

**For discussion  
on 28 November 2017**

**Legislative Council Panel on Development**

**Staffing proposals of (a) the Works Branch of the Development Bureau to cope with increasing workload arising from new and on-going initiatives and (b) Water Supplies Department to take forward the new drinking water safety initiatives**

**PURPOSE**

This paper seeks Members' views on the following staffing proposals of the Works Branch of Development Bureau (DEVB(WB)) and the Water Supplies Department (WSD) -

- (a) creation of one permanent directorate post, conversion of one supernumerary directorate post to permanent post with effect from 1 April 2019, and redeployment of three existing directorate posts in the DEVB(WB) associated with its re-organisation to cope with the workload of new and on-going initiatives; and
- (b) creation of two supernumerary directorate posts in the WSD for three years to take forward the new drinking water safety initiatives.

**PROPOSAL**

2. Over the years, the additional workload in DEVB (WB) arising from new and on-going initiatives is tremendous and has overloaded the existing divisions/offices heads within the Branch. We propose to re-organise the Branch, involving -

- (a) creation of one permanent Principal Government Engineer (PGE) (D3) post to be designated as Deputy Secretary (Works) 3 (DS(W)3)) to rationalise the workload amongst those division/office heads being heavily overloaded and take up tasks associated with the new

drinking water safety initiatives;

- (b) conversion of an existing supernumerary Government Engineer (GE) (D2) post (designated as Principal Assistant Secretary (Works) 5 (PAS(W)5)) into a permanent post. The supernumerary post was created up to 31 March 2019 to steer, deliver, supervise, oversee and monitor the implementation of projects for the multi-pronged strategy of increasing land supply. A permanent post is needed to provide long-term steer and oversee the implementation of these projects/initiatives in particular the Lantau development and conservation in the long run; and
- (c) redeployment of a GE (D2), a Chief Architect (CA) (D1) and a Chief Geotechnical Engineer (CGeoE) (D1) posts to rationalise the demarcation of duties among the directorates of DEVB(WB).

3. After the “lead in drinking water” incident in 2015, DEVB and WSD have spared no effort in taking follow-up actions on the recommendations of the Commission of Inquiry into Excess Lead Found in Drinking Water (CoI) (an updated position given at **Enclosure 1**) including the formulation of the Action Plan for Enhancing Drinking Water Safety in Hong Kong (the Action Plan) which was announced on 21 September 2017. Accordingly, we need additional support at directorate level in WSD to take forward the implementation of the Action Plan as detailed in paragraphs 21 to 27 below. The proposed directorate posts are -

Encl. 1

- (a) one supernumerary Administrative Officer Staff Grade C (AOSGC) (D2) post in WSD to be designated as Assistant Director/Special Duty (AD/SD); and
- (b) one supernumerary Chief Engineer (CE) (D1) post in WSD to be designated as Chief Engineer/Special Duty (CE/SD).

4. The existing and proposed organisation charts of DEVB(WB) showing the situation before and after the proposed re-organisation are at **Enclosures 2 and 3** respectively and those of WSD are at **Enclosures 4 and 5** respectively.

Encls.  
2, 3, 4 & 5

## JUSTIFICATION

### (A) Re-organisation of DEVB(WB)

#### Need for a permanent post of PGE (D3) in DEVB(WB)

5. Headed by the Permanent Secretary for Development (Works) (PS(W)), DEVB (WB) is not only responsible for formulating public works policies and co-ordinating and monitoring the implementation of public works projects, but also tasked to carry out a host of new and on-going initiatives relating to land supply, heritage, manpower resources, professional services, energizing Kowloon East, etc.

6. At present, the Branch consists of two works policies divisions, two offices and one legal advisory division, namely the Heritage, Programme and Resources Division, Works Policies and Infrastructural Projects Division, Project Cost Management Office, Energizing Kowloon East Office and Legal Advisory Division (Works) (Please refer to **Enclosure 2** for the existing organisation chart of DEVB(WB)). The functions and duties of these divisions/offices are briefly set out below -

Encl. 2

- (a) The Heritage, Programme and Resources Division, headed by Deputy Secretary (Works) 1 (DS(W)1) ranked at Administrative Officer Staff Grade B1 (AOSGB1) (D4), is mainly responsible for a wide range of work including -
  - (i) formulating policies and initiatives on heritage conservation;
  - (ii) formulating policies and strategies on greening, landscape and tree management, and coordinating their implementation across government departments;
  - (iii) monitoring the implementation of the Public Works Programme and reviewing and updating related procedures and practices;
  - (iv) supporting and liaising with the statutory Construction Industry Council on matters relating to construction manpower development;
  - (v) overseeing resource planning and administration, media relations and publicity matters as well as financial management of the Works Branch; and
  - (vi) monitoring overall financial management, manpower and public relations matters of the Works Group of Departments.

- (b) The Works Policies and Infrastructural Projects Division, headed by Deputy Secretary (Works) 2 (DS(W)2) ranked at PGE (D3), is mainly responsible for a wide range of work relating to the implementation and coordination of public works in Hong Kong, including -
- (i) formulating procurement policies on public works contracts and consultancies and participating in tenders boards for the award of public works contracts and consultancies;
  - (ii) formulating policies on construction safety, environment, standard and materials for public works and managing public works consultants and registered public works contractors;
  - (iii) formulating policies on construction industry security of payment and overseeing the implementation of workers' registration;
  - (iv) formulating policies to promote innovation and enhance productivity in the construction industry, including the adoption of Building Information Modelling and new engineering form of contract;
  - (v) formulating policies to assist the local professional establishments (including both consultants and private small practitioners) and contractors to seize job opportunities outside Hong Kong;
  - (vi) implementing land supply initiatives including development and conservation of Lantau, reclamation outside Victoria Harbour, rock cavern and underground space development;
  - (vii) formulating policies to ensure water supply reliability and overseeing implementation of total water management,
  - (viii) formulating policies on flood prevention and revitalization of nullahs;
  - (ix) formulating policies on lift and escalator safety as well as slope safety;
  - (x) overseeing the implementation of major infrastructure projects and pier improvement programme; and
  - (xi) overseeing the implementation of smart city initiatives in public works projects and formulating policies to deal with climate change impacts on public works infrastructures, etc.

DS(W)2 also assists PS(W) in directing, co-ordinating and determining the need for supporting services to the Works Group of Departments and assume housekeeping responsibilities in respect of individual Works Group of Departments

- (c) The Project Cost Management Office (PCMO), headed by a supernumerary D2 officer, ranked at GE, has been established since 2016 to tackle the problem of high construction costs. Its core functions include -
- (i) devising and promoting cost management policies in respect of capital works projects, coordinating their implementation and promoting such policies to the private building sector;
  - (ii) coordinating cross-bureaux efforts to use cost as one of the major drivers for project implementation; and
  - (iii) enhancing existing procedures on project management and cost control and cost reduction.

