Hong Kong Red Cross Headquarters and the Harcourt Road fresh water pumping station.

5. To pave the way for implementing the proposed office development and enhance the existing Central Business District by freeing up appropriate land currently occupied by government uses to facilitate the provision of office supply, the relocation of the Harcourt Road fresh water pumping station is necessary, and would form part of the efforts for taking forward the future development of the New Central Harbourfront having regard to the recommendations of the UDS.

6. The Harcourt Road fresh water pumping station is one of the key installations of the water supply system supplying fresh water to the Central, Wan Chai, Mid-level and Peak areas. To maintain the water supply to these areas, it is necessary to re-provision the pumping station by constructing a replacement before releasing the site of the existing pumping station at Harcourt Road for future development. We also need to lay new water mains to connect the existing water mains to the new pumping station.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the proposed works to be \$742.5 million in MOD prices, broken down as follows –

		\$ million
(a)	Construction of new pumping station	407.8
(b)	Laying of fresh water mains	88.2
(c)	Demolition of the existing Harcourt Road fresh water pumping station	5.8
(d)	Environmental mitigation measures	6.0
(e)	Greening works	5.5
(f)	Contingencies	51.3
	Sub-total	564.6 (in September 2013 prices)
(g)	Provision for price adjustment	177.9
	Total	742.5 (in MOD prices)

8. The proposed works will not give rise to additional recurrent

expenditure.

PUBLIC CONSULTATION

9. We consulted the Development, Planning and Transport Committee of the Wan Chai District Council and the Food, Environment, Hygiene & Works Committee of the Central and Western District Council on 15 October 2013 and 17 October 2013 respectively. Both committees supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

10. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have completed the Preliminary Environmental Review for the proposed works, which concluded that the works would not have any long-term environmental impact. We have included in paragraph 7(d) above a sum of \$6 million (in September 2013 prices) in the project estimates for the implementation of standard pollution control measures to mitigate short-term environmental impacts during construction stage. These measures include the use of temporary noise barriers and silenced construction plants for noisy construction activities, and frequent cleaning and watering of the site to prevent dust nuisance.

11. At the planning and design stages, we have optimised the design of site levels and layouts of the proposed works to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) 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 facilities¹. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.

12. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site will comply with the approved plan. We will require the contractor to separate the inert and non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

¹ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

13. We estimate that the proposed works will generate in total about 49 850 tonnes of construction waste. Of these, we will reuse about 9 800 tonnes (20%) of inert construction waste on site and deliver 39 600 tonnes (79%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 450 tonnes (1%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$1.1 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

14. The Flagstaff House (Museum of Tea Ware), a Declared Monument, is near but outside the new pumping station site and a section of the old stone wall² lies within the new pumping station site as shown in **Enclosure 3**. We conducted a Heritage Impact Assessment on the Declared Monument and the old stone wall due to construction and operation of the new pumping station and devised measures to mitigate the impacts concerned. The proposed mitigation measures have been accepted by the Antiquities and Monuments Office (AMO) of the Leisure and Cultural Services Department (LCSD) and supported by the Antiquities Advisory Board. We will implement the agreed measures as part of the project to the satisfaction of AMO.

TRAFFIC IMPLICATIONS

15. We have carried out a Traffic Impact Assessment (TIA) for the proposed works. The TIA concluded that the proposed works would not cause any significant impact on the traffic by carrying out the mainlaying works during night time as needed and through implementation of appropriate temporary traffic management schemes. We will display information boards on site and set up telephone hotlines for public enquiries and complaints. We will adopt trenchless methods as needed for laying of water mains at busy road junctions.

LAND ACQUISITION

16. The proposed works do not require any land acquisition.

² About 35 m out of a total length of 155 m of the old stone wall lies within the site. The old stone wall forms part of the boundary wall of the Flagstaff House and was formed by stacking of layers of rectangular pieces of granite stones.

