

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 704 – DRAINAGE

Environmental Protection – Sewerage and sewage treatment

399DS – Relocation of Sha Tin Sewage Treatment Works to caverns

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **399DS** as **445DS**, entitled “Relocation of Sha Tin Sewage Treatment Works to caverns – main caverns construction and upstream sewerage works” to Category A at an estimated cost of \$14,076.5 million in money-of-the-day (MOD) prices; and
- (b) the retention of the remainder of **399DS** in Category B.

PROBLEM

The relocation of Sha Tin Sewage Treatment Works (STSTW) to caverns (the Project) aims at releasing the existing site for housing and other beneficial uses and improving the environment of the existing site and its surroundings. We need to carry out main caverns construction and upstream sewerage works (Stage 2 Works) of the Project.

PROPOSAL

2. The Director of Drainage Services, with the support of the Secretary for Development, proposes to upgrade part of **399DS** to Category A at an estimated cost of \$14,076.5 million in MOD prices, for the construction of the Stage 2 Works of the Project.

/PROJECT

PROJECT SCOPE AND NATURE

3. The part of **399DS** which we propose to upgrade to Category A, viz. Stage 2 Works, comprises –

- (a) main caverns construction
 - (i) construction of a main caverns complex¹ at Nui Po Shan of about 14 hectares in area and about 2.3 million cubic metres in total volume for accommodating the sewage treatment facilities in the remaining stage of the Project;
 - (ii) construction of about 260 metres (m) long secondary access tunnel² to connect the main caverns complex and Mui Tsz Lam Road;
 - (iii) construction of a ventilation shaft³ of about 70 m deep, and a ventilation adit⁴ of about 660 m long to connect the ventilation shaft and the main caverns complex;
 - (iv) construction of two effluent discharge pipes of about 2.2 m in diameter and about 320 m long to connect the relocated STSTW in caverns (the relocated sewage treatment works to be named “Sha Tin Cavern Sewage Treatment Works” and hereinafter referred to as “the cavern STSTW”) to the existing effluent discharge tunnel; and
 - (v) site formation works at the secondary access tunnel portal areas⁵, including natural terrain hazard mitigation measures and construction of the relevant retaining structures;

/(b)

¹ The main caverns complex comprises five separate caverns (each cavern is up to about 33 m high and about 32 m wide) and driveways of about 2.6 km long.

² The secondary access tunnel, which serves as an alternative access under emergency situations, is about 19 m high and 18 m wide.

³ The ventilation shaft is about 7 m in diameter.

⁴ The ventilation adit is about 10 m high and 12 m wide.

⁵ Site formation works are for the construction of a ventilation building and ancillary facilities in the remaining works of the Project.

- (b) upstream sewerage works
 - (i) construction of a new intermediate sewage pumping station (ISPS)⁶ at the south-western edge of the existing STSTW;
 - (ii) construction of rising mains of about 4.6 kilometres (km) in total length with diameters ranging from 0.8 m to 1.2 m connecting the existing Sha Tin Main Sewage Pumping Station (STMSPS), the new ISPS and the main access tunnel portal area; and
 - (iii) modification of six sewage pumping stations (SPS) currently serving the Sha Tin and Ma On Shan areas, including STMSPS, A Kung Kok SPS, Ma On Shan SPS, Kau To Area 56A SPS, Chinese University SPS, Pak Shek Kok No. 3 SPS, and other related upstream sewerage facilities;
- (c) other related works⁷; and
- (d) implementation of environmental mitigation measures and related environmental monitoring and audit (EM&A) programme for the works mentioned in paragraph 3(a) to 3(c) above.

4. A layout plan of the proposed Stage 2 Works, a section of the main caverns complex and a photomontage of the ISPS are at Enclosure 1.

5. We plan to commence the proposed Stage 2 Works upon obtaining funding approval from the Finance Committee (FC). We target to first substantially complete the construction of the main caverns complex in about 2026, so as to accommodate the sewage treatment facilities in the remaining stage of the

/Project

⁶ The ISPS, to be constructed inside the existing STSTW, is for pumping the sewage collected from various sewage pumping stations to the cavern STSTW relocated at a higher level.

