



- b) construction of about 600 m of sewers along Sha On Street and Sai Sha Road;
- c) construction of about 300 m of sewers along Che Kung Miu Road;
- d) upgrading of part of the pumping equipment at the Ma On Shan Main Pumping Station; and
- e) the associated ancillary works.

Site plans showing the proposed works are at **Enclosure 1**.

4. We plan to commence construction in early 2007 for completion in late 2010.

## **FINANCIAL IMPLICATIONS**

5. We estimate the capital cost<sup>1</sup> of the proposed works to be about \$76 million in MOD prices and the annual recurrent cost<sup>1</sup> to be about \$0.9 million. Based on the current level of expenditure on operation and maintenance of sewerage facilities, the proposed works of themselves will lead to an increase in the recurrent cost of providing sewage services by about 0.05%, which will be taken into account in determining sewage charges.

6. We estimate that the proposed works will create about 52 jobs<sup>1</sup> (45 for labourers and another 7 for professional/technical staff) providing a total employment of about 2 100 man-months.

## **TRAFFIC IMPLICATIONS**

7. We have completed a traffic impact assessment and worked out mitigation measures to minimize possible disruption to the traffic during construction of the sewers. To minimize disturbance and inconvenience to the public during the construction stage, we will carry out the pipe laying works in sections and institute appropriate temporary measures to divert traffic and pedestrians so as to maintain all existing vehicular and pedestrian accesses. To expedite works progress without inducing unacceptable interruption to the traffic, we will also employ the trenchless method to construct a section of rising main across Sai Sha Road.

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<sup>1</sup> These are the latest estimates. We would finalize the project costs and estimated new job opportunities, and include the cost breakdown prior to submitting the proposals to the PWSC for consideration.

## ENVIRONMENTAL IMPLICATIONS

8. Among the proposed works, only the proposed new pumping station in Area 108 is a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We will apply for an environmental permit under the Ordinance in mid 2006 for its construction and operation. We have completed a Project Profile which concluded that there would not be any long term adverse environmental impacts arising from the proposed works. We will nevertheless install a forced ventilation system fitted with a de-odourizer in the proposed pumping station to combat the potential odour problem. For short term impacts caused by the works during construction, we will control noise, dust and site runoff to levels within established standards and guidelines through implementation of mitigation measures, such as the use of quieter construction equipment to reduce noise, water-spraying to reduce dust, and strict control on diversion of site run-off. We will also carry out regular site inspections to ensure that these recommended mitigation measures and good site practices are properly implemented.

9. We have given due consideration to the need to minimize construction and demolition (C&D) materials in the planning and design stages of the proposed works. We will require the Contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will require the Contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will ensure that the day-to-day operation on site complies with the approved WMP. We will control the disposal of public fill and C&D waste to designated public filling reception facilities<sup>2</sup> and landfills respectively through a trip-ticket system. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

10. We estimate that the proposed works will generate about 10 600 tonnes of C&D materials. Of these, we will reuse about 5 000 tonnes (47%) on site and 5 000 tonnes (47%) as fill in public filling reception facilities, and dispose of 600 tonnes (6%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be about \$0.2 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne<sup>3</sup> at landfills).

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<sup>2</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

<sup>3</sup> This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled, and the aftercare required. It does not include the land opportunity cost for existing

## **PUBLIC CONSULTATION**

11. We presented the proposal for the implementation of this project to the Development & Housing Committee of Sha Tin District Council on 21 February 2006. The Committee supported the implementation of the project.