BACKGROUND INFORMATION

17. We upgraded **347WF** to Category B in September 2010.
18. In November 2011, we engaged the Civil Engineering and Development Department's term contractor to carry out site investigation for the proposed works at a cost of \$1.2 million under block allocation Subhead **9100WX** "Waterworks, studies and investigations for items in Category D of the Public Works Programme". The site investigation was completed in February 2012.
19. Starting from March 2012, we engaged consultants to undertake heritage impact assessment, traffic impact assessment, and architectural and landscape design for the proposed works and to provide advisory services on preparation of tender documents at a total cost of \$4.32 million under block allocation Subhead **9100WX** "Waterworks, studies and investigations for items in Category D of the Public Works Programme". We have substantially completed the detailed design of the proposed works.
20. Of the 120 trees affected by the construction works, 2 trees will be preserved. The construction works will involve the removal of 118 trees, including 87 trees to be felled and 31 trees to be transplanted elsewhere. All trees to be removed are not important trees³. We will incorporate planting proposals as part of the project, including 87 trees, about 3 310 shrubs and 270 square meters of grassed area.
21. There is an existing teak tree (*Tectona grandis*), which is an Old and Valuable Tree (OVT) (Registration no. LCSD CW/99) adjacent to the new pumping station site with its tree protection zone falling within the site boundary. Temporary fence will be erected outside the tree protection zone to prevent any works being carried out within the tree protection zone boundary and we will incorporate precautionary measures as part of the project in accordance with the requirements stipulated in the Environment, Transport and Works Bureau Technical Circular (Works) No. 29/2004 to protect the OVT from any disturbance.

³ "Important trees" refers 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 persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

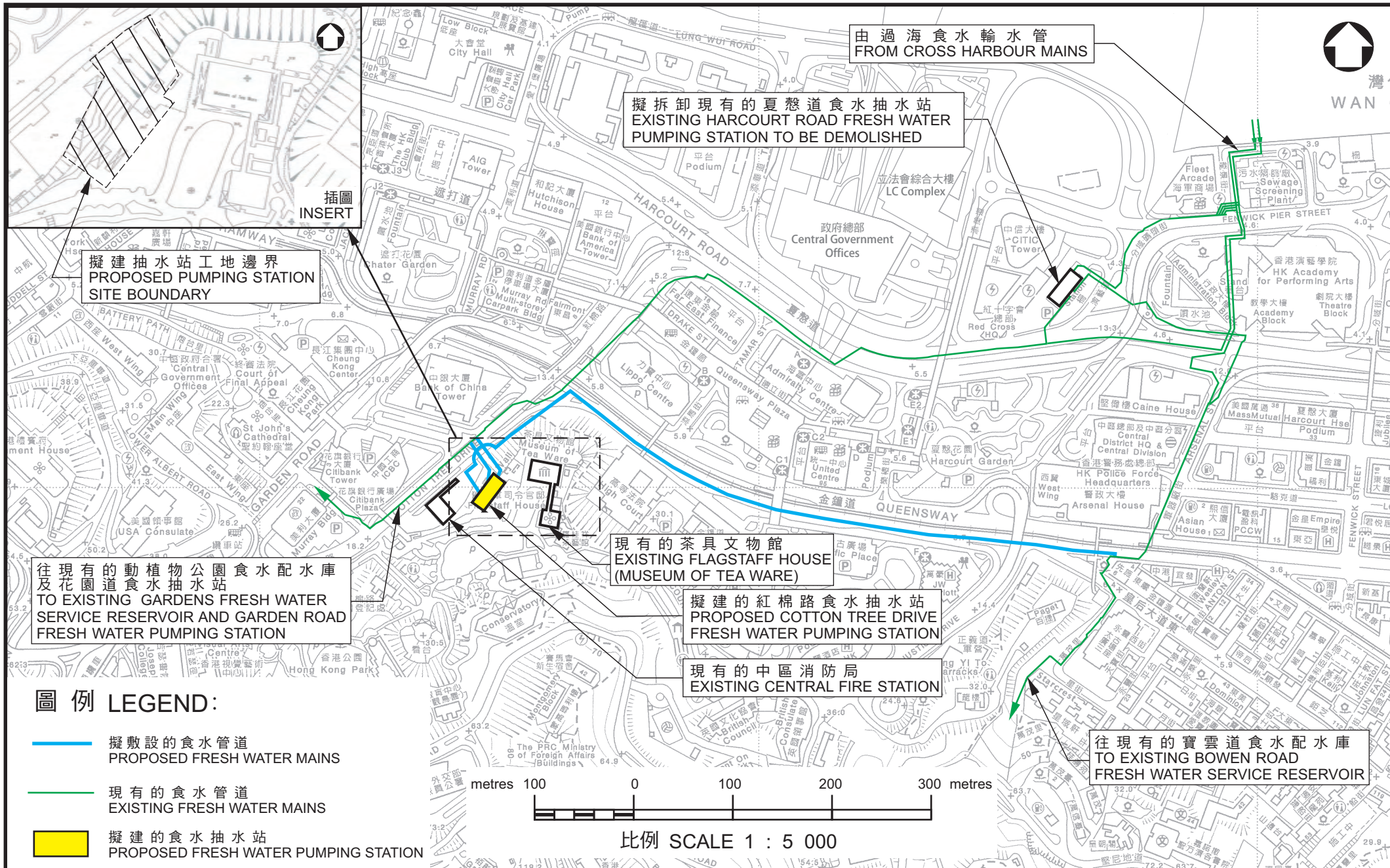
22. There is an existing Hong Kong Park's nursery within the new pumping station site. We will reinstate the nursery at the roof of the new pumping station (see **Enclosure 2**) as part of the project to the satisfaction of LCSD, Architectural Services Department and Electrical and Mechanical Services Department.