⁷ Other related works to facilitate works under paragraph 3(a) and (b) include demolition and temporary re-provisioning part of the facilities in the existing STSTW, utilities diversion, road and drainage works, geotechnical works, construction of temporary magazine compound, removal and preservation of trees and provision of temporary traffic arrangement, etc.

Project for commissioning of the cavern STSTW in 2029⁸. To enable early commencement of the proposed works, the Drainage Services Department (DSD) plans to invite tenders in parallel with the funding application, but the contract will only be awarded upon FC's funding approval.

6. We will retain the remainder of **399DS**, which comprises the construction of sewage treatment facilities in the new main caverns complex, ancillary buildings and associated facilities; decommissioning and demolition of the existing STSTW; and other related works, in Category B. With a view to pressing ahead with the implementation of the different stages of the Project to achieve the target commissioning of the cavern STSTW in 2029 and releasing of the site of the existing STSTW in 2031 for housing and other beneficial uses, we will orderly seek funding for the remainder of **399DS** in a timely manner.

7. A layout plan of the remainder of **399DS** is at Enclosure 2.

JUSTIFICATION

8. There is a pressing need to optimise the supply of land for various uses by sustainable and innovative approaches to support social and economic development. It is the established policy of the Government to adopt a multi-pronged approach to expand land resources. One practicable approach is rock cavern development, which is a viable source of long-term land supply. In 2014, the DSD completed a "Feasibility study on relocation of STSTW to caverns". The study has demonstrated that relocation of the existing STSTW to caverns is technically feasible and financially viable.

9. In the 2017 Policy Agenda, the Government announced that it would strive to complete the site investigation, detailed impact assessments and detailed design for the Project as soon as possible for early commencement of cavern construction works, reprovisioning of the facilities inside caverns and onward demolition of the existing STSTW. In December 2018, the Task Force on Land Supply (hereinafter "the Task Force") in its report to the Government recommended that cavern development was a land supply option worthy of priority studies and implementation. In February 2019, the Government responded to the report of the Task Force that the Government would actively pursue the Project.

/10.

⁸ Part of the proposed upstream sewerage system works under the Stage 2 Works involve re-adjusting the alignment of the existing rising mains within the existing STSTW, and the construction works of which can only commence after decommissioning of the existing STSTW. It is expected that the works involved could be carried out between 2029 and 2031.

10. Releasing of about 28 hectares of land after relocating the existing STSTW to caverns brings multifold benefits to the communities of Sha Tin and Ma On Shan Districts as a whole. On one hand, the environment of the existing STSTW site and its surroundings will be greatly improved. In comparison with the existing open-plant arrangement, the odour management of the proposed cavern STSTW, with caverns as natural barrier, can be efficiently enhanced so as to minimise the odour impact on the surrounding communities. On the other hand, developing the released site for residential and other beneficial uses will bring benefits to the community by meeting the public's needs⁹.

11. The future main caverns complex for the cavern STSTW will be the largest of its type ever built in Hong Kong. The Project is being implemented in stages as follows –

- (a) the Stage 1 Works – including mainly site preparation and main access tunnel construction that commenced in February 2019 for completion in 2022;
- (b) the Stage 2 Works – the proposed works to seek for upgrading as detailed in the paragraph 3 above; and
- (c) the remaining works – including mainly construction of sewage treatment facilities in the new caverns, and decommissioning and demolition of the existing STSTW.

FINANCIAL IMPLICATIONS

12. We estimate the cost of the proposed Stage 2 Works to be \$14,076.5 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Main caverns construction	8,265.9
(i) main caverns complex ¹⁰	7,213.2
(ii) secondary access tunnel	395.1
	/(iii)

⁹ The future land uses of the existing STSTW site to be vacated will be separately considered under a planning and engineering study. Appropriate development and land uses schemes will be formulated in the study for further consultation with the public and stakeholders.

