

For discussion
On 19 March 2001

Legislative Council
Panel on Environmental Affairs

301DS – East Kowloon sewerage, stage 2

Purpose

This paper seeks Members' views on the Administration's proposal to invite Public Works Subcommittee to recommend to Finance Committee on 27 April 2001 to increase the approved project estimate (APE) for Public Works Project (PWP) Item 301DS, namely "East Kowloon sewerage, stage 2" from \$162.5 million by \$63.0 million to \$225.5 million in money-of-the-day prices

Background

2. The project "East Kowloon sewerage" aims at upgrading the sewerage system in East Kowloon to cope with existing and planned developments in the area with a view to providing a sustainable system to meet future demands. The project was divided into two stages to minimize disruption to the public and local traffic during the implementation of works.

3. The scope of works for the "East Kowloon sewerage, stage 2" project, which is funded under PWP Item 301DS comprises –

- (a) construction of approximately 14 kilometres of sewers with diameters ranging from 0.225 metres to 1.35 metres in the San Po Kong and Kwun Tong industrial areas; and
- (b) the rectification of about 220 expedient connections¹.

¹ Expedient connections are improper connections which divert foul sewage flows into storm drains. Through these connections, foul sewage can flow into the storm-water drainage system and pollute environmental waters.

A layout plan of the project is at Annex A.

Justification for the Additional Funding

4. The proposal to increase the approved project estimate of the project by \$63.0 million is required to cover the following-

- (a) poor performance by the forfeited contractor and voluntary liquidation (paragraphs 5 to 7); and
- (b) additional nightworks² undertaken (paragraphs 8 to 11).

Poor performance by the forfeited contractor and voluntary liquidation

5. The construction contract, the tender sum of which was \$144.5 million, commenced in March 1996 and was originally scheduled for completion in March 1998. However, the performance of the contractor had deteriorated since the end of 1996. The contractor failed to place adequate resources on site to maintain the normal progress of the works. We have taken all possible regulatory measures under the contract³ to urge the contractor to improve his performance and reduce the delay. The contractor did improve its performance from time to time but was not able to maintain consistency. The contractor went into voluntary liquidation on 27 November 1998. As a result of the liquidation, Government had to re-enter the sites on 11 December 1998. Prior to its liquidation, the contractor had laid about 9.5 kilometres of sewers and rectified 130 expedient connections. Based on the Consulting Engineer's latest estimation, the total cost of works completed under the forfeited contract is about \$108.1 million. \$103.2 million had so far been paid to the Contractor and further payment was withheld in Government's deposit account to set-off the debt

² Nightworks are the construction works carried out between 7 p.m. and 7 a.m. on the following day.

³ The Consulting Engineer and the Drainage Services Department (DSD) had issued warning letters, including 9 adverse reports, and interviewed the contractor on various occasions. Monitoring of the contractor's performance had also been stepped up through more regular reporting and progress meetings. In April 1998, the contractor was suspended from tendering for further public works on financial grounds in order for the contractor to concentrate its resources on existing contracts with the Government.

incurred in relation to the forfeiture of the Contract.

6. Due to the poor performance and liquidation of the first contractor, the project experienced a delay of 28 months as compared with the original programme schedule. In addition, there was a further delay of 5 months caused by inclement weather during the time of construction by the first contractor. To provide supervision for the works during the extended 33 months, additional resident site staff had to be maintained at an additional cost of \$29.7 million, which included \$25.3 million due to the poor performance and liquidation of the first contractor and \$4.4 million due to inclement weather. Legal advice indicated that, given the liquidation of the contractor, it is extremely unlikely that there would be any monies available to satisfy Government's claim for these costs from the contractor.

7. Works Bureau had taken the following steps to protect the interests of Government in the event of contractors failing to meet the standards of performance due to cashflow problem or heavy financial losses -

- (a) revised the financial requirements of contractors being accredited on the Approved Lists so as to minimise the risk of awarding contracts to contractors having financial problems; and
- (b) reviewed the guidelines and procedures pertaining to administration and monitoring of the performance of the contractors and suppliers on the Approved Lists with a view to further tightening the rules governing their conduct and performance, e.g. contractors receiving two consecutive adverse reports on performance instead of three would be suspended from tendering for public works contracts.

The revised rules were finalized and will be incorporated into the Contractor Management Handbook to be promulgated in late March 2001.

