

For discussion
on 22 July 1998

PWSC(98-99)5

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 704 - DRAINAGE

Environmental Protection - Sewerage and sewage treatment
210DS - Chuen Lung sewerage

Members are invited to recommend to Finance
Committee -

- (a) the upgrading of part of **210DS**, entitled "Chuen Lung sewerage, stage 1", to Category A at an estimated cost of \$24.4 million in money-of-the-day prices; and
- (b) the retention of the remainder of **210DS** in Category B.

PROBLEM

There is no proper sewerage system in the Chuen Lung area and sewage from the villages is being discharged to a nearby streamcourse without prior treatment, thus causing pollution to inland and coastal waters in Tsuen Wan.

/PROPOSAL

PROPOSAL

2. The Director of Drainage Services, with the support of the Secretary for Planning, Environment and Lands, proposes to upgrade part of **210DS** to Category A at an estimated cost of \$24.4 million in money-of-the-day (MOD) prices for the Chuen Lung sewerage stage 1 works.

PROJECT SCOPE AND NATURE

3. Project **210DS** aims to construct a sewerage system for the existing villages and the planned village expansion area at Chuen Lung. The part of the project we now propose to upgrade to Category A as stage 1 works comprises the construction of a trunk sewer 4.4 kilometres in length and diameter ranging from 225 millimetres to 300 millimetres along Route Twisk. The site plan at Enclosure 1 shows the locations of the proposed stage 1 works.

4. The remainder of **210DS** consists of the stage 2 works which comprise the provision of sewers, sewage pumping facilities and a rising main for the villages at Chuen Lung.

JUSTIFICATION

5. Chuen Lung, which is an unsewered area in Tsuen Wan, consists of 110 households with a population of 450. At present, the villages at Chuen Lung generate about 110 cubic metres of sewage per day and the quantity will double upon the completion of the village expansion programme in mid 2001. We propose the provision of a sewerage system under **210DS**. We plan to construct a trunk sewer from Chuen Lung to the Tsuen Kam Interchange via Route Twisk under the stage 1 works of **210DS** to convey sewage to the existing sewerage system at Tsuen Wan.

6. If we do not implement the proposed works, sewage generated from Chuen Lung will remain a source of water pollution. The situation will become worse on completion of the development of the Chuen Lung village expansion area in mid 2001 as the population will then increase to 1 000.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the proposed works to be \$24.4 million in MOD prices (see paragraph 8 below), made up as follows -

	\$ million	
(a) Trunk sewer	18.0	
(b) Contingencies	1.7	
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Sub-total	19.7	(at December 1997 prices)
(c) Inflation allowance	4.7	
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Total	24.4	(in MOD prices)
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8. Subject to approval, we will phase expenditure as follows -

Year	\$ million (Dec 1997)	Price adjustment factor	\$ million (MOD)
1998 - 99	0.5	1.06000	0.5
1999 - 2000	7.9	1.14878	9.1
2000 - 01	7.0	1.24642	8.7
2001 - 02	2.0	1.35237	2.7
2002 - 03	2.3	1.46732	3.4
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	19.7		24.4
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9. We have derived the MOD estimate on the basis of the Government's forecasts of trend labour and construction prices for the period 1998 to 2003. We will tender the proposed works under a re-measurement contract because we are uncertain about the existence and exact locations of underground utilities such as electric cables, telephone lines and water mains. As the contract period will exceed 21 months, we will allow for adjustment to the tender price due to inflation.

10. We estimate the annual recurrent expenditure for maintenance work to be \$402,000.

11. Based on the current level of water consumption and sewage charges, the annual recurrent expenditure will have negligible impact on sewage charges.

PUBLIC CONSULTATION

12. We presented the stage 1 works under **210DS** to the Rural Planning and Improvement Strategy (Minor Works) - Tsuen Wan District Working Group of the Provisional Tsuen Wan District Board on 27 May 1998. Members of the Working Group supported the implementation of the proposed works.

ENVIRONMENTAL IMPLICATIONS

13. The Director of Environmental Protection completed a Preliminary Project Feasibility Report in April 1996 and concluded that the project would have no long-term adverse environmental impact and no environmental impact assessment would be required. For short term construction impacts, we shall control noise, dust and site run-off nuisance to within established standards and guidelines through the implementation of mitigation measures in the contract.

LAND ACQUISITION

14. The proposed works do not require land acquisition.

BACKGROUND INFORMATION

15. We upgraded **210DS** to Category B in October 1996 for the implementation of the proposed sewerage works for Chuen Lung.

16. We have completed the detailed design and tender documents for the stage 1 works using in-house resources. We plan to start the construction phase for the stage 1 works as soon as practicable after funding approval, in any case not later than February 1999. These will last for some 29 months inclusive from start to finish. We aim to complete this phase of the project not later than June 2001.