¹⁰ The cost for main caverns complex includes the excavation of a main caverns complex of about 2.3 million cubic metres in total volume, construction of permanent lining and installation of rock bolts for the strengthening of the caverns and the construction of concrete ventilation ducts, pipeworks and road pavements along driveways of about 2.6 km long.

	\$ million (in MOD prices)
(iii) ventilation shaft and ventilation adit	313.5
(iv) effluent discharge pipes	65.6
(v) site formation works	278.5
(b) Upstream sewerage works	2,945.8
(i) intermediate sewage pumping station	970.3
(ii) rising mains	499.6
(iii) modification of existing sewage pumping stations and related upstream sewerage facilities	1,475.9
(c) Other related works	216.1
(d) Environmental mitigation measures and EM&A programme	331.2
(e) Consultants' fees for	72.2
(i) contract administration	50.2
(ii) management of resident site staff (RSS)	22.0
(f) Remuneration of RSS	1,021.1
(g) Contingencies	1,224.2
	<hr/>
Total	<u>14,076.5</u>

13. We propose to engage consultants to undertake contract administration and site supervision for part of the Stage 2 Works¹¹. A detailed breakdown of the estimates for the consultants' fees and RSS costs by man-months is at Enclosure 3.

/14.

¹¹ The part of the Stage 2 Works for which contract administration and site supervision are to be undertaken by consultants includes the main caverns construction under item (a) of paragraph 3, and the part of other related works, environmental mitigation measures and EM&A programme under items (c) and (d) of paragraph 3 associated with the main caverns construction.

14. Subject to funding approval, we plan to phase the expenditure as follows –

Year	\$ million (in MOD prices)
2021 – 2022	90.5
2022 – 2023	977.5
2023 – 2024	3,414.4
2024 – 2025	3,614.2
2025 – 2026	1,714.8
2026 – 2027	1,650.7
2027 – 2028	766.4
2028 – 2029	689.5
2029 – 2030	586.8
2030 – 2031	299.0
2031 – 2032	156.6
2032 – 2033	96.4
2033 – 2034	19.7
	<hr style="width: 50%; margin: auto;"/> 14,076.5 <hr style="width: 50%; margin: auto;"/>

15. We have derived the MOD estimates on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period from 2021 to 2034. We will deliver the proposed works under a New Engineering Contract (NEC)¹² form of contract with provision for price adjustment.

/16.

¹² NEC is a suite of contracts developed by the Institution of Civil Engineers, United Kingdom. It is a contract form that emphasises cooperation, mutual trust and collaborative risk management between contracting parties.

16. We estimate the additional annual recurrent expenditure arising from the proposed Stage 2 Works to be \$109.8 million. The recurrent expenditure of providing sewage services will be taken into consideration when determining the sewage charge and trade effluent surcharges rates in future.

PUBLIC CONSULTATION

17. We conducted a three-stage Public Engagement (PE) exercise between 2012 to 2016 for the Project. Views from the public and the relevant stakeholders were gathered through media briefings, roving exhibitions, visits to the Stanley Sewage Treatment Works in caverns, focus group meetings with professional and environmental concern groups, community group meetings, public forum, etc. so as to build consensus on the Project. The public generally agreed that the Project could benefit the community and enhance the environment in Sha Tin as a whole, especially in the aspects of odour control and visual impact.

18. We have continuously consulted and updated the Sha Tin District Council (STDC) on the latest development of the Project since the early stage in 2012. Regarding the Environmental Impact Assessment for the Project, the proposed environmental mitigation measures as well as the details of the blasting works for construction of caverns, we consulted the Health and Environment Committee (HEC) of STDC on 10 March 2016. For the proposed road improvement works at Mui Tsz Lam Road and the proposed temporary traffic arrangement during the construction and operation of the Project, we consulted the Traffic and Transport Committee (T&TC) of STDC on 9 May 2017. As regards the implementation arrangement of the overall Project as well as the commencement of the construction works, we consulted the HEC of STDC on 11 January 2018. With a view to providing latest progress of the Project, we also briefed the HEC of STDC on 10 January 2019 and 3 November 2020, and the Development and Housing Committee of STDC on 30 June 2020. The STDC generally supported the implementation of the Project and provided comments on the Project.

