立法會 Legislative Council

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Public Works Subcommittee of the Finance Committee of the Legislative Council

Minutes of the 12th meeting held in the Chamber of Legislative Council Building on Wednesday, 27 February 2002, at 10:45 am

Members present:

Ir Dr Hon Raymond HO Chung-tai, JP (Chairman)

Hon Albert CHAN Wai-yip (Deputy Chairman)

Hon Kenneth TING Woo-shou, JP

Hon Cyd HO Sau-lan

Hon Eric LI Ka-cheung, JP

Hon Fred LI Wah-ming, JP

Hon James TO Kun-sun

Hon CHAN Yuen-han, JP

Hon CHAN Kam-lam

Hon SIN Chung-kai

Hon LAU Kong-wah

Hon Andrew CHENG Kar-foo

Hon LAW Chi-kwong, JP

Hon TAM Yiu-chung, GBS, JP

Dr Hon TANG Siu-tong, JP

Hon Henry WU King-cheong, BBS

Hon WONG Sing-chi

Hon IP Kwok-him, JP

Hon LAU Ping-cheung

Hon MA Fung-kwok

Members absent:

Hon Andrew WONG Wang-fat, JP

Hon WONG Yung-kan

Hon Miriam LAU Kin-yee, JP

Hon Emily LAU Wai-hing, JP

Hon Abraham SHEK Lai-him, JP

Public officers attending:

Miss Elizabeth TSE, JP Deputy Secretary for the Treasury (3)

Mr S S LEE, JP Secretary for Works

Mr Mike STOKOE, JP Deputy Director of Environmental Protection

Miss Janice TSE Principal Assistant Secretary for the Treasury (Works)

Director of Drainage Services Mr John COLLIER, JP

Chief Engineer/Project Management Mr K C NG

Drainage Services Department

Principal Assistant Secretary for the Mr Raistlin LAU

Environment and Food (B)1

Chief Engineer/Consultants Management Mr K W MAK

Drainage Services Department

Deputy Secretary for the Environment and Food (A) Mrs Stella HUNG, JP Mrs Marion LAI

Deputy Director of Food and Environmental Hygiene

(Administration and Development)

Assistant Director of Mr K K LEE

Food and Environmental Hygiene (Operations) 2

Director of Architectural Services Mr S H PAU, JP

Mr WONG Shiu-kwan Project Director 3

Architectural Services Department

Principal Assistant Secretary for Mr John LEUNG

Education and Manpower (9)

Principal Education Officer (Infrastructure) Mr S L MA

Education Department

Mr Clement LEUNG Principal Assistant Secretary for

Education and Manpower (1)

Deputy Secretary-General (1) Mr Jeff LEUNG

University Grants Committee

Mr K S SHUM Chief Technical Advisor/Subvented Projects,

Architectural Services Department

Director of Water Supplies Mr KO Chan-gock, JP

Mr LEUNG Mang-chiu Assistant Director of Water Supplies (New Works)

Clerk in attendance:

Ms Anita SIT Chief Assistant Secretary (1)6

Staff in attendance:

Ms Pauline NG Assistant Secretary General 1
Ms Bonnie KAN Senior Assistant Secretary (1)9

HEAD 704 – DRAINAGE

PWSC(2001-02)104 120CD Drainage improvement in Sai Kung

Mr Henry WU noted that the proposed design consultancy for the project was scheduled to start in August 2002 for completion in December 2005 and the construction works were scheduled to commence in December 2005 for completion in December 2008. He was concerned that the flooding problem in Sai Kung would not be resolved until the completion of the drainage improvement works in late 2008, and asked why it would take more than three years to complete the design consultancy. Mr WU also noted that construction of a section (280 metres) of the proposed box culvert was scheduled to commence in July 2002 for completion in December 2004. He queried why it required two and a half years for this works item.