As the Government accords high priority to tackle the problem of high construction costs, DEVB(WB) set up the dedicated PCMO to handle the above tasks instead of assigning the already-overloaded DS(W)1 and DS(W)2 to take care of such tasks. Accordingly, the Head of the PCMO is directly responsible to PS(W).

- (d) The Energizing Kowloon East Office, headed by a supernumerary D3 officer ranked at Principal Government Town Planner, has been established since 2012 to spearhead the coordination of the transformation of Kowloon East (KE) (comprising the former industrial areas of Kwun Tong and Kowloon Bay and the Kai Tak Development Area) into another core business district to support Hong Kong's economic development as well as formulate a smart city framework strategy for KE. The office is recently tasked to extend the Energizing KE initiative to San Po Kong as mentioned in the 2017 Policy Address announced in October this year, focusing on enhancing connectivity, improving the environment, and promoting vibrancy and diversified development in the area.
- (e) The Legal Advisory Division (Works), headed by a D3 officer ranked at Principal Government Counsel and comprised a team of government counsels, is responsible for offering legal advice to the works group of departments and other bureau/departments on matters concerning complex issues relating to procurement and execution of public works as well as regulating actions against contractors.

To accomplish the above new and on-going policy initiatives, DEVB(WB) is underpinned by the Architectural Services Departments, the Civil Engineering and Development Department, the Drainage Services Department, the Electrical and Mechanical Services Department (EMSD) and WSD, as well as the Antiquities and Monuments Office of the Leisure and Cultural Services Department.

7. The workload arising from the above new and on-going policy initiatives is tremendous. DEVB(WB) has recently reviewed the workload of its existing divisions and offices. The review found that all D4/D3 officers in DEVB(WB) have already been fully engaged by their duties with DS(W)1 and DS(W)2 being stretched beyond their limits as evidenced by a wide spectrum of tasks being handled by them. There is thus a strong need to rationalise the workload of the two works policies divisions and at the same time create an additional permanent PGE (D3) post to help share their workload. The review also found that there is a need to rationalise the distribution of workload and manpower resources at the D2 level of the Branch. Upon the creation of the proposed PGE (D3) post, there is room to re-organise the duties and responsibilities of different divisions within DEVB(WB). Details are set out in paragraphs 18 to 20 below.

### ***Proposed setting up of Works Division 3***

8. To help share the workload of the works policies divisions, we propose to create a new DS(W)3 post in DEVB(WB) to lead a new Works Division 3 to oversee/perform duties including (i) formulating and implementing procurement policies for works contracts and consultancies; (ii) serving as a board member of the Central Tender Board, the Engineering and Associated Consultants Selection Board and the Architectural and Associated Consultants Selection Board; (iii) devising policies to assist the local professional establishments (including both consultants and private small practitioners) and contractors to seize job opportunities outside Hong Kong; (iv) devising and implementing policies relating to lift and escalator safety; and (v) assisting PS(W) in directing, co-ordinating and determining the need for supporting services to the works group of departments as well as housekeeping the EMSD. Accordingly, the existing Works Policies 2 Section under DS(W)2 will be re-titled as Works Policies 4 Section and deployed to work under DS(W)3. The Section will continue to be headed by Principal Assistant Secretary (Works) (PAS(W)4) ranked at GE (D2) with support from Chief Assistant Secretary (Works)7 (CAS(W)7) ranked at CA (D1).

*Additional workload arising from drinking water safety initiatives*

9. Developing a drinking water safety regulatory regime suitable for Hong Kong is one of the core components of the Action Plan. DEVB(WB) has engaged consultants to study the water safety regime of leading jurisdictions as well as to explore a suitable control framework for Hong Kong. Further studies will be carried out to explore the scope and details of the water safety regulatory regime in the long run. A small dedicated team is proposed to be set up to take forward the above studies and in the interim to monitor the performance of WSD over drinking water safety issues including conducting surveillance inspections and auditing WSD's daily operations. Given the unique nature of the monitoring work, such work can be separated from the day-to-day housekeeping of WSD being handled by DS(W)2. Besides, DEVB(WB) will set up a Drinking Water Safety Advisory Committee (the Advisory Committee) with members comprising academics and experts of related fields to give advice to DEVB(WB) on various water safety issues including the formulation of the drinking water safety regulatory regime and review on drinking water standards based on the water quality data collected by WSD through the Action Plan. In this connection, the proposed dedicated team will provide secretariat support to the operation of the Advisory Committee. DEVB(WB) attaches much importance to the above tasks, in particular the studies on the drinking water regulatory regime and monitoring of WSD's performance over drinking water safety. The proposed DS(W)3 post will head the small dedicated team so that high level steer and input can be given throughout the course of delivering such tasks.

10. Against the above, the incumbent of the proposed DS(W)3 post should have rich engineering experience and knowledge, and possess strong leadership and communication skills required for liaising closely with relevant parties from other disciplines with different expertise and roles in water safety, for example, the Food and Health Bureau, the Department of Health (DH) and the Food and Environmental Hygiene Department.

11. As a related matter, the small dedicated team headed by DS(W)3 will also be responsible for overseeing the implementation of other components of the Action Plan and the follow-up actions on the recommendations of the CoI, including close policy coordination with the senior management of relevant bureaux/departments (B/Ds) to ensure smooth implementation of various components of the Action Plan.

Encl. 6

12. The duties of the proposed DS(W)3 post are set out at **Enclosure 6**.

### **Rationalisation of workload amongst works policies divisions in DEVB(WB)**

13. In rationalising the duties of the works policies divisions, DS(W)1 will be tasked to take up from DS(W)2 the duty in relation to implementation of the construction workers registration system in conjunction with the Construction Workers Registration Authority as DS(W)1 has been handling matters on construction manpower development, including the training/development of construction professionals, supervisors/technicians and workers. In this connection, Principal Assistant Secretary (Works) 1 (PAS(W)1) ranked at AOSGC (D2) will be responsible to DS(W)1 solely instead of serving both DS(W)1 and DS(W)2 under the existing organisation. Opportunity is also taken to retitle DS(W)1's Division to Works Division 1 with his revised duties set out at **Enclosure 7**.

Encl. 7

14. With the reshuffling of duties as proposed in paragraphs 8 and 13, the revised duties of DS(W)2 are set out at **Enclosure 8** with his Division retitled as Works Division 2.

Encl. 8

### **Making permanent a supernumerary GE (D2) post for land supply initiatives**

15. A supernumerary GE (D2) post, designated as PAS(W)5, was created up to 31 March 2019 in DEVB(WB) to lead the Land Supply Section including steering, delivering, supervising, overseeing and monitoring the implementation of projects associated with the multi-pronged strategy for increasing land supply. These projects include, but are not limited to, strategic studies for artificial islands in the central waters including the development of the East Lantau Metropolis, the associated planning and engineering studies on reclamations outside the Victoria Harbour, and the planning, engineering and architectural study of topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge. PAS(W)5 is also responsible for reviewing and formulating works policies with a view to expediting land supply as well as overseeing the provision of infrastructure support to various land supply projects and initiatives. These projects and initiatives are highly complex in nature involving not only technical issues throughout the planning, design and implementation phases, but also extensive engagement with stakeholders and the public. PAS(W)5 thus plays a key role in resolving interfacing issues and conflicting requirements, liaising with the relevant B/Ds in the formulation of strategies and enlisting their support for implementing infrastructure works for land supply and supporting departments in taking forward public engagement.