19. We gazetted the proposed upstream sewerage works under the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 8 March 2019 and received no objection. The proposed upstream sewerage works were subsequently authorised on 31 May 2019.

20. Taking into account the suggestions of STDC members during the PE exercise, a community liaison group (CLG) was established in 2017 to enhance the communication between the project team and the stakeholders in the neighbourhood. Starting from the early stage, we have been keeping a close communication with the relevant stakeholders to listen to their views. The CLG will hold meetings from time to time to collect stakeholders' view, and three CLG meetings were held on 11 December 2017, 24 April 2019 and 17 October 2020 respectively. We will continue to conduct CLG meetings, update STDC regularly on the progress of the Project as well as to maintain close communication with the public and relevant stakeholders.

21. We consulted the Legislative Council Panel on Development on 27 October 2020 and most Members supported the proposed Stage 2 Works. Some Members also expressed concerns on a number of issues including the adequacy of the cavern STSTW in catering for future development needs of the Sha Tin District, handling of excavated rocks, early commencement of planning work for the released site of the existing STSTW and the benefits of the Project.

ENVIRONMENTAL IMPLICATIONS

22. The construction and operation of the cavern STSTW is a designated project (DP)¹³ under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and an environmental permit (EP) is required. The Environmental Protection Department approved the Environmental Impact Assessment (EIA) Report for the above cavern STSTW under EIAO in November 2016, and issued an EP for their construction and operation in March 2017. The EIA Report concludes that the environmental impact of the construction and operation of the cavern STSTW can be controlled to within the criteria under EIAO and the Technical Memorandum on EIA Process. Since the commencement of Stage 1 Works, we have been implementing the environmental mitigation measures and EM&A programme recommended in the approved EIA Report, and comply with the relevant conditions under the EP and other statutory requirements for environmental protection.

/23.

¹³ The proposed upstream sewerage works (as detailed in item (b) of paragraph 3 above) is not a DP under Schedule 2 of the EIAO. The DSD completed the Preliminary Environmental Review (PER) for the proposed upstream sewerage works in December 2019. The PER concluded and the Director of Environmental Protection agreed that after implementing the recommended environmental mitigation measures, the proposed upstream sewerage works would not have any long-term adverse environmental impact.

23. For short-term environmental impacts during construction of the proposed Stage 2 Works, the recommended mitigation measures mainly include adoption of quiet powered mechanical equipment and temporary noise barriers to minimise construction noise impact; installation of effective dust collector at the exhaust of enclosed rock crushing plant, use of wheel washing facilities and regular water spraying for dust control; provision of on-site facility for treatment of site run-off to minimise water quality impact; and use of CLGs to maintain close communication with the community and concern groups. All necessary environmental mitigation measures and the implementation of the EM&A programme have been taken into account in the cost estimation for the proposed Stage 2 Works.

24. At the planning and design stages of the proposed Stage 2 Works, we have considered all the proposed works and construction sequences associated with the proposed Stage 2 Works to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. demolished concrete and excavated soil and rock) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities (PFRF)¹⁴. 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.

25. At the construction stage of the proposed Stage 2 Works, 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 comply with the approved plan. We will also require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert and non-inert construction waste at PFRF and landfills respectively through a trip-ticket system.

/26.

¹⁴ PFRF are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste at PFRF requires a licence issued by the Director of Civil Engineering and Development.

26. We estimate that the proposed Stage 2 Works will generate about 6.31 million tonnes of construction waste. Of these, we will reuse 0.14 million tonnes (2.2%) on site, reuse 5.02 million tonnes (79.6%) on other construction and/or suitable site(s), deliver 1.04 million tonnes (16.5%) of inert construction waste to PFRF for subsequent reuse, and deliver 0.11 million tonnes (1.7%) of non-inert construction waste to landfill sites for disposal. The total cost for disposal of construction waste at PFRF and landfill sites for the proposed Stage 2 Works is estimated to be \$95.8 million (based on a unit charge rate of \$71 per tonne for disposal at PFRF and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

27. The proposed Stage 2 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

28. The proposed Stage 2 Works do not involve resumption of private land.

TRAFFIC IMPLICATIONS

29. We have conducted a traffic impact assessment (TIA) for the Project, covering the traffic impact during both construction and operation phases. According to the findings of the assessment, with the implementation of appropriate temporary traffic arrangement (TTA), the construction works will not cause significant impact on the traffic network in areas concerned. The traffic impact during operation phase, after completion of the Project, has also been assessed and found to be insignificant.