- 2. In response, the Director of Drainage Services (DDS) advised that environmental impact assessment (EIA) and land resumption were required for the project. The time schedule for the proposed design consultancy had taken into account the time required for taking the project through the EIA and land resumption procedures. As regards the construction of the downstream section of the proposed box culvert at Sha Ha, DDS advised that this works item would be advanced and incorporated into the road works contract under project 304CL to be carried out by the Civil Engineering Department, which was scheduled to commence in July 2002. The entrustment arrangement was to obviate repeated openings and reinstatement of roads and to save cost. DDS also advised that the proposed box culvert would consist of three cells and would be nine metres in width.
- 3. Mr Albert CHAN noted that upon completion of the proposed drainage improvements, the flood protection level in Sai Kung area would generally be raised to withstand rainstorms of a 50-year return period. He recalled that in some proposals for drainage improvement works in the past, the flood protection standard adopted was the 200-year return period rather than the 50-year return period. He thus sought clarification on the relevant flood control and prevention strategy as well

as the criteria adopted in designing drainage systems with different protection standards.

- 4. The Secretary for Works (S for W) explained that that basically, similar criteria were adopted in all districts for the design of different drainage systems. For urban areas, a protection level of the 200-year return period was specified for the trunk drains such that adequate protection was provided against extensive regional flooding in the urban areas. For the branch networks of urban areas, a protection level of 50-year return period was provided bearing in mind that the catchment area served by a branch drain was relatively small. Regarding the design of main rivers, rural drainage channels and village flood protection schemes, a protection level of the 50-year return period was provided based on considerations such as land requirement, social and economic impacts of flooding. DDS advised that for this project, since the rivers concerned were rural drainage channels affecting relatively small areas, a protection level of the 50-year return period was considered appropriate.
- Admin. 5. At Mr Albert CHAN's request, DDS undertook to provide a paper to explain the flood control and protection strategy and the criteria for adoption of different flood protection standards.
 - 6. The item was voted on and endorsed.

PWSC(2001-02)102 61DR Northeast New Territories village sewerage, phase 2

- 7. Members noted that the item was discussed at a meeting of the Environmental Affairs Panel on 26 November 2001.
- 8. The item was voted on and endorsed.

HEAD 703 – BUILDINGS

PWSC(2001-02)105 11NB Replacement of cremators at Fu Shan Crematorium, Sha Tin

9. Members noted that the present proposal had been discussed at the Food Safety and Environmental Hygiene Panel on 28 January 2002.

- 10. Mr LAU Kong-wah highlighted that there had been numerous complaints from nearby residents against dark smoke and bad odour emitted from the existing cremators at Fu Shan Crematorium. He enquired about the expected performance standard of the four new cremators to be procured. Project Director 3, Architectural Services Department (PD(3), ArchSD) advised that the four new cremators would probably be imported from the United States or Europe and their design would be up to the latest standard in respect of environmental protection. They would not emit dark smoke or odour, and there would be devices to filter particles and gases such as carbon dioxide, sulphur and dioxin. Monitoring and audit of the air emissions from the new cremators would be carried out by the Food and Environmental Hygiene Department (FEHD) on a continuous basis, to ensure that the air emissions would be in compliance with the current environmental protection requirements. Moreover, an automatic monitoring system connected to the Environmental Protection Department (EPD) and the management office of the Fu Shan Crematorium would be installed at the cremators so that any incident of emission exceeding the prescribed limit would be attended to at once.
- 11. Noting from the Administration that the Electrical and Mechanical Services Department (EMSD) would undertake the repair and maintenance (R&M) of the new cremators, Mr LAU expressed doubt on the effectiveness of EMSD's R&M work as the existing cremators maintained by EMSD were found to be not functioning satisfactorily. He sought assurance from the Administration that effective R&M would be made for the new cremators. In response, PD(3), ArchSD reiterated that the new cremators would adopt the latest cremation technology and advanced design such that harmful materials would be filtered and the quality of emissions would be much improved. EMSD would replace accessories of the new cremators if needed. Coupled with the aforesaid comprehensive environmental monitoring mechanism, the Administration was confident that the future emissions of the new cremators would be continuously in compliance with the prescribed environmental standards. At Mr LAU's request, the Administration agreed to provide further information on the R&M programme for the new cremators of this project.

Admin.

12. In reply to Mr MA Fung-kwok's enquiry about the extent the cremation service had been disrupted for R&M works in the past, Deputy Director of Food and Environmental Hygiene (Administration & Development) (DD of FEH/A&D) advised on average, the R&M works for each cremator in the Fu Shan Crematorium took up 62 days per year in the past two years.