16. Apart from the above, PAS(W)5 provides secretariat support to the Lantau Development Advisory Committee (LanDAC). The LanDAC issued its First-term Work Report entitled “Space for All” in January 2016 setting out the vision, strategic positioning and planning principles for the development of Lantau, with initial proposals on spatial planning and land use, conservation, strategic traffic and transport infrastructure, recreation and tourism, and social development. A three-month public engagement exercise was subsequently carried out in early 2016 to collect public views on the proposals. The Sustainable Lantau Blueprint (the Blueprint), which provides a reference roadmap for guiding and implementing the development and conservation initiatives in Lantau, was then formulated and promulgated in June 2017. To take forward the development and conservation initiatives as set out in the Blueprint, high-level policy and technical steer from PAS(W)5 is required in addition to providing continually secretariat support to the LanDAC.

17. Upon re-organisation of DEVB(WB) as detailed in paragraphs 18 to 20 below, PAS(W)5 will also take up some existing duties in formulating and implementing works policies in regard to green procurement, construction site safety and environment, construction standards and materials, and flood prevention and revitalization of nullahs from the section headed by Principal Assistant Secretary (Works) 3 (PAS(W)3) ranked GE (D2) under DS(W)2. Such policy-related tasks are long-term work requiring continued support from a permanent GE post. Coupled with the projects and initiatives associated with increasing land supply and the development and conservation of Lantau, we consider it necessary to make the supernumerary GE post of PAS(W)5 permanent. The duties of the proposed PAS(W)5 post are listed at **Enclosure 9**.

Encl. 9

### **Re-organisation and re-titling of different divisions and sections within DEVB(WB)**

18. To better reflect the diverse nature of work of the different divisions and sections and for consistency in naming, the following retitling of divisions and sections (with organisation charts of DEVB(WB) showing the situation before and after the proposed re-organisation at **Enclosures 2 and 3** respectively and a summary at **Enclosure 10**) is proposed -

Encls.  
2, 3, 10

#### Divisional level

- (a) the Heritage, Programme and Resource Division be re-titled as Works Division 1;
- (b) the Works Policies and Infrastructural Projects Division be retitled as

## Works Division 2;

Sectional level

- (c) the Works Policies 3 Section be retitled as Works Policies 1 Section;
- (d) the Infrastructure Coordination Section be retitled as Works Policies 2 Section;
- (e) the Works Policies 1 Section be retitled as Works Policies 3 Section;
- (f) the Works Policies 2 Section be retitled as Works Policies 4 Section;  
and
- (g) the Land Supply Section be retitled as Works Policies 5 Section.

19. To balance the workload and directorate support amongst the Works Policies Sections, the CGeoE post (D1) (designated as Chief Assistant Secretary (Works)5 (CAS(W)5)) currently under the retitled Works Policies 3 Section is proposed to be redeployed to the retitled Works Policies 5 Section to take up new duties relating to projects and initiatives of Lantau development and conservation on top of his existing duties. The existing and proposed duties of the CAS(W)5 post are set out at **Enclosures 11 and 12** respectively.

Encls.  
11 to 12

20. Besides, the responsibilities of individual Works Policies Sections will be redistributed. The proposed duties of DS(W)1, DS(W)2, PAS(W)4 and CAS(W)7 are enclosed at **Enclosures 7, 8, 13 and 14** respectively. The schedule of responsibilities of all D2 posts in the proposed Works Divisions and that for the Head of the Project Cost Management Office and the Deputy Head of the Energizing Kowloon East Office are at **Enclosure 15**.

Encls.  
7,8,13,14

Encl.15

## **(B) Implementation of the Action Plan for Enhancing Drinking Water Safety in Hong Kong**

### **The Action Plan**

21. With reference to overseas practice and advice from the International Expert Panel on Drinking Water Safety<sup>1</sup> (IEP), the Government has formulated the Action Plan after detailed study with a view to safeguarding the drinking water quality in Hong Kong. The Action Plan comprises five components, including (i) drinking water standards and enhanced water quality monitoring programme, (ii) plumbing material control and commissioning requirements for new plumbing installations, (iii) Water Safety Plans (WSP), (iv) publicity and public education,

---

<sup>1</sup> The IEP was appointed by the Secretary of Development in June 2016.

and (v) water safety regulatory regime.

22. For drinking water standards, the Government will adopt Guideline Values/Provisional Guideline Values of the World Health Organization's Guidelines for Drinking-water Quality (WHO Guidelines) as the drinking water standards in Hong Kong. Moreover, WSD will enhance the current water quality monitoring programme for monitoring the drinking water quality in the territory and collecting local water quality data for review of the drinking water standards, including the appropriateness to adopt standards beyond WHO Guidelines for certain parameters.

23. Following the international practice, about 670 premises will be randomly selected over the territory each year calculated according to the population and water samples will be collected at consumers' tap using a two-tier sampling protocol, namely Random Day Time sampling and 30-minute stagnation sampling<sup>2</sup> as endorsed by the IEP taking into account the findings of the review of the water sampling protocols adopted in two international organisations (viz. WHO and European Union) and several overseas nations (viz. the United Kingdom, Germany, the United States of America, Canada, Australia, New Zealand, Singapore and Japan) for water quality monitoring. The water samples collected will be tested for six metals (viz. lead, cadmium, chromium, nickel, copper, and antimony) which could be present in the internal plumbing system. The collection and testing of water samples will commence by the end of 2017.

24. As water quality from consumers' taps will be affected by their internal plumbing systems (including the materials used), the Action Plan includes strengthening the regulatory control of internal plumbing systems. We have tightened up the commissioning requirements for new plumbing installations and introduced a systematic flushing and six-hour stagnation water sampling test<sup>3</sup> for the six metal parameters as mentioned in paragraph 23 above to ensure adequate flushing of new plumbing installations, as new pipes and fittings will have higher metal leaching rate. We are also conducting a holistic review on the roles and

---

<sup>2</sup> Tier 1 – Random Day Time sampling refers to taking 1-litre (L) unflushed sample at random during normal working hours in daytime for determining the metal exposure of consumers to the six metals. Tier 2 – 30-minute stagnation sampling is for verification of exceedance found in the Tier 1 water sample, which will be tested in case of exceedance being found in the Tier 1 water sample. The tap should first be flushed for 5 minutes and then stagnated for 30 minutes before the 1-L sample is taken.

