

**立法會**  
***Legislative Council***

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**Panel on Planning, Lands and Works**

**Minutes of special meeting  
held on Tuesday, 20 May 2003, at 10:45 am  
in the Chamber of the Legislative Council Building**

**Members present** : Dr Hon TANG Siu-tong, JP (Chairman)  
Hon LAU Ping-cheung (Deputy Chairman)  
Ir Dr Hon Raymond HO Chung-tai, JP  
Hon James TO Kun-sun  
Hon WONG Yung-kan  
Hon CHOY So-yuk  
Hon Timothy FOK Tsun-ting, SBS, JP  
Hon TAM Yiu-chung, GBS, JP  
Hon Abraham SHEK Lai-him, JP  
Hon Albert CHAN Wai-yip  
Hon WONG Sing-chi  
Hon IP Kwok-him, JP

**Member attending** : Hon Andrew CHENG Kar-foo

**Members absent** : Hon James TIEN Pei-chun, GBS, JP  
Hon LAU Wong-fat, GBS, JP

**Public officers attending** : Mr W S CHAN  
Deputy Secretary for the Environment, Transport  
and Works (Works) 2

Mr James S O CHAN  
Chief Assistant Secretary for the Environment, Transport  
and Works (Works) 4

Mr Raymond T K CHEUNG  
Director of Drainage Services

Mr LAM Chiu-hung  
Assistant Director/Operations & Maintenance  
Drainage Services Department

Mr SIN Wai-sum  
Chief Engineer/Land Drainage  
Drainage Services Department

**Clerk in attendance** : Miss Salumi CHAN  
Chief Assistant Secretary (1)5

**Staff in attendance** : Ms Sarah YUEN  
Senior Assistant Secretary (1)6

Ms May LEUNG  
Legislative Assistant

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Action

**I. Flood control and prevention strategy and measures**  
(LC Paper No. CB(1)1695/02-03(01) — Paper provided by the  
Administration)

The Chairman advised that the purpose of this special meeting was for the Administration to provide an update on the flood control and prevention strategy and measures, to give an account of the flooding incidents on 5 May 2003 including the one in which a Senior Inspector died when attempting to rescue a villager, and to report on the remedial measures to be taken to address the flooding problem in the areas concerned.

2. The Chairman drew members' attention to the typographical errors on pages 1 and 2 of the Chinese version of the paper on "Flood Control and Prevention" provided by the Administration for discussion at the meeting.

*(Post-meeting note: The revised Chinese version was issued to members vide LC Paper No. CB(1)1743/02-03 on 21 May 2003.)*

3. The Deputy Secretary for the Environment, Transport and Works (Works) 2 (DSETW(W)2) thanked the Chairman for the opportunity to brief the Panel on the matters highlighted in paragraph 1 above. With the aid of a power-point presentation, the Director of Drainage Services (D of DS) then briefed members on the paper on "Flood Control and Prevention" and highlighted the latest improvements made to the flooding areas in various parts of Hong Kong.

#### Progress of flood mitigation projects and drainage improvement works

4. Pointing out that certain parts of Hong Kong had been plagued by flooding for over ten years, Mr WONG Sing-chi considered it unacceptable that the flooding problem was still unresolved. Mr WONG Yung-kan shared his view and reckoned that over \$6 billion had already been spent in this regard. Mr Albert CHAN Wai-yip expressed similar views and found it hard to accept that, as a cosmopolis, Hong Kong was constantly plagued by flooding. Highlighting that the flooding incidents on 5 May 2003 had led to the death of a Senior Inspector in Lin Ma Hang Road, the three members urged the Administration to fully resolve the flooding problem without further delay.

5. In response, D of DS explained that it took years to complete flood mitigation projects because they were immense tasks involving large area coverage. For example, the Shenzhen River Regulation Project (SRRP), the most critical flood mitigation project in the Northern New Territories, had to be implemented in stages, starting from downstream. There was also the long lead time required to conduct large-scale public consultation exercises in recognition of the implications of the works and to go through the land resumption and the Environmental Impact Assessment processes, etc. Stages I and II of the SRRP had already been completed in 1997 and 2000 respectively. Stage III of the SRRP was under way and was scheduled for completion in early 2006. D of DS however stressed that the Administration had already been doing its best to expedite the SRRP, and good progress had also been made in implementing other major flood control projects such as works on the lower reach of River Indus and River Beas, which had been substantially completed in 2001.