30. We will consult STDC prior to the implementation of any major TTA for the Project. During the construction phase, we will establish a traffic management liaison group and closely liaise with the Hong Kong Police Force, the Transport Department and other concerned government departments to discuss, scrutinise and review the proposed TTA with a view to minimising the traffic impact arising from the construction works.

/BACKGROUND

BACKGROUND INFORMATION

31. In May 2012, FC approved upgrading **379DS** “Feasibility study on relocation of STSTW to caverns” to Category A with an approved project estimate of \$57.9 million in MOD prices for carrying out the feasibility study (FS). The FS commenced in May 2012 and completed in May 2014.

32. We upgraded **399DS** to Category B in September 2013.

33. In July 2014, FC approved the upgrading of part of **399DS** to Category A as **407DS** “Relocation of Sha Tin sewage treatment works to caverns – consultants’ fees and investigation” at an approved project estimate of \$637.7 million in MOD prices for carrying out site investigation, surveys, impact assessments and detailed design for the Project.

34. In September 2014, we engaged consultants to undertake various impact assessments including EIA, TIA, etc. and detailed design for the Project. We also engaged contractors to carry out ground investigation for the Project. The ground investigation works have been completed.

35. In October 2018, FC approved the upgrading of Stage 1 Works of **399DS** to Category A as **425DS** “Relocation of Sha Tin Sewage Treatment Works to Caverns – site preparation and access tunnel construction” at an approved project estimate of \$2,077.5 million in MOD prices for carrying out the Stage 1 Works which subsequently commenced in February 2019 for completion in 2022.

36. We have substantially completed the detailed design of the proposed Stage 2 Works.

37. Of the 1 047 number of trees within the boundary of and affected by the proposed Stage 2 Works, 692 number of trees will be retained. The proposed works will involve the removal of 355 number of trees, including 215 number of trees to be felled and 140 number of trees to be transplanted. All trees to be