<sup>3</sup> The mandatory requirements of the systematic flushing to all new plumbing installations and the taking of a 6-hour stagnation (6HS) water sampling test after the flushing were introduced in July and October 2017 respectively. These two requirements will become a condition precedent for effecting water supply to new buildings starting in January 2018.

responsibilities of the contractors, licensed plumbers and workers, including exploring the introduction of a registration regime for plumbing contractors in the Waterworks Ordinance (WVO) to undertake more complex and large-scale plumbing works. The amendments to the WVO will be carried out in phases.

25. Furthermore, with reference to overseas experience and advice of the consultant on WSP for WSD, WSD has enhanced its WSP followed by establishing and implementing in July 2017 the Drinking Water Quality Management System (DWQMS) that has embraced the enhanced WSP. In addition, WSD will promote the WSP for Buildings to building owners and property management agents as water quality might deteriorate within buildings due to, for instance, water stagnation at dead ends of the inside services, ingress of foreign materials to the water tanks or lack of proper maintenance of the internal plumbing system. In this connection, WSD has developed guidelines and templates and has launched the Quality Water Supply Scheme for Buildings – Fresh Water (Management System) in November 2017 to encourage them to develop and implement WSP for their buildings.

26. We will also enhance publicity and public education on the safe use of water through various channels such as dedicated webpages, leaflets, posters, television and radio Announcement of Public Interest (API) public seminars and briefings to different users/stakeholder groups including property management agents and operators of specific premises, such as kindergartens, welfare units, schools etc. DEVB(WB) will review the drinking water safety regulatory regime in Hong Kong as mentioned in paragraph 9 above.

Encl. 16

27. Details of the Action Plan are further elaborated at **Enclosure 16**.

### **Proposed creation of two directorate supernumerary posts to head the new Special Duty Unit (SDU) in WSD**

28. Implementing the Action Plan to enhance the drinking water safety in Hong Kong entails a great deal of work to be carried out in a short period of time in WSD, and the existing staff resources are grossly inadequate to cope with the workload. It also requires steering from directorate staff to support the Director of Water Supplies (DWS) to take forward the Action Plan in the most effective and efficient manner. There is thus a need to establish a mission-driven SDU.

29. There are numerous tasks proposed to be undertaken by the SDU. Some are existing mandates to be enhanced under the Action Plan, which are

considered best to be administered by this relatively independent new unit, such as internal audits of the water quality monitoring work and the DWQMS and public relation functions including the publicity and public education on the safe use of water, while others are new and ad hoc project-oriented responsibilities introduced by the Action Plan such as review of the WWO and the Waterworks Regulations (WWR) as well as review of the drinking water standards. The SDU will also carry out system review of WSD to strengthen its internal governance.

30. As the mission of the SDU covers a myriad of highly complex issues, it is necessary for the SDU to be headed by an AOSGC (D2) (to be designated as AD/SD), underpinned by a CE (D1) (to be designated as CE/SD), and directly reporting to DWS. The proposed directorate structure of SDU, which is recommended to be time-limited for three years initially, is needed for the purpose of driving and delivering the results in a timely manner. Some of the project-oriented tasks are expected to be completed in three years' time while other tasks which are more permanent in nature can continue to be housed under the SDU or other branches of WSD afterwards. As a prudent and pragmatic measure, the future of the SDU, including its directorate structure, will be reviewed in due course taking into account the actual operational experience and its duties upon completion of some of the project-oriented tasks.

#### **Need for a supernumerary AOSGC (D2) post to head the SDU**

Encl. 17 31. The major responsibilities of the AOSGC (D2) post (the duties of the proposed post are set out at **Enclosure 17**) are highlighted below -

- (a) overseeing the review study on drinking water standards and consolidating necessary information from enhanced water quality monitoring programme to facilitate DEVB(WB) to review drinking water standards for Hong Kong (paragraph 22 above refers);
- (b) undertaking a comprehensive review of WWO/WWR in safeguarding the safety of drinking water in Hong Kong through enhanced regulatory control of the internal plumbing systems (paragraph 24 above refers);
- (c) supervising internal audits for water quality monitoring and the DWQMS, and liaising with DEVB(WB) and DH on drinking water quality issues (paragraph 25 above refers);

- (d) overseeing the public relations work of WSD including the publicity and public education on the safe use of water (paragraph 26 above refers); and
- (e) reviewing and re-engineering business processes, operational procedures and institutional structure of WSD to strengthen internal governance that would enable effective use of resources and adequate monitoring in the department's day-to-day operation.

The tasks under (a), (b) and (e) above will be carried out on a project basis and are expected to be completed during the proposed tenure of the AD/SD post. Tasks (c) and (d) are ongoing initiatives which can continue to be housed under SDU or other branches of WSD depending on the result of a future organisational review.

32. On the review of drinking water standards, the AOSGC (D2) will need to actively co-ordinate with relevant B/Ds on provision of strategic inputs to the review study while consolidating the local water quality data collected under the enhanced water quality monitoring programme in coming up with a recommendation to facilitate DEVB(WB) to review drinking water standards in Hong Kong. As regards the holistic review of the WWO and WWR, in view of the breadth and depth of the various subject matters highlighted by the CoI which would have a significant impact on the operation of the trade and water quality and safety, there is a need for the AOSGC (D2) to closely supervise the review with constant directorate inputs, render policy guidance throughout its proceeding, and engage all the stakeholders concerned so that the outcome of it will be sensible, implementable and well-received by the trade and the community alike. Internal auditing to improve water quality monitoring is a key attesting function that helps to uphold and support the integrity of the newly established DWQMS. Since new audit procedures and mechanism will need to be introduced for carrying out the task, the AOSGC (D2) will, riding on his rich administrative experience, offer direction to the design of the audits and supervise its process. The implementation of the Action Plan requires public participation and the support of all the stakeholders concerned. The design of an efficient public education and publicity programme with significant directorate and strategic inputs would make a big difference for the Action Plan to achieve its impact. On strengthening the internal governance of WSD and its various business processes, the AOSGC (D2) will be responsible for giving strategic steer in respect of the design and implementation of practical solutions to address issues of major operational concern to WSD. Taking into account the level of responsibilities, the complexity and scope of work involved, and the co-ordination work required with other B/Ds and stakeholders,

we consider it necessary to have an AOSGC at D2 level with comprehensive policy experience and strategic skills to spearhead these highly complex and delicate tasks.

### **Need for a supernumerary CE post to support AD/SD**

33. To support AD/SD to properly and effectively discharge his responsibility under paragraph 31(b) above for three years, it is necessary to create a CE/SD post on a time-limited basis who will in return be supported by an existing team of professional grade staff to carry out a holistic review of WWO and WWR in safeguarding the safety of drinking water in Hong Kong through enhanced regulatory control of the internal plumbing systems. CE/SD will be responsible for reviewing legislations, including drawing up and implementing proposals to improve WSD's regulatory regime on internal plumbing systems; engaging and consulting stakeholders on related proposals and on other issues related to the review of the legislative measures governing water supply and safety issues; and supervising a team of professional grade staff.