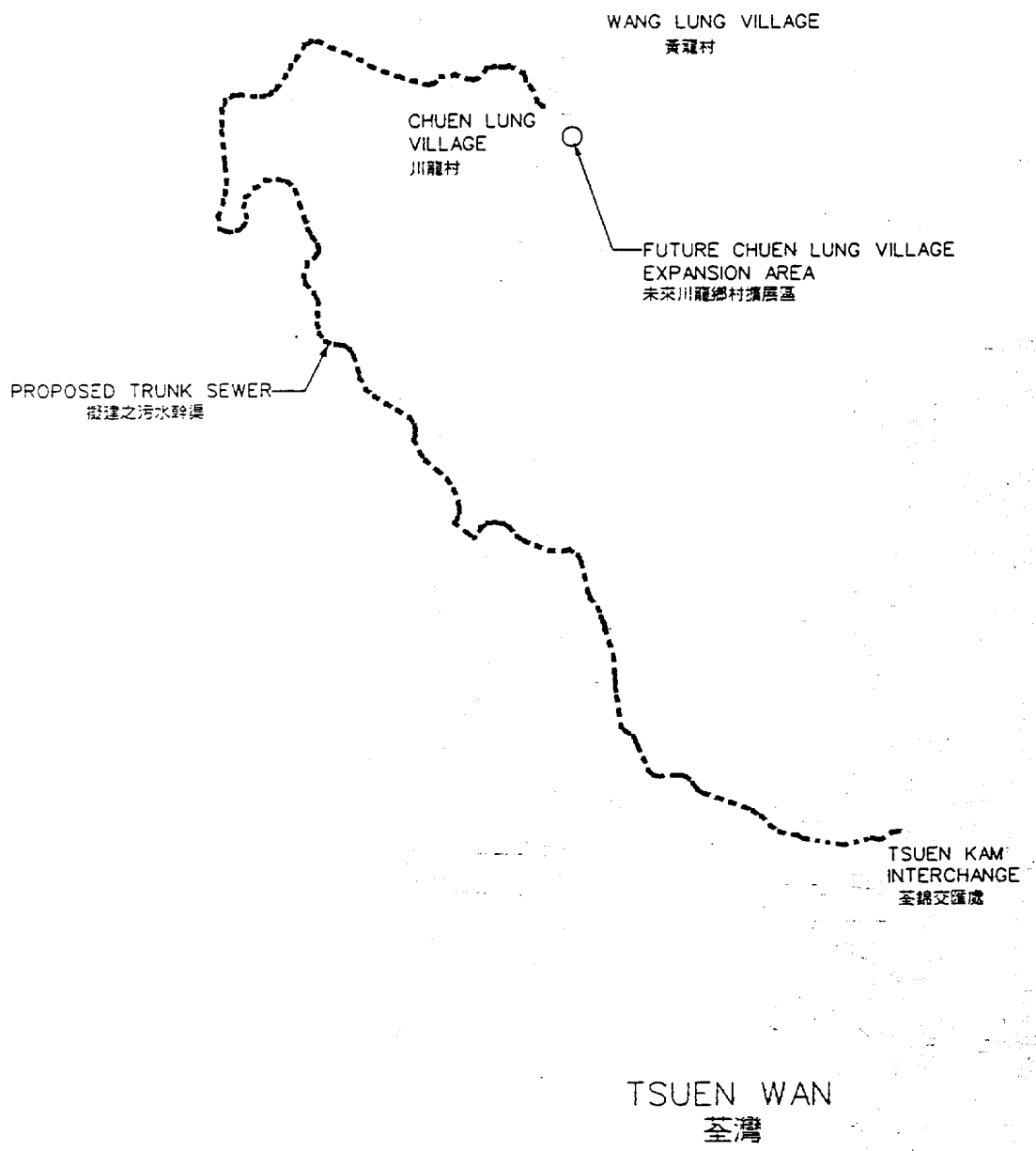
17. We are currently undertaking the detailed design for the stage 2 works. These are scheduled to start construction in August 2000 for completion in August 2001.


Planning, Environment and Lands Bureau
July 1998

(KK320)



ROUTE 荃錦公路
TWISK



title 圖則名稱 CHUEN LUNG SEWERAGE - STAGE I 川龍污水收集系統 - 第一期階段工程	drawn by 繪圖 <i>K.P. LO</i> K.P. LO	date 日期 10.6.98	drawing no. 圖號 DDN/210DS/0002	scale 比例 1 : 20 000
	approved 批核 <i>C.M. CHAN</i> C.M. CHAN	date 日期 10.6.98	 DRAINAGE SERVICES DEPARTMENT 渠務署 HONG KONG 香港	
	office 部門 SEWERAGE PROJECTS DIVISION 污水工程處			