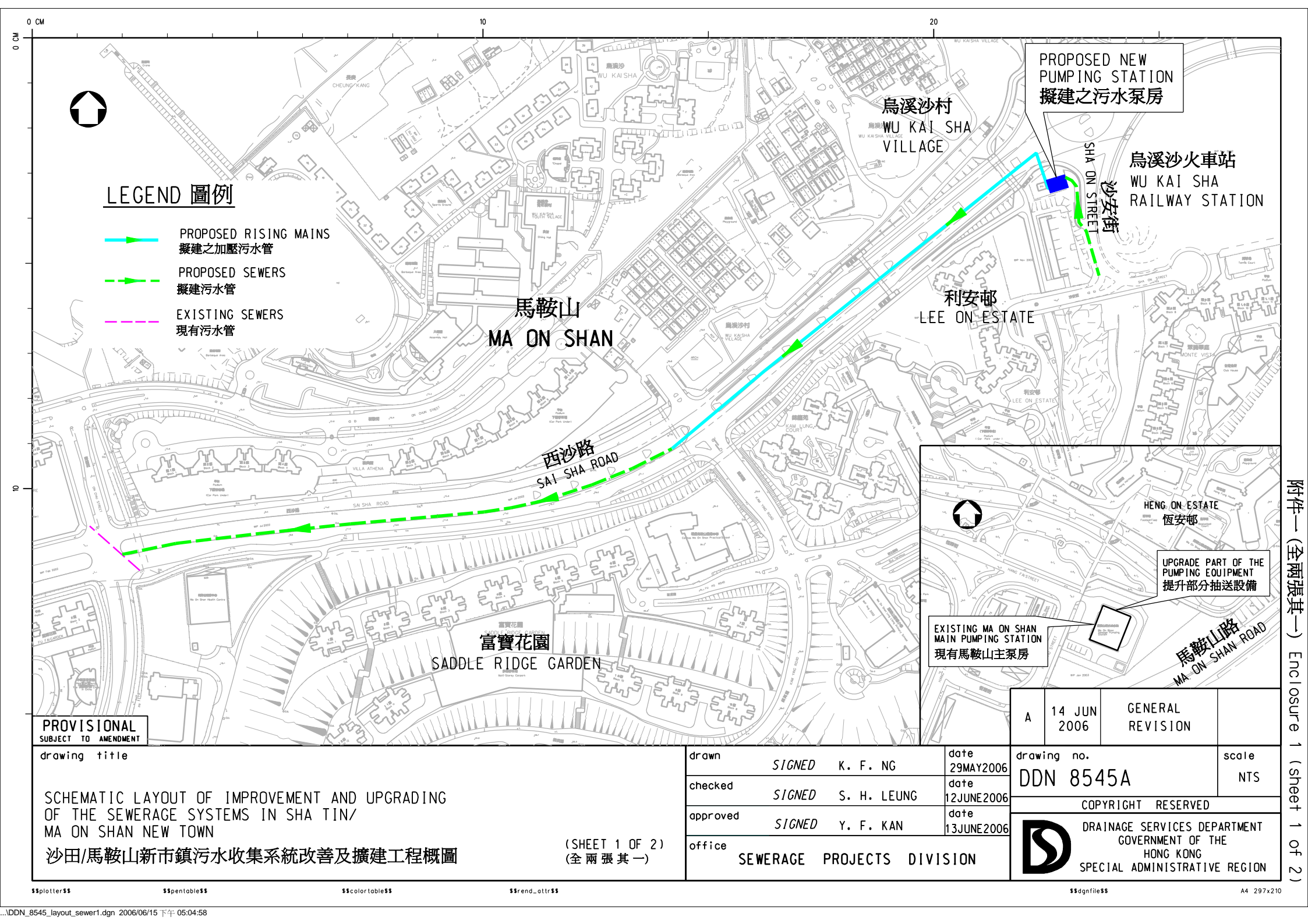
## **ADVICE SOUGHT**

12. Members are invited to support our proposal to seek PWSC support in October 2006 for upgrading of **338DS** to Category A, with a view to seeking the funding approval of Finance Committee in November 2006.

Environmental Protection Department  
June 2006

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landfill sites (which is estimated at \$90/m<sup>3</sup>), nor the cost of providing new landfills (which are likely to be more expensive) when existing ones are filled.



**LEGEND 圖例**

- ▶ PROPOSED RISING MAINS  
擬建之加壓污水管
- - -▶ PROPOSED SEWERS  
擬建污水管
- - - EXISTING SEWERS  
現有污水管

PROPOSED NEW PUMPING STATION  
擬建之污水泵房

烏溪沙火車站  
WU KAI SHA RAILWAY STATION

烏溪沙村  
WU KAI SHA VILLAGE

馬鞍山  
MA ON SHAN

利安邨  
LEE ON ESTATE

西沙路  
SAI SHA ROAD

富寶花園  
SADDLE RIDGE GARDEN

HENG ON ESTATE  
恆安邨

UPGRADE PART OF THE PUMPING EQUIPMENT  
提升部分抽送設備

EXISTING MA ON SHAN MAIN PUMPING STATION  
現有馬鞍山主泵房

馬鞍山路  
MA ON SHAN ROAD

PROVISIONAL  
SUBJECT TO AMENDMENT

drawing title

SCHMATIC LAYOUT OF IMPROVEMENT AND UPGRADING OF THE SEWERAGE SYSTEMS IN SHA TIN/ MA ON SHAN NEW TOWN

沙田/馬鞍山新市鎮污水收集系統改善及擴建工程概圖

(SHEET 1 OF 2)  
(全兩張其一)

drawn	SIGNED K. F. NG	date	29MAY2006
checked	SIGNED S. H. LEUNG	date	12JUNE2006
approved	SIGNED Y. F. KAN	date	13JUNE2006
office	SEWERAGE PROJECTS DIVISION		

A	14 JUN 2006	GENERAL REVISION
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drawing no.	DDN 8545A	scale	NTS
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GOVERNMENT OF THE HONG KONG  
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附件一(全兩張其一) Enclosure 1 (Sheet 1 of 2)