34. We consider that a CE at D1 level with rich professional knowledge is needed to co-ordinate cross-divisional efforts in the legislative process, including conducting policy research and business impact assessment, engaging stakeholders and drafting legislative proposals. We expect that the review will be completed within the proposed tenure of the CE/SD post (i.e. for three years). The duties of the proposed CE/SD post are set out at **Enclosure 18**. The schedule of responsibilities of other directorate officers in WSD at D2 and D1 levels are set out at **Enclosure 19**, which shows that they are already fully engaged and cannot be redeployed to undertake the duties of AD/SD and CE/SD.

Encls.  
18 and 19

### **Other non-directorate manpower support in DEVB(WB) and WSD**

35. For DEVB(WB), the dedicated team led by the proposed PGE (D3) involves one contract staff as the team leader, plus five non-directorate civil service and contract staff including professional and general grades to assist the PGE (D3) to perform his functions. Subject to further development of the regulatory regime, DEVB(WB) will review and formulate proposals on the final set up of the dedicated team in due course.

36. For WSD, the proposed establishment of SDU involves, on top of the proposed supernumerary AOSGC (D2) and CE (D1) posts, the creation of five non-directorate civil service posts and six additional non-civil service contract

positions; and redeployment of 22 non-directorate staff outside SDU to form a multi-disciplinary team including professional, technical and general grades. A summary of the non-directorate posts under SDU and their duties are at **Enclosure 20**.

Encl. 20

37. Furthermore, non-directorate posts comprising staff from the professional, technical and general grades will be deployed to strengthen the existing operational units in WSD including the Supply and Distribution Branches and the Water Science Division to cope with the workload arising from the implementation of the Action Plan.

### **ALTERNATIVES CONSIDERED**

38. The two existing works policies divisions of DEVB(WB) have already been extremely overcommitted by daily responsibilities as explained above. We foresee that the tremendous workload incurred from the ongoing and forthcoming initiatives will persist and hence there is a need to have a permanent D3 rank officer to help share their workload, failing which the momentum in taking forward a number of initiatives of the DEVB(WB) will be hampered. Furthermore, as mentioned in paragraphs 9 to 11 above, there is a need to have a permanent PGE (D3) officer to lead the dedicated team to take forward the studies on the formulation of the drinking water safety regulatory regime as well as overseeing the performance of WSD in respect of drinking water safety. The sharing of the workload by the remaining heads of division/offices in DEVB(WB) is not feasible since they are already fully occupied by their own work. Furthermore, the Legal Advisor (Works) is dedicated for works-related legal matters while the Head of Project Cost Management Control Office is a supernumerary D2 post.

39. We have considered the alternative of redeploying other D2 officers to take up the proposed duties of the PAS(W)5 post. **Enclosure 15** shows that the other D2 officers within DEVB(WB) are already fully engaged and cannot be redeployed to undertake the duties of the proposed PAS(W)5 post.

Encl. 15

40. Furthermore, we have critically examined the feasibility of redeploying existing directorate officers within WSD to take on the work of the proposed supernumerary AOSGC (D2) and CE (D1) posts. At present, the 22 directorate professional grade officers, comprising one Deputy Director of Water Supplies (D3), five Assistant Director of Water Supplies (D2), one Assistant Director of Accounting Services (D2), one Principal Executive Officer (D1), 11 CEs and 2 CEs (Mechanical or Electrical) and one Chief Waterworks Chemist



Encl. 19

supporting DWS are already fully engaged in their respective duties. It is operationally not possible for them to take up the work of SDU without adversely affecting the discharge of their current duties as illustrated at **Enclosure 19**.

## FINANCIAL IMPLICATIONS

41. The proposed creation of the permanent PGE (D3) post in DEVB(WB), and two supernumerary posts of an AOSGC (D2) and a CE (D1) in WSD as well as making permanent a supernumerary GE (D2) post in DEVB(WB) will bring about an additional notional annual salary cost at mid-point of \$8,386,200, as follows –

<b>Staffing proposal</b>	<b>Notional annual salary cost at mid-point \$</b>	<b>No. of posts</b>
(a) Head 159: DEVB(WB)		
Creation of a permanent PGE (D3) post	2,431,800	1
Making permanent the existing supernumerary GE (D2) post	2,094,600	1
(b) Head 194: WSD		
Creation of a supernumerary AOSGC (D2) post	2,094,600	1
Creation of a supernumerary CE (D1) post	1,765,200	1
	8,386,200	4

The additional full annual average staff cost, including salaries and staff on-costs, is \$11,645,688.

42. The additional notional annual salary cost at mid-point for the six additional non-directorate civil service posts in DEVB(WB) and SDU of WSD supporting the proposed PGE, AOSGC and CE posts is \$6,415,650 and the additional full annual average staff cost, including salaries and staff on-costs, is around \$9,978,000. The annual staff cost of ten additional non-civil service contract staff in DEVB(WB) and SDU of WSD will be within \$10,502,000. The

changes in establishment and the required funding for the relevant proposals will be reflected as appropriate in the Draft Estimates of 2018-19.

**ADVICE SOUGHT**

43. Members are invited to consider the staffing proposals. Subject to Members' views, we will seek the necessary funding approval from the Legislative Council.

**Development Bureau  
Water Supplies Department  
November 2017**

**Latest situation of follow up actions of Development Bureau and Water Supplies Department in response to recommendations made by the Commission of Inquiry into Excess Lead Found in Drinking Water**

<b>Recommendations by Commission of Inquiry (CoI)</b>	<b>Latest situation of follow up actions</b>
<p>1. The Government should undertake to test the drinking water of all Public Rental Housing (PRH) estates again using an appropriate sampling protocol that would include the testing of stagnant water as well.</p>	<p>The International Expert Panel on Drinking Water Safety (IEP) (see Item (4) below) has studied the previous water sampling test results for the PRH estates taken in 2015 and considered that it was in general effective in distinguishing the affected PRH estates from the unaffected ones due to the large number of water samples taken systematically from each PRH estate and the use of a stringent criterion for classification of a PRH estate as an affected estate. With regard to testing of lead for PRH estates again, the enhanced water quality monitoring programme (Enhanced Programme) will cover all PRH estates. Given that copper pipes involving solder joints were in general used in post-2005 PRH developments and the risk of lead contamination was relatively higher, the Government will take additional water samples from these estates for testing of lead if such estates are not selected for testing under the first year of the Enhanced Programme.</p>
<p>2. The Government should, at the policy level, review the adequacy of the existing legislative framework and regulatory regime in safeguarding the safety and quality of drinking water in Hong Kong</p> <p>3. The Government should set up an independent body to overlook the</p>	<p>DEVB will set up a dedicated team to monitor the performance of WSD over drinking water safety issues, and conduct detailed studies to establish a drinking water safety regulatory regime suitable for Hong Kong. Furthermore, DEVB will set up a Drinking Water Safety Advisory Committee with members from relevant sectors to provide advice on various water safety issues.</p>