/removed

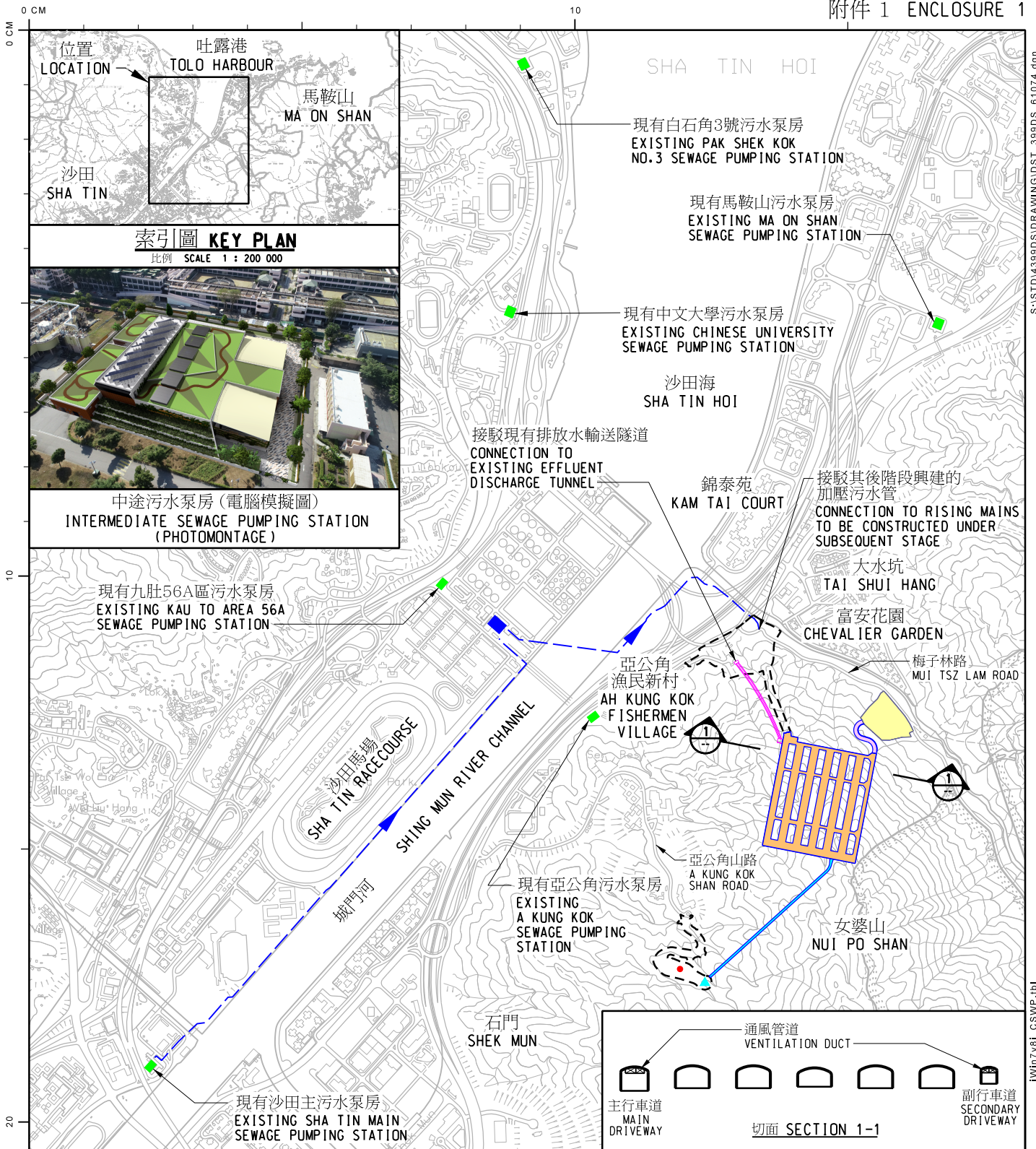
removed are not important trees¹⁵. We will incorporate planting proposal under the proposed works as part of the Project, including estimated quantities of 457 number of trees and 3 214 number of seedling trees.

38. We estimate that the proposed Stage 2 Works will create about 2 320 jobs (1 900 for labourers and 420 for professional or technical staff), providing a total employment of 133 900 man-months.

Development Bureau
November 2020

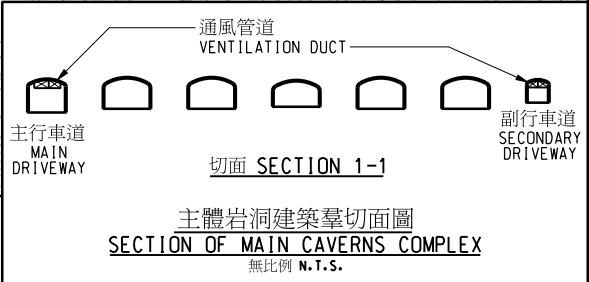
¹⁵ “Important trees” refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria-

- (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 m (measured at 1.3 m above ground level), or with height or canopy spread equal or exceeding 25 m.



圖例 LEGEND:

