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**Public Works Subcommittee of the Finance Committee
of the Legislative Council**

**Minutes of the 11th meeting
held in Conference Room A of Legislative Council Building
on Wednesday, 9 June 2010 at 8:30 am**

Members present:

Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP (Chairman)
Hon CHEUNG Hok-ming, GBS, JP (Deputy Chairman)
Hon Fred LI Wah-ming, SBS, JP
Hon James TO Kun-sun
Hon CHAN Kam-lam, SBS, JP
Hon Miriam LAU Kin-ye, GBS, JP
Hon Andrew CHENG Kar-foo
Hon TAM Yiu-chung, GBS, JP
Hon WONG Kwok-hing, MH
Prof Hon Patrick LAU Sau-shing, SBS, JP
Hon KAM Nai-wai, MH
Hon CHAN Hak-kan
Hon WONG Kwok-kin, BBS
Hon IP Kwok-him, GBS, JP
Hon Mrs Regina IP LAU Suk-ye, GBS, JP
Hon Alan LEONG Kah-kit, SC
Hon CHAN Tanya

Members absent:

Hon LAU Wong-fat, GBM, GBS, JP
Hon Timothy FOK Tsun-ting, GBS, JP
Hon Abraham SHEK Lai-him, SBS, JP
Hon Audrey EU Yuet-mee, SC, JP
Hon LEE Wing-tat

Hon Cyd HO Sau-lan
Hon Starry LEE Wai-king
Dr Hon LEUNG Ka-lau
Hon Albert CHAN Wai-yip

Public officers attending:

Ms Doris HO Pui-ling	Deputy Secretary for Financial Services and the Treasury (Treasury) ³
Mr MAK Chai-kwong, JP	Permanent Secretary for Development (Works)
Mr Thomas CHOW Tat-ming, JP	Permanent Secretary for Development (Planning and Lands)
Ms Anissa WONG, JP	Permanent Secretary for the Environment
Miss Sandra LAM Ching-nga	Principal Assistant Secretary for Financial Services and the Treasury (Works)
Mr LAU Ka-keung, JP	Director of Drainage Services
Mr Elvis AU Wai-kwong, JP	Assistant Director (Water Policy)
	Environmental Protection Department
Mr CHAU Kwok-ming	Chief Engineer (Harbour Area Treatment Scheme)
	Drainage Services Department
Mr MAK Ka-wai	Chief Engineer (Consultants Management)
	Drainage Services Department
Mr CHAN Kin-kwong	Chief Engineer (Drainage Projects)
	Drainage Services Department
Mr YAU Shing-mu, JP	Under Secretary for Transport and Housing
Mr CHOW Chun-wah	Principal Assistant Secretary (Transport) ⁷
	Transport and Housing Bureau
Mr WAI Chi-sing, JP	Director of Highways
Mr WAN Man-lung, JP	Principal Government Engineer (Railway Development)
	Highways Department
Mr Henry LAM	General Manager (SCL/KTE)
	MTR Corporation Limited
Miss Maggie SO	Senior Manager (Projects and Property Communications)
	MTR Corporation Limited
Mr MA Lee-tak, JP	Director of Water Supplies
Mr NG Chi-ho	Assistant Director (New Works)
	Water Supplies Department

Clerk in attendance:

Ms Debbie YAU	Chief Council Secretary (1) ⁶
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Staff in attendance:

Ms Angel SHEK	Senior Council Secretary (1)1
Mr Frankie WOO	Senior Legislative Assistant (1)3
Ms Christy YAU	Legislative Assistant (1)1

Action

The Chairman advised that a total of 31 capital works projects costing \$99,692.5 million had been endorsed by the Public Works Subcommittee (PWSC) in the 2009-2010 session so far.

Head 704 – Drainage

PWSC(2010-11)12 329DS Upgrading of Pillar Point sewage treatment works

2. The Chairman advised that the proposal was to increase the approved project estimates (APE) of 329DS by \$559.6 million from \$1,360.9 million to \$1,920.5 million in money-of-the-day (MOD) prices for upgrading the treatment level and capacity of Pillar Point sewage treatment works (PPSTW). The Panel on Environmental Affairs had been consulted on the proposal at its meeting on 24 May 2010, and Panel members raised no objection to the submission of the proposal to PWSC.

Sewage treatment and transportation

3. Mr WONG Kwok-hing enquired about the areas served by PPSTW, its service scope and measures to be taken to monitor odour emission and/or possible leakage during transportation of septic waste before and after treatment.