6. While recognizing improvements to the overall flooding situation, Mr LAU Ping-cheung expressed concern about the loss of life as a result of a flooding incident on 5 May 2003. He therefore urged the Administration to put in place sufficient interim mitigation measures in the affected areas to prepare for the rainy season before

completion of Stage III of the SRRP. In response, D of DS said that due to the need to discharge flood flow through Shenzhen River to the sea, the interim mitigation measures that could be taken in the affected areas were limited, and mainly involved regular clearing of the drainage outlets, inspection and desilting of the river channels, and installation of flood sirens in affected villages.

7. Referring to the case of Kau Lung Hang where flooding was caused by flow constriction as the local stream passed underneath the low hanging railway bridge, Mr WONG Yung-kan expressed disappointment that the flooding problem there could not be resolved until 2007. In his view, to provide a timely solution, the Administration should promptly respond to residents' request to raise the railway bridge. In response, D of DS advised that drainage improvement works in Kau Lung Hang would soon commence in 2004. The Chief Engineer/Land Drainage, Drainage Services Department (DSD) supplemented that to carry out the drainage improvement works without affecting the normal operation of the railway bridge was technically complicated. However, the drainage improvement works in Kau Lung Hang would be completed in 2007 to provide flooding relief.

8. To expedite flood mitigation projects in general, Mr WONG Yung-kan suggested that the Administration should seek Heung Yee Kuk New Territories' assistance in land resumption, conduct works from upstream and downstream of Shenzhen River concurrently to expedite the SRRP, and improve the co-ordination of minor drainage improvement works. Whilst appreciating the need to expedite the projects, DSETW(W)2 pointed out that certain projects, such as the Drainage Rehabilitation Works at Ping Yuen River and the Yuen Long By-pass Floodway, had already commenced for completion in 2006. The proposal on the construction of certain secondary drainage channels would also be considered by the Public Works Subcommittee of the Finance Committee on 21 May 2003. However, since these projects all involved construction, the leeway for further acceleration was highly limited. It would therefore take two to three years more for the completion of these works, and the only thing that could be done for the time being was to schedule the relevant works programmes in such a way so as to implement the key elements of the projects first to effect improvement to the drainage flow before completion of the works. D of DS assured members that before the completion of flood control projects, interim mitigation measures would be taken to provide temporary relief for the areas affected by flooding. For example, temporary flood pumping schemes had already been implemented for Shui Pin Wai and Ma Tin Tsuen. However, such interim measures might not be practicable in all areas.

#### Causes of flooding and measures to tackle the problem

9. Mr WONG Sing-chi opined that the flooding incidents on 5 May 2003 had not only been caused by intense rainfall but also human factors. For example, certain drainage outlets in Lin Ma Hang Road were blocked by the security fence along that section of the border with the Mainland. Prolonged implementation of minor drainage

improvement works due to poor co-ordination among relevant Government departments was another cause of flooding. As far as he knew, despite complaints from local residents, the departments concerned were unwilling to take on minor drainage improvement works. Mr WONG urged the Administration to rectify the situation and carry out minor improvement works through better co-operation among relevant bureaux and departments such as the Home Affairs Department (HAD), the Agriculture, Fisheries and Conservation Department (AFCD), and the Territory Development Department (TDD). Mr Albert CHAN also found human factors, such as planning blunders, failure to clear blockage, etc. significant causes of flooding. As such, he urged the Administration to seriously address these human factors to ensure that in future no life would be lost in flooding. He also expressed dissatisfaction that the paper provided by the Administration did not cover these factors as well as the flooding incident in Silver Mine Bay.

Admin

10. Regarding the causes of flooding associated with the security arrangements along the border with the Mainland, D of DS pointed out that due to security considerations, the holes in the security fence were designed to be small. To improve the flooding situation at Lin Ma Hang Road, however, D of DS undertook to further liaise with the relevant authorities to ensure that the design of the relevant section of the security fence at Lin Ma Hang Road would not substantially affect flow capacity. At the Chairman's request for details, D of DS supplemented that one contemplated option was to replace the relevant section of the security fence with security installations specially designed to minimize the blocking of flood flow. He further said that as an interim measure, before completion of the Drainage Rehabilitation Works at Ping Yuen River, the Administration would endeavour to complete the critical sections of the river training works in Ping Yuen River as early as possible, in particular at the narrow drainage outlet to Shenzhen River, so as to provide early flood relief to Lin Ma Hang Road. Responding to Mr LAU Ping-cheung, D of DS advised that the use of pumps could serve little purpose in the case of Lin Ma Hang Road.