- 13. Mr Albert CHAN enquired about the expected serviceable life of the existing cremators at the time of procurement and that of the four new cremators. PD(3), ArchSD advised that the existing cremators were constructed in 1984 and they met the then required standards. Their expected serviceable life at the time of procurement was about 15 years, while that of the four new cremators would be 15 to 20 years with continuous maintenance.
- 14. Mr Albert CHAN queried that a serviceable life of 15 years for cremators appeared to be unreasonably short. PD(3), ArchSD explained that the existing cremators were still functioning but the frequent repairs required in recent years had disrupted the provision of cremation services. Indeed, they were now beyond economical repair after 16 years of service and were due for replacement. Moreover, their performance was not able to meet the prevailing environmental standards. Hence, it was considered appropriate to replace the existing cremators to ensure effective service and compliance with the current environmental requirements.
- 15. The Chairman and Mr Albert CHAN sought clarification on the basis of the expected serviceable life of 15 to 20 years for the new cremators. PD(3), ArchSD explained that the expected economic serviceable life of the new cremators was worked out from the expected increasing R&M cost and the increasing closure time for repairs for the new cremators, based on the experience gained from the existing cremators. The Chairman commented that with technological advancement, it was reasonable to expect that the new cremators to be procured should be more durable than the existing ones. In response to Mr Albert CHAN's further enquiry about the availability of information on the serviceable life of new cremators from relevant manufacturers or suppliers, PD(3), ArchSD advised that the Administration did not have such information in hand. He undertook to provide further information on the expected serviceable life of the new cremators, with input from EMSD, before the relevant Finance Committee meeting.

Admin.

Mr Fred LI shared the concern that a serviceable life of 15 years for the new cremators was too short. He enquired about the planned utilization of the new cremators. DD of FEH/A&D advised that the utilization rate of the existing cremators in the past two years was about 90%. At present, a total of 12 timeslots were serviced by the four existing cremators per day. Upon the completion of the new cremation room with four new cremators, a total of 20 timeslots would be offered per day. The increase in timeslots offered was enabled by the more efficient cremation capability of the new cremators. If the operating hours per day remained the same, the current heavy utilization of cremators would be alleviated. She envisaged a steady increase in the utilization rate of cremators with the wider acceptance of cremation service.

- 17. Mr Fred LI enquired whether any security measures would be put in place under the project to prevent recurrence of theft by staff operating the cremators. In reply, DD of FEH/A&D advised that an automated coffin delivery system would be installed so that no manual intervention could be made in the process of delivering a coffin from the service hall to the cremator. Moreover, a closed circuit television system would be installed so that the coffin delivery process could be monitored. Mr Henry WU enquired about the fallback measures to prevent theft in the event that the automated coffin delivery system broke down. The Assistant Director of Food and Environmental Hygiene (Operations)2 confirmed that even if the automated coffin delivery system suspended operation, the closed circuit television system would still be able to monitor the security condition inside the cremation room.
- 18. In reply to Mr MA Fung-kwok's enquiry about the availability of suppliers of cremators and the way in which the tender specifications would be drawn up, PD(3), ArchSD advised that there were a number of suppliers of new cremators in the United States, Germany and other European countries. The tender documents would use performance specification for the cremators; they would not be drawn up on the basis of the information provided by a particular cremator supplier. The Chairman suggested that the specifications should be written in general terms as far as possible so that different suppliers would have a fair chance in bidding for the procurement contract.
- 19. In view of the large number of complaints from nearby residents, Mr Albert CHAN questioned if the present site of Fu Shan Crematorium was a suitable location for cremation service. DD of FEH/A&D advised that the Fu Shan Crematorium was constructed in 1985 and currently it was 250 metres from the nearest residential households. The Administration was confident that upon completion of the replacement works, the crematorium would be able to comply with the latest environmental protection requirements and that the operation of the crematorium would not cause nuisances to nearby residents.
- 20. Mr LAU Kong-wah asked if there was any international standard for the acceptable distance between a crematorium and domestic households. He highlighted that there would be some 60 000 to 70 000 residents living in the vicinity of the Fu Shan Crematorium after completion of the population intake of the Home Ownership Scheme flats and private residential developments in the area. In view of this development, the Sha Tin District Council (STDC) had expressed concern that the present location of the crematorium was not suitable in the long run. Mr LAU asked if the Administration had any longer term planning in this regard.
- 21. DD of FEH/A&D advised that while there might be international standards regarding the distance between a crematorium and domestic households, it was questionable if such standards were very relevant to Hong Kong, bearing in mind