4. The Director of Drainage Services (DDS) advised that PPSTW served mainly the population in Tuen Mun. It also provided reception and treatment for septic waste from septic tanks and aqua privies in the district as delivered by private septic waste collection contractors. The septic waste would undergo treatment at PPSTW to form sludge which would be de-watered and transported by sealed container trucks to the West New Territories (WENT) Landfill for disposal. DDS further said that septic waste delivery by private collection contractors was subject to monitoring by the Food and Environmental Hygiene Department to ensure compliance with the relevant sanitary requirements. The Government would be responsible for transporting the dewatered sludge from PPSTW to WENT Landfill and monitoring odour emission by ensuring that the containers carrying the sludge were tightly sealed and the trucks were cleansed before and after each delivery.

5. Mr WONG Kwok-hing enquired whether sea transportation would be adopted for delivering sludge from PPSTW to WENT Landfill to minimize potential adverse impact on local residents. DDS said that the sludge would be transported from PPSTW to WENT Landfill via Lung Mun Road, which would bypass the Tuen Mun town centre and the densely populated residential areas. As PPSTW was segregated from the waterfront by the River Trade Terminal, and having regard to the close proximity of PPSTW to WENT Landfill, transportation by land was considered more direct and convenient than by sea.

6. In reply to Mr WONG Kwok-hing's suggestion for the Tuen Mun District Council (TMDC) to conduct monitoring of PPSTW's operation, DDS said that PPSTW would continue to upload its environmental performance data onto the relevant website for public information and monitoring. The Administration would take into account the views and suggestions from the public, including TMDC, for enhancing PPSTW's operation where warranted.

Design-build-operate procurement mode

7. Mr IP Kwok-him noted that PPSTW would be implemented using a design-build-operate (DBO) contract for which the tenderers had to price the design and construction of the upgrading works separately from the 15-year operation of the upgraded PPSTW. He enquired how the tender prices would be assessed, and the way forward about PPSTW's operation after expiry of the 15-year contract. DDS said that the sum of the two prices would be considered together when assessing the bids. Due to the different timing in undertaking the design and construction works and operating the upgraded PPSTW, the respective tender prices would be converted to net present value for comparison. The contractor would be required to conduct a survey on the facilities one year before expiry of the contract to ensure that the plant could continue operation for at least five more years, and hand over PPSTW to the Government after the end of the 15-year contract period. The Government would then determine whether it would take up PPSTW's operation or contract it out again.

8. Mr IP Kwok-him enquired about the major cause for increasing the APE by \$559.6 million for the project. DDS explained that the contractor would apply innovative and patent technologies in wastewater treatments, which required an advanced treatment setup to be installed at a deeper underground level than that in conventional design, to enhance hydraulic efficiencies of the chemical treatment process. While the proposal would incur an additional capital expenditure of \$403.1 million in September 2009 prices for design and construction, it would yield significant savings in subsequent operation, and the benefits of enhanced operational efficiency represented by estimated savings of around \$450 million in September 2009 prices during the 15-year operation would outweigh the additional capital cost.

9. The item was voted on and endorsed.

PWSC(2010-11)13 372DS Rehabilitation and construction of trunk sewers underneath Shing Mun River Channel

10. The Chairman advised that the proposal was to upgrade 372DS to Category A at an estimated cost of \$140.0 million in MOD prices for the implementation of sewerage works underneath Shing Mun River Channel (SMRC) in Sha Tin. When consulted at the meeting on 24 May 2010, the Panel on Environmental Affairs raised no objection to the submission of the funding proposal to PWSC.

Rehabilitation and construction of trunk sewers

11. Mr IP Kwok-him expressed concern about the cost-effectiveness of using \$33 million to rehabilitate the existing trunk sewer under SMRC as compared to \$63 million for constructing a new one under the same project. He enquired about the service life of the trunk sewer after rehabilitation.