Additional nightworks

8. To minimize the disturbance caused to traffic and road users, additional funds are also required to reschedule some of the construction works at

night time under the completion contract⁴, which involve road openings at busy streets and back alleys in the industrial areas.

9. Based on the traffic impact assessment conducted prior to the commencement of the project and experience gained while carrying out the works under the forfeited contract, we had made provisions for nightworks under the completion contract to cover about 1.3 kilometres out of the total remaining 4.5 kilometres of sewers to be completed. Prior to the commencement of works on a particular road section or a back alley, we consulted affected parties, such as factory operators, on our proposed temporary traffic arrangements. Having taken into account their views and latest traffic conditions, we consider it necessary to re-schedule the construction works for another 1.9 kilometres of sewers at night time (in addition to the nightworks for the 1.3 kilometres of sewers as originally envisaged) so as not to adversely affect the delivery and loading/unloading activities of factories affected. The revised arrangement is also in line with the advice of the Transport Department so as to minimize the risk of traffic congestion at main roads. Appropriate measures⁵ to mitigate any noise nuisance are required during the implementation of nightworks.

10. As the additional nightworks were not allowed for when the completion contract was tendered, the cost of \$20.7 million so incurred, which included \$6.3 million for direct cost and \$14.4 million for prolongation cost respectively, have to be borne by Government.

11. Since carrying out works at night is more time-consuming, we expect that the contract will be delayed by a further 8 months. Together with the estimated 2 months delay caused by inclement weather during the time of construction by the second contractor, our latest estimate is that the contract would be completed in October 2001. To provide supervision for the works during the extended 10 months, resident site staff had to be maintained at an additional cost of \$8.8 million. However, the increase in nightworks is necessary to avoid causing major disruption to the economic activities of concerned factories as well as traffic, thereby minimizing inconvenience to the public at large.

⁴ A completion contract was awarded in June 1999 after the first contractor went into voluntary liquidation. Works commenced immediately after the awarding of the completion contract and were scheduled for completion in December 2000.

⁵ The appropriate measures include the use of silenced construction plants and restricting the noisier operations to be carried out before 11 p.m. to mitigate noise nuisance during the implementation of nightworks.

Financial Implications

12. Following a review of the financial position of the project, we consider it necessary to increase the approved project estimate of 301DS from \$162.5 million⁶ by \$63.0 million to \$225.5 million in MOD prices in order to provide the necessary funding for completing the project. The proposed amount represents an increase of about 24% over the original project estimate of \$262.0 million when the project was upgraded to Category A under the Sewage Services Trading Fund (SSTF). A summary of the proposed increase of \$63.0 million is at Annex B.

13. A comparison of the cost breakdown of the approved project estimate and the revised project estimate is at Annex C.

14. The proposed increase in the approved project estimate will not give rise to additional recurrent expenditure.

Public Consultation

15. As there is no change in the approved project scope, we consider it unnecessary to carry out any further public consultation.

Environmental Implications

16. The proposed increase in the APE does not have any environmental implications. Completion of 301DS would ensure that projected sewage load generated in existing and planned developments would be collected for proper treatment before being discharged into environmental waters. Rectification of expedient connections would also prevent foul sewage from flowing into the storm-water drainage system and polluting environmental waters.





⁶ The project was originally funded under the Sewage Services Trading Fund (SSTF) at an estimated cost of \$262.0 million. The APE of 301DS (\$162.5 million) was established on the basis of our estimated cumulative expenditure of \$99.5 million prior to closure of the SSTF on 31 March 1998, leaving an outstanding commitment of \$162.5 million. The Finance Committee approved the creation and direct inclusion of 301DS "East Kowloon sewerage, stage II" in Category A on 27 February 1998 to cover the outstanding \$162.5 million.

Advice Sought

17. Subject to the views of Members, our proposal to increase the approved project estimate of 301DS will be submitted to the Public Works Subcommittee for consideration on 4 April 2001 with a view to seeking the funding approval of Finance Committee on 27 April 2001.

Environment and Food Bureau
March 2001

圖例
Legend

-  在已收回工程合約下已完成的污水渠工程
Works Completed under Forfeited Contract.
-  在完成工程合約下於日間建造的污水渠工程
Day Time Works under Completion Contract
-  在完成工程合約下原定計劃於夜間建造的污水渠工程
Nightworks Specified in Completion Contract.
-  在完成工程合約下須額外改為夜間建造的污水渠工程
Additional Nightworks Ordered in Completion Contract.