Hong Kong's heavily densely populated environment. In this connection, she confirmed that apart from the impact on air quality, the Administration had also ascertained in the environmental impact assessment study that the visual impact of the crematorium on the environment could be minimized by the design of the project. As to the local people's view on the project, DD of FEH/A&D advised that the Administration had consulted the views of STDC and considered that the local community did not have strong objection to the project. She assured members that the Administration would make every effort to minimize the impact of the crematorium on nearby residents. She added that crematoria were generally not welcome by people and she hoped members would appreciate the difficulty in identifying an alternative site for relocation of the existing crematorium.

- 22. The Chairman recalled that during a study tour to Europe last year, the delegation of LegCo Members had observed that the crematoria in some European countries had been so designed that they would not give rise to visual intrusion at all. He suggested that more emphasis should be given to the aesthetical design of new/replacement crematoria in Hong Kong.
- 23. Mr LAU Kong-wah envisaged that upon full population intake in the vicinity of the Fu Shan Crematorium in six to seven years, there would be great pressure exerted on the Administration by the residents to relocate the crematorium. He therefore urged the Administration to make longer-term planning in this regard. DD of FEH/A&D advised that the Administration had already taken into account the future population intake in the vicinity of Fu Shan Crematorium in planning this project. The Director of Environmental Protection in approving the relevant EIA for the project had also considered this factor. At Mr LAU's request, DD of FEH/A&D undertook to provide a paper before the relevant Finance Committee meeting to elaborate on how the longer-term development in the Fu Shan area had been taken into account in planning for this project.

Admin.

24. In reply to Mr Fred LI's enquiry about the replacement plan for other crematoriums in Hong Kong, DD of FEH/A&D advised that currently, there were six crematoria with a total of 32 cremators managed by FEHD in Hong Kong. Replacement of cremators in Cape Collision Crematorium had been made during the years from 1995 to 2001 and the relevant licence had been obtained from EPD under the Air Pollution Control Ordinance. As the designed cremation volume per hour was less than 500 kilograms for the rest of the five crematoria, there was no need to apply for a licence for these crematoria from EPD. Kwai Chung Crematorium and Diamond Hill Crematorium were near the end of their serviceable life. Relevant replacement works in Kwai Chung Crematorium had started and would be completed in late 2002. Replacement of the cremators at Diamond Hill Crematorium was a Category B project and an EIA was being conducted. The project was scheduled to start in 2003 for completion in 2005. DD of FEH/A&D

added that the Administration would closely monitor the service provision in Wo Hop Shek Crematorium and Cheung Chau Crematorium and would draw up replacement plans in due course.

25. The item was voted on and endorsed.

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

PWSC(2001-02)106 30EC Construction works for schools in the final phase of the School Improvement Programme

- 26. Mr LAU Ping-cheung declared interest that the consultant firm he worked for might tender for the contracts for the proposed school improvement works.
- 27. Mr Albert CHAN pointed out that the noise from the public address systems and alarm-bell systems of schools was often a nuisance to nearby residents. He asked if relevant improvement works would be incorporated into this project to minimize the noise nuisance. The Director of Architectural Services (DArchS) advised that the facilities of schools in the final phase of the School Improvement Programme (SIP) would be upgraded to the year 2000 design as far as practicable and works to improve the public address systems and alarm-bell systems of schools had been incorporated into the present project. For example, an alarm bell with reduced volume would be installed at each floor of the school block to replace the existing alarm bell with high volume for the whole school block. Responding to the Chairman's suggestion of providing appropriate guidelines to existing schools in the use of amplifiers to minimize noise nuisance, Principal Education Officer (Infrastructure), Education Department (PEO/I, ED) agreed that the Education Department could provide appropriate guidelines to schools in this regard. At Mr Albert CHAN's request, the Administration agreed to provide further information to elaborate on the measures to reduce noise nuisance generated from the public address systems and alarm-bell systems of schools.