12. DDS advised that the existing trunk sewer served the south-eastern part of Sha Tin with a population of around 300 000. Recent inspections of the sewerage in the district indicated early signs of structural deterioration in many sewers which implied that the trunk sewer underneath SMRC was also in a deteriorating condition with a growing risk of structural failure. Given the vast volume of sewage handled by the trunk sewer, measure applicable in other cases (such as temporary diversion of sewage flow to adjacent sewers so as to allow comprehensive structural integrity check and rehabilitation works to be carried out for the trunk sewer) was considered technically infeasible. It was thus proposed to provide a duplicate trunk sewer which would be aligned in parallel to the existing trunk sewer. While inspection and rehabilitation of the existing trunk sewer could only commence after full commissioning of its duplicate which could serve 40 to 50 years, it was envisaged that the rehabilitation works could extend the service life of the existing trunk sewer for at least some 10 to 20 years. Upon commissioning of both sewers by November 2015, it would become technically feasible to operate both trunk sewers independently for performing routine inspection, maintenance and emergency repairs whenever necessary, thus avoiding over-utilization and under-repair when compared to operating with only one trunk sewer. This would prolong the service lives of both trunk sewers and safeguard the overall reliability of the sewerage system. Given these considerations, it was worthwhile to retain and rehabilitate the existing trunk sewer at half of the cost for constructing a new one. In reply to Mr IP Kwok-him's further enquiry, DDS clarified that the new twin pipe trunk sewer to be built underneath SMRC was also a gravity trunk sewer as the existing one.

Environmental and traffic impact

13. Mr CHAN Hak-kan said that while he did not object to the proposal, he was concerned about the close proximity of the rehabilitation and construction

works with residential developments, in particular the lower floors of block 13 of City One Shatin, as the works would bring about noise, dust and traffic impacts to the neighboring community. In particular, the reception shaft would be located near a busy bus station catering to the needs of local residents. Mr CHAN also expressed concern that the proposed works would traverse Tai Chung Kiu Road which provided the main connection between Sha Tin and North New Territories. He enquired about the mitigation measures to minimize adverse impact.

14. DDS clarified that block 13 of City One Shatin was located at least 10 metres away from Tai Chung Kiu Road where excavation of the reception shaft would take place. As the proposed duplicate trunk sewer would be constructed using trenchless method, environmental nuisances associated with the proposed works would thus be minimized. Nevertheless, he assured members that the contractors would be required to implement mitigation measures during construction to control noise, dust and site run-off to within established standards and guidelines. DDS further explained that the launch shaft would be excavated at the Sha Tin Sewage Pumping Station at the other side of SMRC, from which the tunnelling shield would be jacked forward, with sewage pipes inserted behind the shield. As the entire tunnelling operation would be conducted underground, the proposed works would not involve road surface excavation and the reception shaft could be covered most of the time during construction.

15. As for the traffic impact, DDS said that the area currently occupied by the central divider of Tai Chung Kiu Road would be utilized to compensate for the road area to be occupied for the excavation of the reception shaft such that the three southbound traffic lanes of Tai Chung Kiu Road would be maintained.

16. In reply to Mr CHAN Hak-kan's concern that the proposed works might lead to subsidence of Tai Chung Kiu Road, DDS said that the trenchless method should not give rise to such a risk. Nonetheless, the Administration would monitor the ground conditions, including detection of subsidence and cracks, for taking early remedial actions. Preventive measures such as grouting works would be carried out, where necessary, to stabilize the ground.

17. The item was voted on and endorsed.

PWSC(2010-11)14 140CD Reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road

18. The Chairman advised that the proposal was to upgrade part of 140CD at an estimated cost of \$159.4 million in MOD prices for carrying out local road widening works at Choi Hung Road adjacent to the section of Kai Tak Nullah near Wong Tai Sin Police Station, and constructing an additional box culvert alongside the existing decked nullah across Prince Edward Road East (PERE). An information paper had been circulated to the Panel on Development on 14 May

2010.

19. Mr WONG Kwok-kin expressed support for the proposal as the road widening works would address the existing bottleneck traffic conditions at Choi Hung Road adjacent to the section of Kai Tak Nullah. Noting that the proposed works would last for two years from late 2010 to late 2012, Mr WONG enquired whether the duration of works could be shortened to minimize potential adverse impact on the traffic and pedestrian flow in the neighbouring areas, in particular if the road widening works in question would be undertaken concurrently with the improvement works to the section of Kai Tak Nullah between Po Kong Village Road and Tung Kwong Road.

20. DDS said that as the improvement works to the section of Kai Tak Nullah between Po Kong Village Road and Tung Kwong Road would require adequate working space alongside the nullah, they could only be undertaken in the next stage after completion of the proposed road widening works which would take only one year, having regard to the request from the Wong Tai Sin District Council for early implementation of the works. As for the construction of an additional box culvert alongside the existing decked nullah across PERE, the works would last for two years, during which temporary traffic diversion would be implemented to maintain smooth traffic flow.