23. We estimate that the proposed works will create about 175 jobs (152 for labourers and another 23 for professional/technical staff) providing a total employment of 8 840 man-months.

WAY FORWARD

24. We plan to seek the support of the Public Works Sub-committee for the proposed upgrading of **347WF** to Category A in June 2014 with a view to seeking funding approval from the FC in July 2014.

Development Bureau
Water Supplies Department
May 2014



核准 APPROVED
總工程師/設計 CE / Des

19 / 05 / 2014

工務工程計劃項目第347號 - 夏慤道食水抽水站重置工程
項目平面圖

PWP ITEM NO. 347WF - REPROVISIONING OF HARCOURT ROAD FRESH WATER PUMPING STATION
PROJECT LAYOUT PLAN



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草圖編號 SK 62013 / 145
SKETCH NO.

Ref. 62013_145.CDR



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工務工程計劃項目第347號 - 夏慤道食水抽水站重置工程
景觀平面圖

PWP ITEM NO. 347WF - REPROVISIONING OF HARCOURT ROAD FRESH WATER PUMPING STATION
LANDSCAPE LAYOUT PLAN



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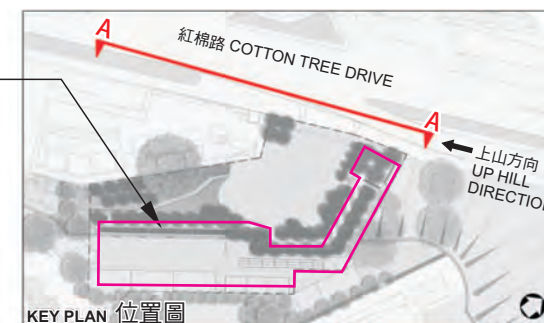
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SKETCH NO. SK 62013 / 146