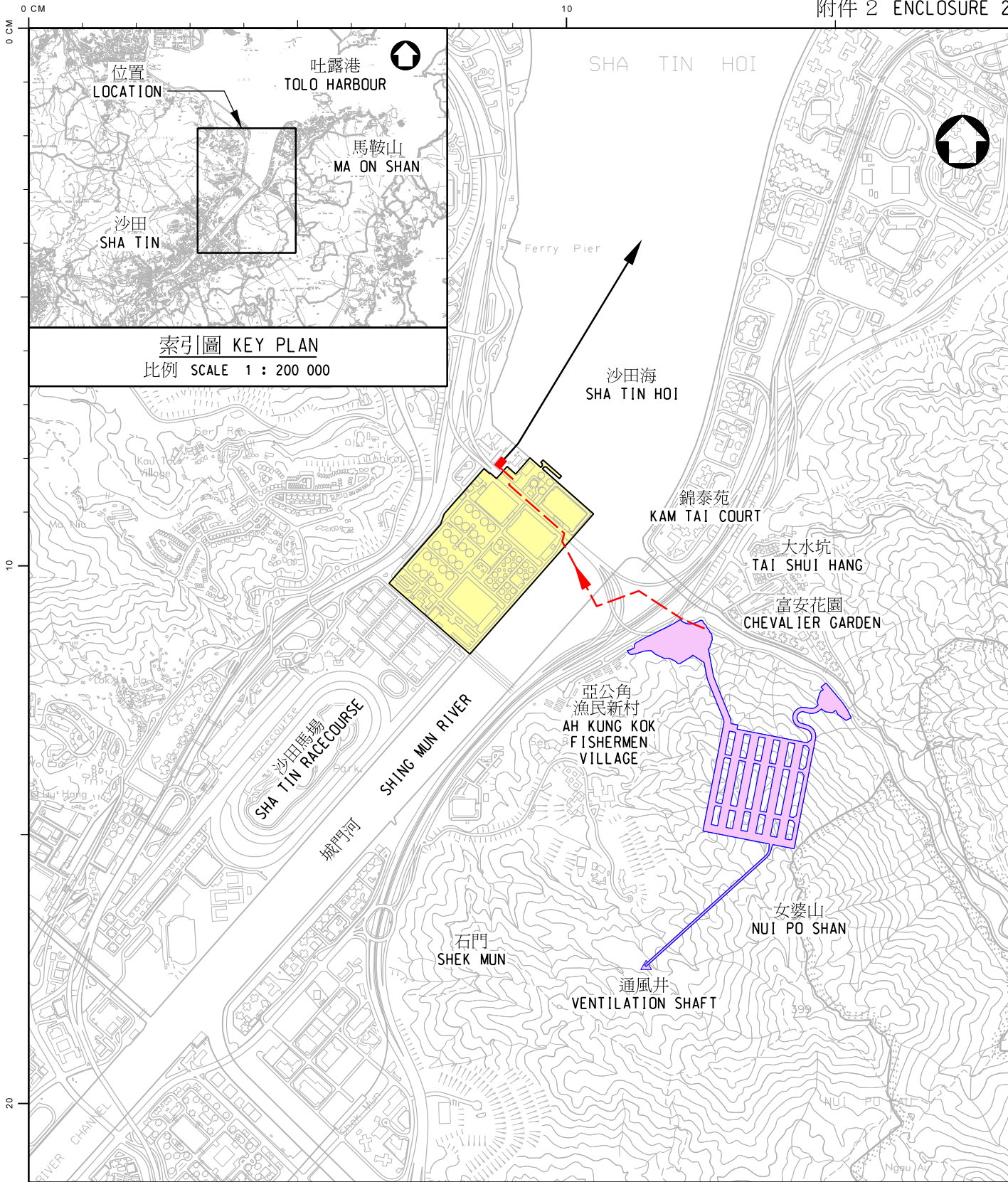
- 工地開拓、主連接隧道及連接道路工程 (於第一階段工程進行)
SITE PREPARATION, MAIN ACCESS TUNNEL AND ACCESS ROAD CONSTRUCTION (UNDER STAGE 1 WORKS)
- 主體岩洞建造 (於第二階段工程進行)
MAIN CAVERNS CONSTRUCTION (UNDER STAGE 2 WORKS)
- 擬建主體岩洞建築羣
PROPOSED MAIN CAVERNS COMPLEX
- 擬建副連接隧道
PROPOSED SECONDARY ACCESS TUNNEL
- 擬建通風坑道
PROPOSED VENTILATION ADIT
- 擬建在副連接隧道入口處進行的工地平整工程
PROPOSED SITE FORMATION WORKS AT THE SECONDARY ACCESS TUNNEL PORTAL AREAS
- ▲ 擬建通風井
PROPOSED VENTILATION SHAFT
- 擬建排放水管道
PROPOSED EFFLUENT DISCHARGE PIPES
- 臨時炸藥貯存設施
TEMPORARY MAGAZINE