21. In reply to the enquiry of Mr IP Kwok-him about road closure arrangements during the proposed works, DDS said that the road widening works at Choi Hung Road would not require any road closure arrangement, and temporary traffic management measures would be implemented to maintain the existing number of traffic lanes thereat. During the construction of the proposed additional box culvert across PERE, the Administration would maintain the existing number of traffic lanes along this major road, whereas one of the two traffic lanes at the existing flyover connecting Choi Hung Road to PERE would be closed temporarily. The location and arrangement of excavation at the carriageway would change as the works proceeded so that no traffic lane would be closed but shifting sideways throughout the entire two-year period.

22. Ms Miriam LAU expressed concern that while the existing number of traffic lanes along PERE would be maintained during the proposed works, the temporary traffic management measures would probably narrow the lanes and give rise to traffic congestion. She enquired about the traffic impact assessment in this regard. Ms LAU also asked about how the lane closure at the existing flyover connecting Choi Hung Road to PERE "would not cause significant traffic impact" as stated in PWSC(2010-11)14.

23. DDS said that the Administration had carried out traffic impact assessment for the proposed works. He explained that the existing number of traffic lanes along PERE could be maintained by making use of the land alongside the carriageway to implement traffic diversion and minimize disturbance to the traffic flow. As for the existing flyover connecting Choi Hung Road to PERE, the lane

bound for Kowloon City would be closed and the traffic in this direction would be diverted towards To Kwa Wan where the vehicles could still access Kowloon City by turning right at the Olympic Garden roundabout. The surveys and trial runs conducted had confirmed that the proposed traffic diversion would not cause significant impact as the vehicle/capacity ratio at this lane was relatively low, i.e. less than 10 vehicles per minute. Ms Miriam LAU requested the Administration to put in place clear road signage to inform drivers about the traffic diversion. The Administration took note of the request.

Admin

24. The item was voted on and endorsed.

Head 706 – Highways

PWSC(2010-11)11 58TR Shatin to Central Link-construction of railway works-protection works

25. The Chairman advised that the proposal was to upgrade part of 58TR to Category A at an estimated cost of \$152.6 million in MOD prices for the construction of protection works for a section of the Shatin to Central Link (SCL) tunnels that intersected with water mains to be reprovisioned under the Wan Chai Development Phase II (WDII) project. When consulted on 4 June 2010, the Subcommittee on Matters relating to Railways (Railways Subcommittee) of the Panel on Transport raised no objection to the submission of the funding proposal to PWSC. The Administration had provided supplementary information on the proposed works to PWSC on 8 June 2010.

Protection works

26. Mr IP Kwok-him noted that the proposed protection works comprised two rows of diaphragm walls, each about 70-metre long, supporting a concrete slab in between, running underground alongside the Convention Avenue in Wanchai. He was concerned about the generation of construction waste if the diaphragm walls etc. would be demolished after use. The Director of Highways (DHy) advised that the Administration would consider retaining the diaphragm walls, if necessary, for permanent purpose during the detailed design stage.

27. Ms Miriam LAU reported that when the Railways Subcommittee was consulted on the proposed works at its meeting on 4 June 2010, Subcommittee members queried why the remainder of the project 58TR, comprising mainly protection works at the underground intersection of future SCL tunnels and the Central Wan Chai Bypass (CWB) tunnels at the Causeway Bay Typhoon Shelter (CBTS) would not be undertaken at the same time. Mr Andrew CHENG expressed disappointment that the Administration had not provided, as undertaken at the Railways Subcommittee meeting on 4 June 2010, explanation for carrying out the protection works at CBTS separately at a later stage. He considered that funding for works of similar nature should be sought under one funding proposal to achieve administrative efficiency and avoid causing delay to the SCL project as a

result.

28. The Under Secretary for Transport and Housing (USTH) explained that the planning and implementation timeframes of the two protection works in question were different. To ensure better interface between the SCL and WDII projects, there was a need to implement the proposed works at this stage before reprovisioning the concerned water mains affected by the reclamation works under WDII. If the protection works under the WDII project were to be carried out later, it would be necessary to relocate the reprovisioned water mains to make way for the protection works. DHy added that the protection works at the CBTS had to dovetail with the programme of the CWB project as it would affect the amount and mode of reclamation works required for SCL in the area. Moreover, the reclamation works had to undergo statutory process and hence funding approval for the protection works could only be sought at a later stage.