Ref. 62013_146.CDR

擬建的紅棉路食水抽水站
PROPOSED COTTON TREE DRIVE
FRESH WATER PUMPING STATION

擬建的抽水站建築物
PROPOSED PUMPING STATION
BUILDING

現有的古樹名木
EXISTING OLD AND
VALUABLE TREE



切面 A
SECTION A

現有的中區消防局
EXISTING CENTRAL FIRE STATION



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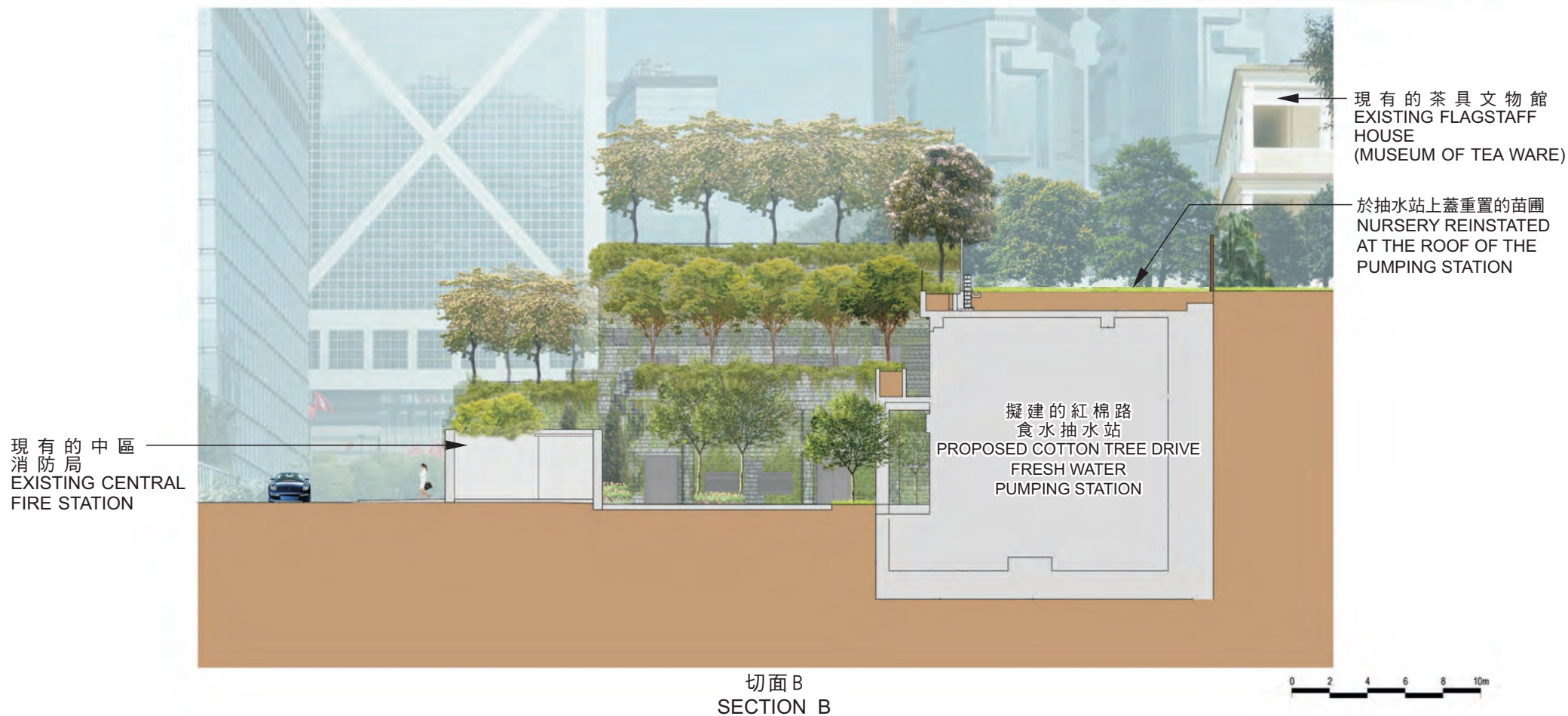
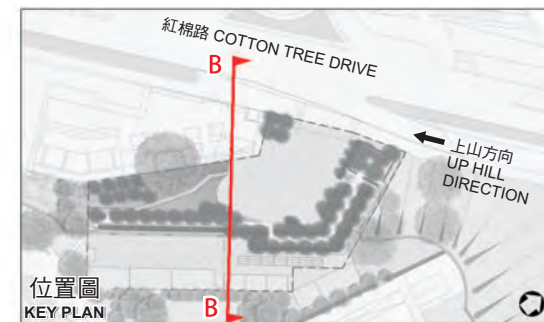
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工務工程計劃項目第347號 - 夏慤道食水抽水站重置工程
景觀立面圖

PWP ITEM NO. 347WF - REPROVISIONING OF HARCOURT ROAD FRESH WATER PUMPING STATION
LANDSCAPE ELEVATION

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草圖編號 SK 62013 / 147
SKETCH NO.