Admin

11. Responding to the criticism of poor co-ordination among the relevant Government departments, D of DS assured members that DSD had been closely liaising with other departments to avoid flooding due to blockage of roadside gullies or drains by rubbish or fallen leaves. He also undertook to work closely with HAD for improvements to the co-ordination of village flood prevention works. DSETW(W)2 also pointed out that the Environment, Transport and Works Bureau (ETWB) was responsible for co-ordination of emergency flood prevention works and would call a meeting of the Emergency Procedure Review Committee involving all relevant departments before each rainy season to remind them of their respective duties in ensuring smooth drainage flow. However, as DSD was the major department responsible for drainage matters, it would be responsible for handling emergency cases.

12. At Mr WONG Sing-chi's request to inspect and clear all drainage systems before each rainy season to ensure that they would not cause flooding, D of DS advised that DSD would inspect, desilt and repair the stormwater drainage system

regularly before and during the rainy season to ensure that any blockages would be cleared and defects rectified. Despite such efforts, however, drainage channels could be blocked again very soon after clearance because of fallen leaves and the like. Nonetheless, blockage of this kind would not lead to serious flooding. D of DS also pointed out that the major causes of flooding had already been eliminated with the completion of the major parts of the primary drainage channels. As evidenced by the situation on 5 May 2003, significant improvements to the flood-prone areas had already been achieved. No regional flooding was observed in historical flood-prone areas despite the very heavy rainfall. Serious flooding was only confined to small localized areas where the major flood control projects had yet to complete.

13. Mr TAM Yiu-chung was concerned that while the flooding problem had diminished in North Western New Territories, the unauthorized use of rural land, such as the forming of paved storage yards for containers by unauthorized land filling activities to make a higher formation level without providing site drainage, would remain a cause of flooding, especially to the adjacent low-lying areas, if not tackled. Sharing Mr TAM's views, Miss CHOY So-yuk quoted some examples of unauthorized land use, such as illegal felling of trees and draining of wetlands, and called for long-term solution to the problem of unauthorized land use. In response, D of DS pointed out that the problem was under the purview of the Lands Department. At the request of Mr TAM and Miss CHOY, DSETW(W)2 undertook to liaise with the Housing, Planning and Lands Bureau to map out measures to effectively address the problem.

Admin

14. The Chairman enquired how the problem of mangrove blocking the estuary, which was another cause of flooding, could be handled. In reply, D of DS said that the growth of mangrove at the estuary would be closely monitored and, in consultation with green groups and AFCD, trimming of the plant would be conducted as necessary to ensure smooth discharge of flood flow to the sea.

#### Tackling of the flooding problem from the planning perspective

15. Ir Dr Raymond HO Chung-tai opined that instead of carrying out various remedial works which were piecemeal in nature and hence had limited effect, a more effective approach should be adopted to tackle the flooding problem at its root. In this connection, Ir Dr HO considered it important to avoid low-lying topography as early as the planning stage. Whilst appreciating Ir Dr HO's views, D of DS pointed out that since Hong Kong was a small place with a large population, there was difficulty in avoiding building towns on floodplains. In recognition of the problems associated with that however, natural watercourses had already been widened and straightened to achieve better flood control. In certain low-lying areas, village flood pumping schemes had also been implemented with embankments like those of the Netherlands formed to prevent ingress of flood water from outside the village and a number of pumps were provided on site for discharging stormwater collected from within the village to the nearby channels. Responding further to Ir Dr HO, D of DS informed

members that new towns like Shatin, Tin Shui Wai, Sheung Shui, etc were already built on formation levels of 5.5 or 5 metres above datum. However, in old areas such as Yuen Long town, the scope for improvement was limited.

16. D of DS also pointed out that the Administration had been aware of the need to tackle flooding at the planning stage. Under section 16 of the Town Planning Ordinance (Cap. 131), all developments involving a change to the land use as specified in the relevant Outline Zoning Plan required the approval from the Town Planning Board. If the project would significantly affect the drainage situation, a Drainage Impact Assessment (DIA) would be conducted.

17. Ir Dr Raymond HO reiterated the need to address the flooding problem from the planning perspective even in old areas. He therefore called upon the Administration to take active measures to overcome the topographical constraints in old areas, such as by forming more embankments or by raising the existing formation levels of these areas. Mr WONG Yung-kan shared his views. In response, D of DS explained that the Administration had already considered such an approach but, because of its significant implications and objections from local residents, there was difficulty in pursuing the approach. He however emphasized that drainage impact was already a consideration in new developments. Moreover, flood prevention measures in place were already achieving good results in many areas where heavy rainfall amounting to “black rainstorm” continuously for 4 hours could be coped with without flooding. In fact, through major drainage projects, even in flood plain areas smooth drainage flow had basically been ensured in most of the drainage basins. At present, only isolated areas where there were special problems, such as low-lying topography and inadequate local drainage capacity, still suffered from some degree of flooding, and more time would be required to work out specific flood preventive or relief measures for these areas.