Admin.

Miss Cyd HO noted that the budget ceiling for each school under the SIP was set at 42% of the average cost of construction of a new school of the same type and size. She enquired about the arrangements where the improvement items requested by the school exceeded this budget ceiling and whether there was any channel for appeal should the school concerned disagreed with the ceiling. PEO/I, ED advised that for these cases, ED had carefully examined each case with ArchSD and the Education and Manpower Bureau and discussed with the schools concerned the need for and cost-effectiveness of the proposed improvement works. The budget

for the improvement works of a school might in exceptional cases exceed the 42% limit to take account of such considerations as land issues (e.g. cost of site formation for additional land grant), age, condition of existing buildings and educational factors.

- 29. Miss Cyd HO expressed concern that the Administration and the schools concerned might hold very different views on the justifiability of improvement works in excess of the 42% budget ceiling, especially when educational factors came into play. She therefore sought information on the number of schools which had requested improvement works exceeding the budget ceiling and the outcome of discussions between the Administration and the schools concerned. PEO/I, ED agreed to provide the relevant information after the meeting. He also advised that most of these cases had been resolved satisfactorily based on objective assessment of the need, cost-effectiveness and feasibility of the requested improvement works. He added that if undertaking improvement works for an existing school was found not cost-effective and/or not feasible, consideration would be given to reprovision the school to new school premises.
- 30. In response to Mr Albert CHAN's enquiry about the plan of ArchSD to contract out 90% of its new works, DArchS confirmed that the re-engineering exercise would not have any impact on the delivery of the final phase of the SIP. DArachS explained that in line with the arrangement for phases 3 and 4 of the SIP, ArchSD had engaged consultants to carry out the pre-construction works for the final phase of the SIP. Except for those 57 schools which had chosen to carry out construction works under a self-delivery mode, ArchSD would continue to act as the works agent for the schools covered in the final phase of SIP, in that ArchSD would engage consultants and contractors to deliver the construction works and would oversee the whole delivery process.
- Noting that the proposed improvement works would cover 59 schools at a total estimated cost of \$1,758.4 million, Mr Albert CHAN asked whether the improvement works would be divided into a number of contracts or would be awarded in a single contract. Miss CHAN Yuen-han opined that for large-scale projects, the Administration should, as far as practicable, award the works in smaller contract packages so as to give a fair chance for medium and small contractor companies to bid for the contracts and to reduce the risks associated with non-performance or poor performance of contractors.
- 32. In response, DArchS advised that about 14 works contracts would be awarded for the proposed improvement works. Each contract would cover one to 10 schools in the same neighbourhood. He added that similar arrangements were adopted for the works under phase 4 of the SIP.

Admin.

33. The item was voted on and endorsed.

PWSC(2001-02)107 43EF A purpose-designed building for centralised science laboratories, The Chinese University of Hong Kong