彩虹
Choi Hung

新蒲崗
San Po Kong

彩虹道
Choi Hung Road

太子道東
Prince Edward Road East

廣業街
Kwai Yip Street

四美街
Sze Mei Street

九龍灣
Kowloon Bay

牛頭角
Ngau Tau Kok

觀塘
Kwun Tong

觀塘避風塘
Kwun Tong Typhoon Shelter

九龍灣
Kowloon Bay

工程計劃項目第301DS/A號
PWP ITEM No. 301DS/A

圖則名稱
drawing title

東九龍污水收集系統
第二階段工程
EAST KOWLOON
SEWERAGE STAGE II

繪畫
drawn by

C.W. Chan C.W. CHAN

日期
date

13-03-2001

批准
approved

C.K. Hon C.K. HON

日期
date

13-03-2001

辦事處
office

策略性污水排放計劃部
SSDS DIVISION

圖號
drawing no.

DSS/2001/002

比例
scale

N.T.S.



香港特別行政區政府渠務署
DRAINAGE SERVICES DEPARTMENT
GOVERNMENT OF THE
HONG KONG
SPECIAL ADMINISTRATIVE REGION

**A breakdown of the proposed increase in the approved project estimate of
301DS – “East Kowloon sewerage, stage 2”**

	Factor	\$ million	% of proposed increase
(a)	Additional cost incurred under forfeited contract	29.7	47.2
(i)	additional resident site staff cost arising from project delay of 28 months due to poor performance and liquidation of the forfeited contractor	25.3	
(ii)	additional resident site staff cost arising from project delay of 5 months due to inclement weather	4.4	
(b)	Additional cost incurred under completion contract	29.5	46.8
(i)	direct costs for additional nightworks	6.3	
(ii)	contractor’s prolongation costs	14.4	
(iii)	additional resident site staff cost arising from project delay of 8 months due to additional nightworks	7.0	
(iv)	additional resident site staff cost arising from project delay of 2 months due to inclement weather	1.8	

(c) Contingencies

	3.8		6.0
	63.0	(in MOD prices)	100.0
Total	63.0		100.0

**Comparison of the cost breakdown of the approved project estimate (APE)
and the revised project estimate for
301DS – “East Kowloon sewerage, stage 2”**

A comparison of the approved project estimate and revised project estimate is as follows –

	Approved Estimate (MOD) \$ million		Revised Estimate (MOD) \$ million		Difference \$ million
(a) construction of trunk and branch sewers	108.9	[194.6]	126.8	[212.5]	17.9
(b) Rectification of expedient connections	17.0	[17.2]	19.8	[20.0]	2.8
(c) Consultants’ fees					
(i) construction of trunk and branch sewers and expedient connections	1.1	[2.0]	1.1	[2.0]	0
(ii) coordination and monitoring of expedient connections	0.6	[1.1]	0.6	[1.1]	0
(d) Resident site staff cost	14.7	[35.1]	53.2	[73.6]	38.5
(e) Contingencies	20.2	[20.2]	24.0	[24.0]	3.8
Total	<u>162.5</u>	<u>[270.2]</u>	<u>225.5</u>	<u>[333.2]</u>	<u>63.0</u>

[] – Total estimate including expenditure already incurred under the SSTF.

2. **As regards (a) (construction of trunk and branch sewers), of the total increase of \$17.9 million includes –**

(i) \$5.4 million is for the costs arising from additional night works;
and

(ii) \$12.5 million is for the contractor’s prolongation cost due to

extended contract period.

3. **As regards (b) (rectification of expedient connections), of the total increase of \$2.8 million includes –**

- (i) \$0.9 million is for the costs arising from additional night works; and
- (ii) \$1.9 million is for the contractor's prolongation cost due to extended contract period.

4. **As regards (d) (resident site staff cost), of the total increase of \$38.5 million includes –**

- (i) \$37.8 million is to cover site staff cost due to the extended contract period of the project; and
- (ii) \$0.7 million is due to salary revisions of the resident site staff in line with the increase of civil service salaries.

5. **As regards (e) (contingencies), we retain \$24.0 million as the contingencies for other minor future additional works and for resolution of possible claims from the contractor.**