18. Miss CHOY So-yuk shared Ir Dr Raymond HO’s view that flood prevention measures should be taken at the planning stage. In this regard, she called upon the Administration to form an inter-departmental team to carry out an overall assessment of the impact of the urbanization of the New Territories on flooding as soon as possible, and to introduce amendments to relevant legislation and procedures where necessary. In response, D of DS explained that DSD had already been working closely with the Planning Department (Plan D). In planning major land uses, Plan D would consult DSD and other relevant departments to ensure that the drainage systems concerned could cope with the planned uses. In recognition that there would continue to be new developments in the New Territories, the Administration’s present strategy was to train the major river channels there to ensure that they could cope with existing and future developments. Improvements to major drainage systems were also being made to resolve the flooding problem in the New Territories in the long run. DSETW(W)2 also stressed that an effective mechanism for internal consultation was in place.

Measures to ensure timely relief during flooding

19. Mr Albert CHAN opined that a list of flooding blackspots that would suffer from flooding under different scenarios of rainfall warning should be drawn up and published to facilitate arrangement of timely flooding relief and evacuation where necessary. D of DS said that DSD had already compiled a list of flooding blackspots which was available on DSD's website. However, there was difficulty in further refining the list as required by Mr CHAN because there was no hard and fast rule as to when flooding would definitely occur. He further explained that while the flow capacity of major regional drainage systems could be assessed and their capacity to cope with exceptionally heavy rainfall so ensured, there was difficulty in ensuring the adequacy of certain village drainage systems because of inherent limitations there such as the low-lying topography of the village concerned. As a result, the Administration could only improve the flooding situation in these villages as far as practicable.

20. Mr Albert CHAN did not agree that there was difficulty in compiling the requested list, having regard to the fact that design of drainage works should be based on an estimate of rainfall in the area concerned. Responding to the Chairman, D of DS pointed out that the existing list could already facilitate the deployment of resources to carry out immediate relief measures during heavy rainstorms. In fact, the list had already been given to the Fire Services Department (FSD) and the Hong Kong Police Force (the Police) for their appropriate actions as necessary. To ensure timely relief, the District Offices of HAD would also liaise with village representatives during heavy rainstorms to ensure that shelter, evacuation or assistance could be arranged as required. In some places, such as Fung Wong Wu in Ta Kwu Ling area, flood sirens had also been installed.

21. Mr Albert CHAN was not convinced that the above quoted measures were effective to ensure that timely emergency evacuation would be arranged as necessary. In his view, should that be the case, the Senior Inspector concerned would not have lost his life. He suggested that the Home Affairs Bureau (HAB) should be requested to provide a paper on the flooding incidents on 5 May 2003 and highlight what improvements could be made to the actions taken. In response, D of DS assured members that the Administration recognized the need for improvement. In fact, it had reviewed whether any measure taken could be improved after each flooding incident. At Mr CHAN's request, the Chairman directed that HAB be invited to provide a paper on the actions taken by the relevant District Offices to arrange emergency evacuation of the residents affected by the flooding incidents on 5 May 2003.

*(Post-meeting note: The Chairman subsequently decided that in order to facilitate the Panel's consideration of the issue in a comprehensive manner, ETWB should be invited to co-ordinate an information paper covering the respective duties of the relevant government departments in handling flooding incidents, actions taken by them in handling the 5 May 2003 flooding*



incidents, and the mechanism for emergency evacuation of the villages affected by flooding and whether the mechanism had been activated on 5 May 2003. An invitation letter was issued to ETWB on 24 May 2003.)

22. In reply to Mr LAU Ping-cheung's enquiry on details of the relief measures taken by DSD in the flooded areas on 5 May 2003, D of DS reported that DSD had alerted FSD and the Police when water levels at the relevant gauging stations reached the corresponding alert levels. The North District Office had also called the village representatives concerned to ascertain the need for evacuation or shelter but according to records, the representatives had replied that there was no need for going to the shelter. D of DS also stressed that the Emergency and Storm Damage Organization (ESDO) and Emergency Control Centres of DSD had been put in place. Under the mechanism, evacuation actions would mainly be taken by FSD and HAD. As for DSD, its duties mainly involved monitoring the flood warning systems and alerting relevant departments of the need for relief measures.

## **II. Any other business**

23. There being no other business, the meeting ended at 12:20 pm.

Council Business Division 1  
Legislative Council Secretariat  
21 July 2003