29. Ms Miriam LAU opined that while the two protection works would take place at different locations and times, it might be more cost-effective to deploy the manpower resources of the 95 posts concerned to undertake and monitor both works of similar nature. Implementing the protection works under the CWB project separately at a later stage would also risk further increase in the construction cost due to price fluctuation.

30. USTH said that funding for both protection works had already been included in the SCL project estimates and there was flexibility to implement these works separately at different times. The Permanent Secretary (Works) (PS(W)) said that it was the prevailing practice to estimate the jobs created by each public works project in terms of man-month or man-year of employment. He explained that the proposed protection works would likely be entrusted to the ongoing WDII project contractor(s). The 95 jobs (or 1 380 man-months) estimated to be created for the works would form part of the job creation of the WDII project. Similarly, protection works at the CBTS would be entrusted to the CWB project contractor(s), and hence the job creation would be counted as part of that for the CWB project. PS(W) further said that protection works were undertaken when the need arose. For example, the protection works at the CBTS would be carried out later when the construction of the CWB section thereat was ready to commence. At the request of Mr Andrew CHENG and Ms Miriam LAU, the Administration agreed to provide further information on the considerations for undertaking the planned protection works at CBTS separately at a later stage.

Admin

31. Mr WONG Kwok-kin said that he supported the proposed works but was concerned about the timeframe for constructing SCL as a number of issues relating to its alignment and facilities had not yet been resolved. Mr WONG considered that the Administration should inform members about its latest position of the SCL alignment and other issues to facilitate members' consideration whether the proposed protection works should be pursued at this stage to ensure prudent use of public resources.

32. USTH said that the Administration had carried out the preliminary design in parallel with public consultation for SCL since late 2008. The public had raised different views and concerns about the railway project, such as the use of Ma Chai Hang Recreation Ground as a temporary works site, location of ventilation buildings, and whether a "semi-depressed" or "depressed" design should be adopted for the SCL stabling sidings at Diamond Hill. The Administration would further consult the local communities and relevant parties in the next two to three months with a view to gazetting the SCL project under the Railways Ordinance (Cap. 519) in 2011 or earlier, depending on the progress of consultation.

Project estimates of SCL

33. Mr Andrew CHENG expressed dissatisfaction that the Administration had not responded to the request of the Railways Subcommittee to provide the latest estimates of the SCL project. While understanding that the estimates were subject to changes taking into account possible changes in the railway alignment and other factors arising from the ongoing public consultation, he considered it unreasonable that the Administration could not provide the latest estimates for members' reference, in particular an initial estimate of \$37.4 billion for the SCL project was made in 2008. Noting from some sources that the latest project estimates might reach as high as \$50 billion, he was worried that the Administration did not provide the information because there was a drastic increase in the capital cost. Ms Miriam LAU also requested the Administration to provide the latest estimates of the SCL project.

34. USTH advised that the SCL project was still undergoing detailed design and issues relating to several major component works involving substantial expenditures that might affect the estimation, such as the Diamond Hill stabling sidings, had yet to be resolved. As such, a more realistic estimation of the overall project cost of SCL could not be provided at this stage. DHy said that the Administration would make reference to the outturn tender prices of other major public works projects to be available in the next few months, in order to come up with a more precise estimation of the SCL project cost.

Admin

35. The Chairman requested the Administration to address members' concerns and provide a ballpark estimate of the SCL project on the basis of latest information and assumptions available, together with explanation on the possible factors that might affect the estimation.

36. The item was voted on and endorsed. Mr Andrew CHENG requested that the item be voted on separately at the relevant FC meeting.

Head 709 – Waterworks

PWSC(2010-11)15 181WF In-situ reprovisioning of Sha Tin water treatment works

37. The Chairman advised that the proposal was to upgrade part of 181WF to Category A at an estimated cost of \$149.1 million in MOD prices for engaging consultants to carry out design and site investigation for the reprovisioning of the South Works of Sha Tin water treatment works. An information paper on the proposal had been circulated to the Panel on Development on 18 May 2010.

38. The item was voted on and endorsed.

39. The Chairman thanked Mr MAK Chai-kwong, PS(W), for his attendance at and contribution to PWSC meetings in the past years. The Chairman wished Mr MAK a rewarding retirement life.

40. There being no other business, the meeting ended at 10:30 am.

Council Business Division 1
Legislative Council Secretariat
30 June 2010