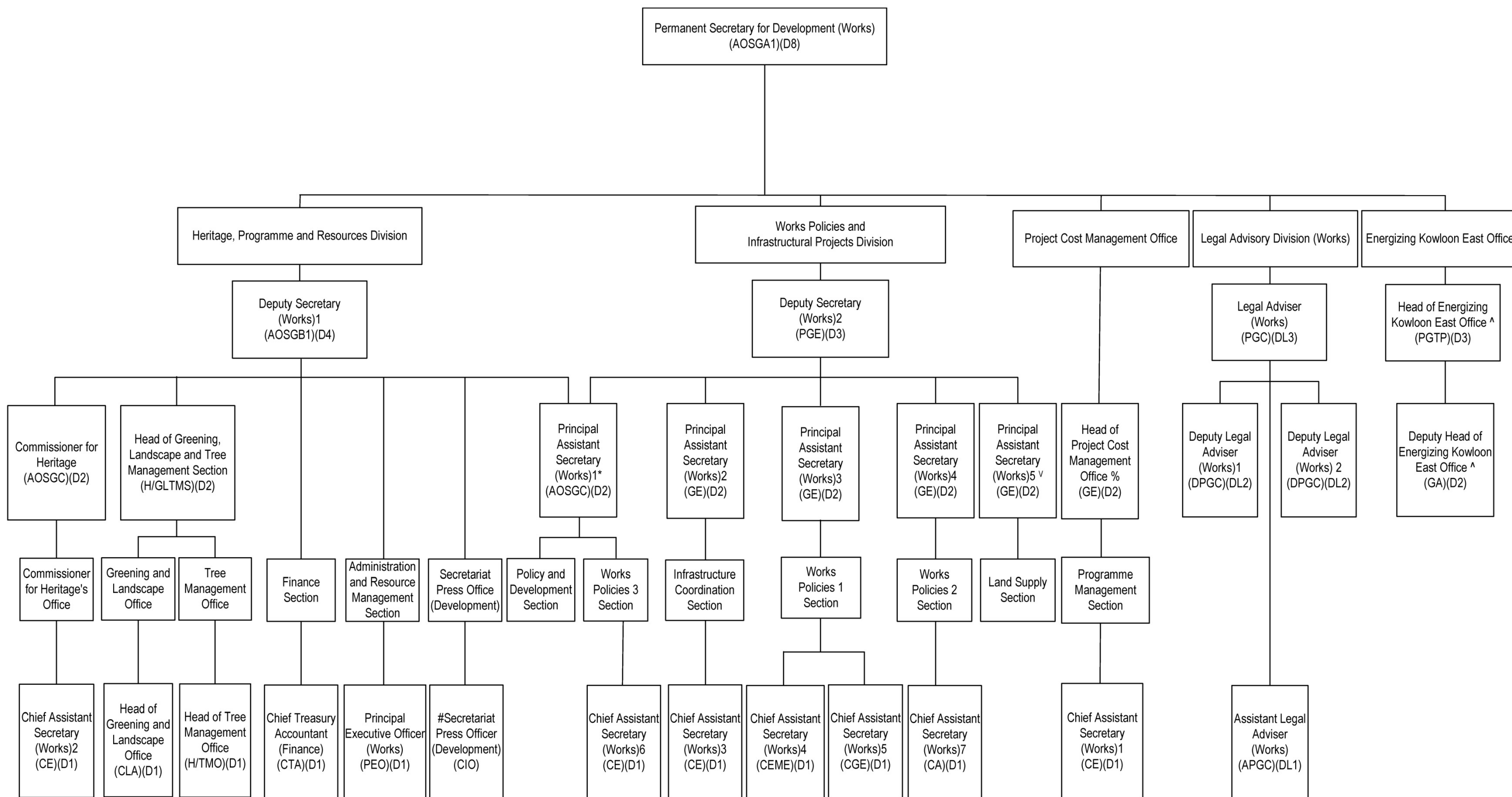
<p align="center"><b>Recommendations by Commission of Inquiry (CoI)</b></p>	<p align="center"><b>Latest situation of follow up actions</b></p>
<p>performance of WSD and water quality in Hong Kong generally.</p>	
<p>4. The Commission supports Water Authority (WA)/WSD’s proposal to set up an international expert panel on water safety.</p>	<p>With the support of the CoI, DEVB established the IEP on 1 June 2016, comprising five members viz. three overseas experts from Australia, Canada and the United Kingdom and two local experts, to provide expert advice on matters relating to drinking water safety.</p>
<p>5. WA/WSD should undertake a comprehensive study with a view to establishing the “Hong Kong Drinking Water Standards”.</p>	<p>WSD has engaged an expert consultant from the United Kingdom to review international practice and methodology for formulating drinking water standards. Review for the World Health Organization (WHO) metal parameters has been completed as a matter of priority. Based on the consultants' findings, the IEP agreed that WHO Guideline Values /Provisional Guideline Values for metal parameters be adopted as Hong Kong’s drinking water standards and existing water quality monitoring programme of WSD be enhanced to collect water samples from consumers’ taps for testing six metals that could be present in the plumbing system. The standards for these parameters should be reviewed when three to five years' data from the Enhanced Programme are available.</p> <p>The IEP further advised that a two-tier water sampling protocol (viz. Random Day Time (RDT) involving the testing of stagnant water, followed by 30-Minute Stagnation (30MS) water sampling if RDT test result fails) be adopted as the sampling protocol for taking water samples for testing six metal parameters. In regard to the non-metal parameters, pending completion of the review by the second quarter of 2018, the IEP recommended that the</p>

<p align="center"><b>Recommendations by Commission of Inquiry (CoI)</b></p>	<p align="center"><b>Latest situation of follow up actions</b></p>
	<p>WHO values be adopted as drinking water standards for compliance monitoring purpose.</p>
<p>6. WA/WSD should define the roles, involvements and responsibilities of other parties, who are in practice involved in the design, construction and maintenance of inside services.</p>	<p>WSD has set forth on a holistic review of the Waterworks Ordinance and Waterworks Regulations in regard to, inter alia, the roles, involvements and responsibilities of relevant parties responsible for the design, construction and maintenance of the inside services, including possible introduction of a registration regime for plumbing contractors in the legislation. Prior to the completion of legislative review, WSD and Construction Industry Council jointly issued the “Good Practice Guide on Plumbing Works” in March 2017, clarifying the roles and responsibilities of relevant stakeholders in inside services.</p>
<p>7. WSD should establish and implement a Water Safety Plan (WSP) for Hong Kong in general and WSPs specifically for other developments in Hong Kong (e.g. public and private housing developments, hospitals, elderly homes, schools)</p>	<p>With reference to the advice of an Australian expert consultant, WSD has enhanced its WSP and implemented since July 2017 a Drinking Water Quality Management System incorporating the enhanced WSP. A set of guidelines and templates have also been developed and piloted for use to assist building owners and property management agents in establishing and implementing WSP for their buildings. WSD has also promulgated the guidelines and WSP templates in conjunction with the announcement of the Action Plan for Enhancing Drinking Water Safety in Hong Kong on 21 September 2017. Training courses have been conducted for plumbing professionals and licensed plumbers with a view to building up and enhancing the industry capacity in developing WSPs. Public seminars and briefings on WSP have been conducted for publicising WSP for Buildings in Hong Kong. WSD has launched a Quality Water Supply Scheme for Buildings – Fresh Water (Management System) in November 2017 to encourage development and implementation of WSP for Buildings. WSD has also set up a dedicated hotline and helpdesk to provide</p>