- 上游污水收集系統工程 (於第二階段工程進行)
UPSTREAM SEWERAGE WORKS (UNDER STAGE 2 WORKS)
- 擬改裝現有污水泵房
EXISTING SEWAGE PUMPING STATIONS TO BE MODIFIED
- 擬建中途污水泵房
PROPOSED INTERMEDIATE SEWAGE PUMPING STATION
- ▶ 擬建加壓污水管
PROPOSED SEWAGE RISING MAINS





圖則名稱 drawing title	繪畫 drawn	日期 date	修改項目 description	簡簽 initial
工務工程計劃項目第399DS-2號 搬遷沙田污水處理廠往岩洞 - 主體岩洞建造及上游污水收集系統工程 PWP ITEM NO. 399DS-2 RELOCATION OF SHA TIN SEWAGE TREATMENT WORKS TO CAVERNS - MAIN CAVERNS CONSTRUCTION AND UPSTREAM SEWERAGE WORKS	SIGNED L. Y. CHOW	23 NOV 2020	DST/399DS/61074	比例 scale 1:20000 OR AS SHOWN
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	SIGNED W. C. TIN	23 NOV 2020	保留版權 COPYRIGHT RESERVED	香港特別行政區政府渠務署 DRAINAGE SERVICES DEPARTMENT GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
SIGNED H. M. CHAN	23 NOV 2020			


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索引圖 KEY PLAN
比例 SCALE 1 : 200 000

圖例 LEGEND:

-  擬建污水處理設施裝置和相關工程
PROPOSED SEWAGE TREATMENT FACILITIES INSTALLATION AND RELATED WORKS
-  現有沙田污水處理廠解除運作及拆卸工程
DECOMMISSIONING AND DEMOLITION OF EXISTING SHA TIN SEWAGE TREATMENT WORKS
-  擬建緊急排放管道及接駁現有排水出口
PROPOSED EMERGENCY DISCHARGE PIPES AND CONNECTION TO EXISTING OUTFALL
-  現有緊急排水出口
EXISTING EMERGENCY OUTFALL

圖則名稱 drawing title		繪畫 drawn	日期 date	圖則編號 drawing no.	比例 scale
工務工程計劃項目第399DS-3號 搬遷沙田污水處理廠往岩洞 - 餘下工程 PWP ITEM NO. 399DS-3 RELOCATION OF SHA TIN SEWAGE TREATMENT WORKS TO CAVERNS - REMAINING WORKS		SIGNED L. Y. CHOW	23 NOV 2020	DST/399DS/61081	1:20000 OR AS SHOWN
		核對 checked	日期 date		
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399DS – Relocation of Sha Tin Sewage Treatment Works to caverns

**Breakdown of estimates for consultants’ fees and resident site staff costs
(in September 2020 prices)**

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants’ fees for	Professional	-	-	-	27.5
	contract	Technical	-	-	-	13.9
	administration (Note 2)					
					Sub-total	41.4#
(b)	Resident site staff	Professional	3 370	38	1.6	463.0
	(RSS) costs	Technical	8 228	14	1.6	398.0
	(Note 3)					
					Sub-total	861.0
Comprising –						
(i)	Consultants’ fees				18.1#	
	for management					
	of RSS					
(ii)	Remuneration of				842.9#	
	RSS					
					Total	902.4

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 38 = \$85,870 per month and MPS salary point 14 = \$30,235 per month).
2. The consultants’ staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of the Project. The construction phase for the Stage 2 Works of the assignment will only be executed subject to Finance Committee’s approval to upgrade part of **399DS** to Category A.
3. The actual man-months and actual costs will only be known after the completion of the construction works.

Remarks

The figures in this Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in money-of-the-day prices in paragraph 12 of the main paper.