- 34. Mr CHAN Kam-lam declared interest that he was a Council Member of the Chinese University of Hong Kong.
- Noting that the net operational floor area (NOFA) of the proposed new 35. building would be 6 443 square metres whereas the construction floor area (CFA) would be 13 572 square metres, Mr Henry WU asked whether this ratio between NOFA and CFA was reasonable and how this ratio was compared to the situation of similar buildings of other universities in Hong Kong. The Chief Technical Advisor/Subvented Projects (CTA/SP), ArchSD, said that the rate of NOFA to CFA in this project was 47% and this ratio was considered reasonable for this type of building. He explained that NOFA covered only areas for performing the primary functions of the building concerned and that circulation areas, staircases, plant rooms and ventilation facilities, etc. were not included in the calculation of NOFA. The Deputy Secretary General (1), University Grants Committee (DSG1/UGC) supplemented that the ratio of NOFA to CFA in this project was similar to that in other similar projects. For example, the ratio of NOFA to CFA of the Engineering Building Complex, phase 2, CUHK (project 38EF in PWSC(2001-02)1) was about 45%, and in the project "Development of Faculty of Medicine at the existing site of the Northcote Campus of the Hong Kong Institute of Education of the University of Hong Kong" (project 45EG in PWSC(96-97)97), the ratio was also at a similar level. DSG1/UGC added that for the proposed laboratory building, a substantial amount of area was required to accommodate the plant room and the independent chemical fume exhaust system, which were not included in NOFA but were necessary to support the operation of the building.
- 36. Noting that the project was estimated to cost \$289.46 million and the NOFA was only 6 443 square metres, Mr Albert CHAN questioned the cost-effectiveness of the project in view of the high unit cost of some \$40,000 per square metre. He asked if the Administration or the university had explored alternative project delivery mode such as the "Design and build" mode to reduce cost. CTA/SP, ArchSD responded that the construction unit cost for a building project was usually calculated on the basis of CFA rather than NOFA. For this project, the estimated construction unit cost was \$12,781 per square metre. In reply to the Chairman's enquiry about the relatively high building services cost of \$86.72 million for the project, CTA/SP, ArchSD explained that this was due to the need to provide a sophisticated ventilation

system for the building to guard against potential hazards arising from laboratory experiments.

- 37. Mr Albert CHAN did not agree that the unit cost based on NOFA was not a useful indicator of the cost-effectiveness of building projects. He requested the Administration to provide information on the ratio of NOFA to CFA and the construction cost of building projects in other universities in Hong Kong and in overseas countries so that the reasonableness of the estimated cost for this project could be assessed on a comparative basis. The Chairman cautioned that cost comparison with overseas projects might not be very useful as labour and construction prices could vary substantially from one place to another.
- 38. CTA/SP, ArchSD elaborated that NOFA excluded areas occupied by any structure and partitions, circulation areas, staircases, staircase halls, lift landings, space occupied by lavatories and shower facilities, mechanical and electrical services such as lifts and air-conditioning systems, etc. At the request of Mr Albert CHAN and the Chairman, the Administration agreed to provide information on the ratio of NOFA to CFA and the construction unit cost for similar laboratory buildings of other UGC-funded institutions.
- 39. Addressing Mr LAU Ping-cheung's concern about possible hazards associated with the construction and operation of the proposed laboratory building, DSG1/UGC advised that there would not be any hazardous materials generated during the construction process. However, risks associated with hazardous materials would exist when laboratory experiments were carried out in the building upon completion. To guard against potential hazards, tailor-made precautionary systems would be installed in the new building and very stringent safety measures would be implemented to prevent incidents of toxicity, explosion, infection, radiation and risks of spread to the other users and community. In response to Mr LAU's further question on how the students and staff in the building would be protected, DSG1/UGC said that the laboratories in the building would meet the relevant biosafety standards. Proper chemical waste disposal arrangements would be made and independent chemical fume exhaust system installed to segregate the laboratories from external areas in case of any toxic gas leakage.
- 40. The item was voted on and endorsed.

Admin.

PWSC(2001-02)108 44EF

Stabilisation of slopes within the university campus, phase 11, The Chinese University of Hong Kong

- 41. Noting that the 48 sub-standard slopes would be grouped into six packages for implementation of stabilisation works, Mr Henry WU enquired about the criteria for determining the order of priority for works on the slopes. DSG1/UGC and CTA/SP, ArchSD advised that currently, 10 slopes in the university were subjects of Dangerous Hillside Orders (DHOs). After the 10 slopes had been made subjects of the DHOs, an understanding had been reached with the Geotechnical Engineering Office (GEO) of Civil Engineering Department (CED) in 1999 that in view of CUHK's relatively well organized and systematic approach in slope stabilisation works, GEO would no longer include the slopes in the university under their Landslip Preventive Measures Accelerated Programmes for surveys assessments. Henceforth, CUHK needed to conduct its own slope safety surveys and assessments with the assistance of professional consultants. Against this background, the geotechnical consultants engaged by CUHK recommended stabilisation works to a further 38 slopes showing signs of distress and possible instability. Hence the 10 slopes that were subjects of DHOs and the aforesaid 38 slopes were considered to be equally unstable. DSG1/UGC added that the extent of risk and the progress of the preparatory work in respect of these 48 slopes would be the major considerations in determining the order of priority among the six packages of stabilization works.
- 42. Mr IP Kwok-him expressed concern about the reduction of GEO's involvement in monitoring the slope safety in CUHK and enquired about the present role of GEO on the matter. DSG1/UGC advised that a task force had been formed with representatives from GEO, CED and CUHK to monitor the safety of over 250 slopes in CUHK. Hence, GEO would continue to provide professional advice for CUHK in monitoring the safety of slopes in the university, though GEO would not be directly involved in the slope survey and assessment work.
- 43. The item was voted on and endorsed.