<b>Recommendations by Commission of Inquiry (CoI)</b>	<b>Latest situation of follow up actions</b>
	assistance and advice to facilitate the development of WSP for Buildings.
8. WA/WSD should set out clearly the latest approved pipes and fittings as well as the latest standards for all plumbing material and components to be used in the construction of inside service, and update the same regularly and periodically.	WSD has uploaded to WSD's website lists of the latest approved pipes and fittings and will update the lists from time to time. DEVB/WSD has also amended the Waterworks Regulations (Cap. 102A) (with effect from 14 July 2017) to make clear and update the applicable standards for plumbing materials and components to be used in the construction of inside services.
9. WA/WSD should devise and uphold a robust licensing/ registration regime for parties responsible for plumbing installations, including to:  (i) define the duties of licensed plumbers (LPs) under WWO, taking into account the relevant provisions of the Construction Workers Registration Ordinance (CWRO), which allows skilled workers to perform plumbing installations;  (ii) review the adequacy of the existing arrangement where an individual LP can be	The Waterworks (Amendment) Bill 2017 (the Bill) submitted by DEVB/WSD is now under deliberation of a Bills Committee set up by the Legislative Council. The Bill includes setting out clearly the persons designated for carrying out plumbing works (including LPs and workers registered under CWRO) and their respective role and responsibilities. In regard to the surveillance and inspection of inside services, WSD launched a pilot scheme of risk-based random inspection of plumbing works during construction stage of new plumbing installations with effect from 1 April 2017. The risk factors to be considered include the scale and nature of the projects, as well as the workload, past performance, experience and Continuing Professional Development credits of the LPs engaged, etc. In regard to the recommendations of the CoI on strengthening the management and training of licensed plumbers, the training courses provided by the Vocational Training Council and the Construction Industry Council for licensed plumbers and plumbing workers have covered the potential causes and hazards of drinking water contaminations and the associated precautionary measures since September 2016, so as to enhance their awareness on drinking

<p style="text-align: center;"><b>Recommendations by Commission of Inquiry (CoI)</b></p>	<p style="text-align: center;"><b>Latest situation of follow up actions</b></p>
<p>responsible for plumbing installations of any scale at any given time;</p> <p>(iii) review the competency and manpower development of LPs, and consider the need for continuous professional education for LPs on a compulsory basis as part of the conditions for renewal of licences;</p> <p>(iv) ensure that LPs and skilled plumbing workers under CWRO would be taught the potential causes and hazards of drinking water contaminations, and precautionary measures; and</p> <p>(v) consider the need and feasibility to include other professionals and specialised contractors in the design and construction of inside service.</p>	<p>water safety. WSD has conducted a manpower study and confirmed adequate manpower to meet demand for LPs in the coming years whilst effort will continue to attract more people to join the plumbing trade to cope with future workload. In regard to the continuous professional education for LPs, WSD also launched the Voluntary Continuing Professional Development Scheme for LPs in October 2016 jointly with the plumbing industry stakeholders. From October 2016 to October 2017, 59 CPD programmes/courses have been accredited by WSD and around 45% of LPs active in the industry have attended at least one programme/course, while some of them have attended more than one programme/course. WSD will review the competency and training criteria and requirements for renewal of licences for LPs as part of the holistic legislative review. DEVB/WSD is reviewing the need and feasibility of introducing registration regime for plumbing contractors and professionals in the legislation to take up and supervise the plumbing works especially those of a large scale.</p>

Existing Organisation Chart of the Works Branch of the Development Bureau



Legend

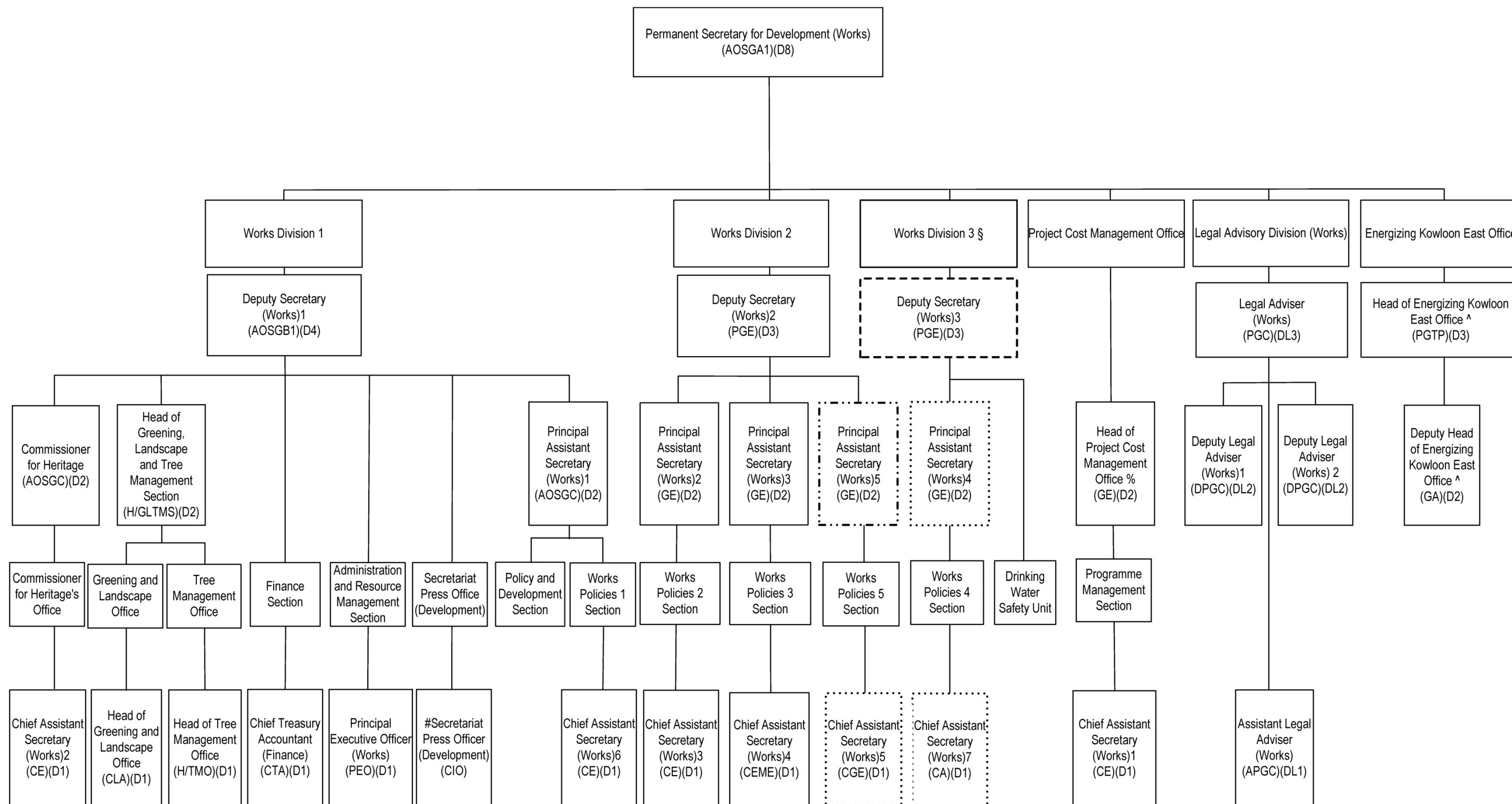
AOSGA1 Administrative Officer Staff Grade A1  
 AOSGB1 Administrative Officer Staff Grade B1  
 AOSGC Administrative Officer Staff Grade C  
 APGC Assistant Principal Government Counsel  
 CA Chief Architect  
 CE Chief Engineer  
 CEME Chief Electrical and Mechanical Engineer  
 CGE Chief Geotechnical Engineer  
 CIO Chief Information Officer  
 CLA Chief Landscape Architect