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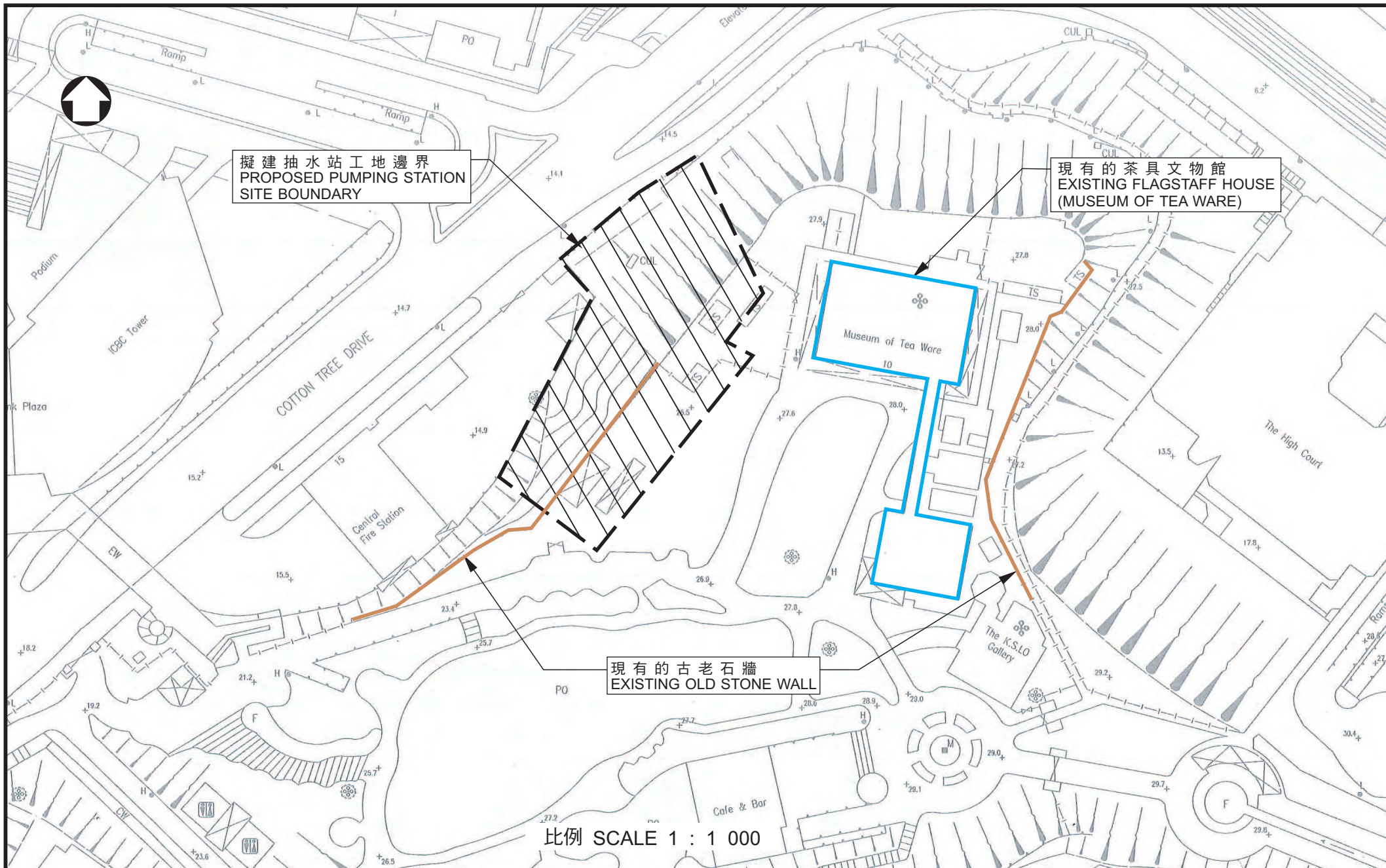
工務工程計劃項目第347號 - 夏慤道食水抽水站重置工程
景觀切面圖

PWP ITEM NO. 347WF - REPROVISIONING OF HARCOURT ROAD FRESH WATER PUMPING STATION
LANDSCAPE SECTION

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 文物項目

PWP ITEM NO. 347WF - REPROVISIONING OF HARCOURT ROAD FRESH WATER PUMPING STATION
 HERITAGE ITEMS



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