HEAD 709 – WATERWORKS

PWSC(2001-02)101 231WF Reconstruction of catchwater channels on Hong Kong Island and Lantau Island

44. Noting that this was a proposal for reconstruction of catchwater channels on Hong Kong Island and Lantau Island, Mr TAM Yiu-chung asked if funding requests would be made for similar works in other parts of the territory in future. The

Director of Water Supplies (DWS) replied that investigation studies were being conducted on the catchwater channels in other parts of the territory and design work was in progress for the catchwater channels in some areas. Upon the completion of the design work, the Administration would submit the relevant funding proposal(s).

- 45. Mr IP Kwok-him expressed support for the inclusion of landscaping works in the project. However, he pointed out that there were frequent complaints from hikers about the improper disposal of construction and demolition (C&D) waste such as pipes and hoarding in Lung Fu Shan Country Park by contractors. He suggested that contractors should be required to clear all C&D waste away from the works site upon works completion and this requirement should be stipulated in Government's works contracts.
- 46. The Chairman pointed out that the issue concerned two phases of clearance of C&D waste, i.e. the handling of waste or materials no longer required in the course of works and the waste disposal arrangement at the end of a works project. He sought elaboration on the relevant requirements on contractors. S for W confirmed that contractors of all works projects of the Government had to comply with relevant waste management requirements both in the course of works and upon completion of works. He added that the Administration considered the tidiness at construction sites and proper waste disposal by contractors very important and that new guidelines would be issued to works departments in the coming two to three months aiming at tighter control over the proper management and disposal of C&D waste.
- 47. DWS took note of Mr IP's concern about the unsatisfactory condition in Lung Fu Shan Country Park and assured members that Water Supplies Department would closely monitor the situation and would ask all contractors concerned to clear the C&D waste away from the works site as soon as possible.
- 48. In reply to Mr MA Fung-kwok's enquiries, DWS advised that the catchwater channels on Hong Kong Island channeled stormwater to Tai Tam Upper Reservoir, Tai Tam Byewash Reservoir, Tai Tam Intermediate Reservoir, Tai Tam Tuk Reservoir, Wong Nai Chung Reservoir, Aberdeen Upper and Lower Reservoirs and the Pokfulam Reservoir, while the catchwater channels on the Lantau Island channeled stormwater to Shek Pik Reservoir. He also advised that at present, about 20% of the fresh water consumed in Hong Kong was supplied from local reservoirs while 80% was Dongjiang water. Assistant Director/New Works, Water Supplies Department (AD/NW, WSD) further advised that the reservoirs on the Hong Kong Island accounted for about 10% of the total fresh water supply from local reservoirs, the Shek Pik reservoir in Lantau accounted for another 10%, while the reservoirs in Kowloon and the New Territories accounted for the remaining 80%. In other words,

the catchwater channels on the Hong Kong Island served to collect about 2% of the total fresh water consumed in Hong Kong.

- 49. Taking note of the above details, Mr MA Fung-kwok asked how the Administration assessed the cost-effectiveness of this project, bearing in mind that the catchwater channels only served to collect 4% of the total fresh water consumed in Hong Kong. In response, DWS affirmed the Government's policy of maintaining all the existing catchwater channels and reservoirs, mainly on the consideration that the Government was able to properly monitor the quality of water from these channels and reservoirs. He added that WSD was exploring the feasibility of constructing more catchwater channels in future. The Chairman suggested that the Administration should consult the Planning, Lands and Works Panel on future proposals to construct more catchwater channels or reservoirs as such proposals involved important policy issues.
- 50. Mr Albert CHAN pointed out that cracks in some sections of catchwater channels would cause water leakage and seepage during rainstorms and this would adversely affect residential developments in the vicinity. He asked if reconstruction/repair works would be first carried out at those sections of catchwater channels with cracks. DWS agreed that it would be specified in the tender documents that priority should be given to defective sections of catchwater channels susceptible to water leakage and seepage in scheduling the reconstruction and repair works.
- 51. Mr Albert CHAN also enquired about the standard of landscaping works to be carried out on the 20 substandard slopes adjoining the defective sections of catchwater channels. DWS responded that under the current policy, the Administration would no longer use cement as finish for slopes, unless no alternative methods was feasible for safety and technical reasons. Instead, emphasis was given to the visual impact and compatibility with the surrounding environment for all slope landscaping works nowadays. AD/NW, WSD supplemented that the hydroseeding method would be used for the landscaping works at the 20 substandard slopes.
- 52. Miss Cyd HO suggested that the Administration should pay more attention to the colour scheme to be used in works projects to ensure compatibility with the environment. Noting that the project in itself would lead to an increase in water charges by about 0.09% in real terms by 2007, Miss Ho asked whether the reduction in water lost as a result of this project had been taken into account in calculating the effect of the project on water charges. DWS and AD/NW, WSD responded that as it would be necessary to maintain the catchwater channels in good condition, there would not be considerable reduction in the recurrent R&M cost as a result of this project. The estimation on the increase in water charges had mainly taken into account an annual depreciation cost of \$5 million for the catchwater channels. In

reply to Miss HO's enquiry about the quantity of water lost if this project was not implemented. DWS explained that the water leakage pattern for catchwater channels was different from that of water mains. In the latter case, leakage occurred continuously while for catchwater channels, day-to-day leakage was negligible and it was only at times of rainstorms, significant leakage would occur. As it was mentioned in the paper that the deteriorating condition of the catchwater channels might lead to wastage of natural water resources through leakage, Miss HO commented that the leakage problem was exaggerated in the paper. DWS remarked that if works was not carried out in respect of the defective catchwater channels, stormwater would seep into slopes and pose slope stability problems. The Chairman agreed to the comment of Miss HO and suggested that the Administration should provide more specific and accurate information on the consequences of non-implementation of proposed works in future proposals.

53. The item was voted on and endorsed.

PWSC(2001-02)103 252WF Replacement of mechanical and electrical equipment in the Tsuen Wan raw water pumping station

- 54. Mr Albert CHAN expressed appreciation of the decrease in water charges by 0.02% in real terms by 2008 as a result of this project.
- Social Centre and Fung Hon Chu Gifted Education Centre were close to the Tsuen Wan raw water pumping station. Moreover, the operation of the raw water pumping station would be maintained during the works period. He expressed concern about the possible hazards posed by the asbestos abatement work to users of the aforesaid facilities and the staff working at the pumping station, and asked what precautions would be taken in this regard. DWS advised that there were specific guidelines for asbestos abatement work and only specialized contractors and workers would be deployed for the work. He assured members that all necessary precautionary measures would be taken during the asbestos abatement process and thus the abatement work would not pose safety hazards.
- 56. In reply to Mr Henry WU's question on the schedule of asbestos abatement work, AD/NW, WSD advised that asbestos was present in the ceilings, partitions as well as the heat insulation facilities of the diesel pumpsets of the old pumping station building. As the operation of the station would be maintained during the works period, the abatement work would need to be staggered and it would took about four and a half years from May 2002 to December 2006 to complete the work.

- 57. In reply to Mr Kenneth TING's enquiry, DWS and AD/NW, WSD advised that installation of the existing mechanical and electrical equipment had been carried out at different times. The pumping station first came to service in 1958 and an overall refurbishment had been made in 1974 with new equipment added. The equipment of the pumping station therefore had been in service for 28 to 44 years, as stated in the paper.
- 58. The item was voted on and endorsed.
- 59. The meeting ended at 12:40pm.

<u>Legislative Council Secretariat</u> 11 April 2002