CTA Chief Treasury Accountant  
 DPGC Deputy Principal Government Counsel  
 GA Government Architect  
 GE Government Engineer  
 H/GLTMS Head of Greening, Landscape and Tree Management Section  
 H/TMO Head of Tree Management Office  
 PEO Principal Executive Officer  
 PGC Principal Government Counsel  
 PGE Principal Government Engineer  
 PGTP Principal Government Town Planner

# On the establishment of Information Services Department  
 \* Serves both Deputy Secretary (Works)1 and Deputy Secretary (Works)2  
 ^ Supernumerary post created for Energizing Kowloon East Office from 1 July 2012 to 31 March 2022  
 v Supernumerary post created for Land Supply Section from 11 July 2014 to 31 March 2019  
 % Supernumerary post created for Project Cost Management Office from 28 June 2016 to 31 March 2019



Proposed Organisation Chart of the Works Branch of the Development Bureau

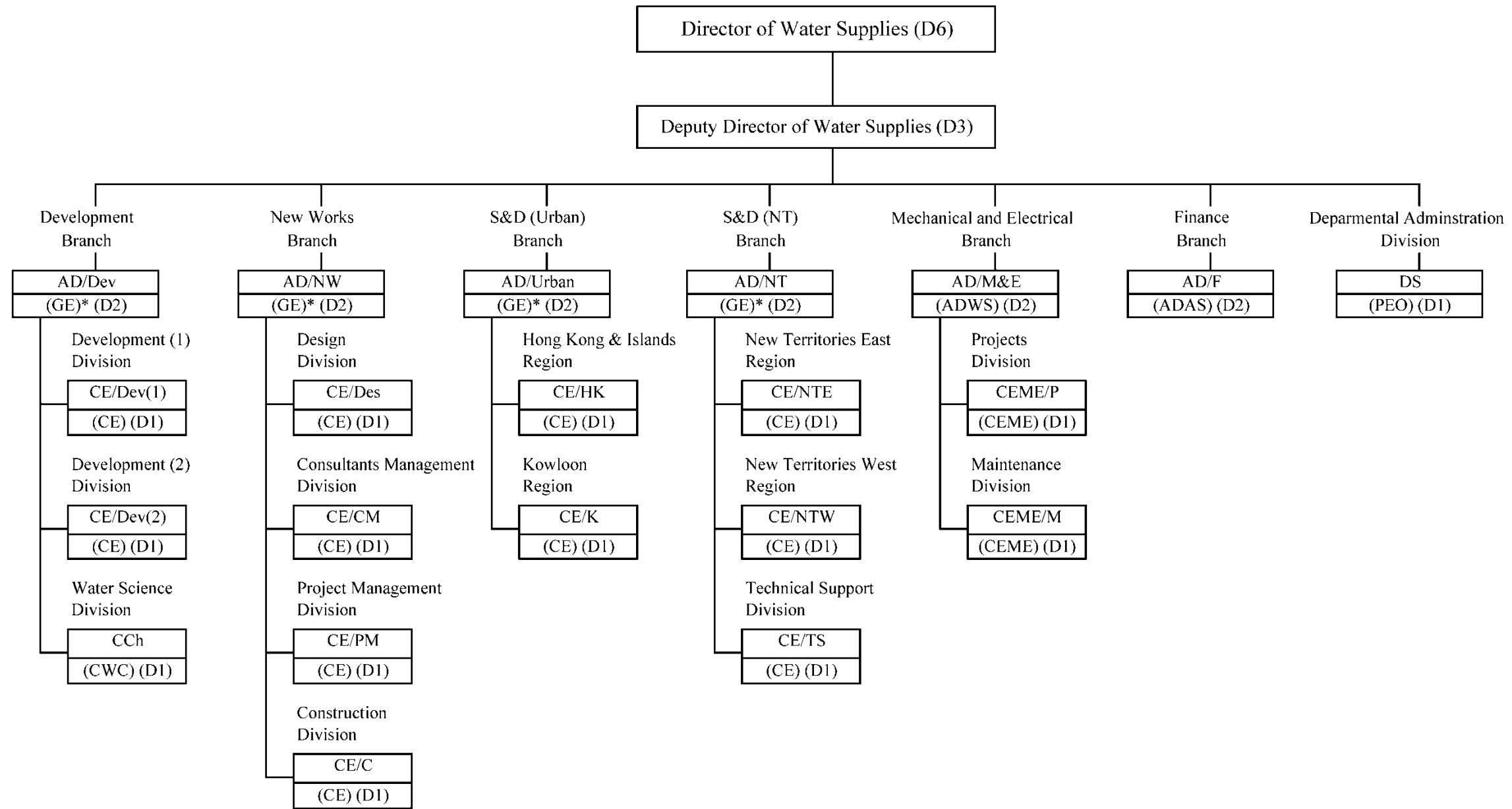


Legend

AOSGA1	Administrative Officer Staff Grade A1	CTA	Chief Treasury Accountant
AOSGB1	Administrative Officer Staff Grade B1	DPGC	Deputy Principal Government Counsel
AOSGC	Administrative Officer Staff Grade C	GA	Government Architect
APGC	Assistant Principal Government Counsel	GE	Government Engineer
CA	Chief Architect	H/GLTMS	Head of Greening, Landscape and Tree Management Section
CE	Chief Engineer	H/TMO	Head of Tree Management Office
CEME	Chief Electrical and Mechanical Engineer	PEO	Principal Executive Officer
CGE	Chief Geotechnical Engineer	PGC	Principal Government Counsel
CIO	Chief Information Officer	PGE	Principal Government Engineer
CLA	Chief Landscape Architect	PGTP	Principal Government Town Planner

- # On the establishment of Information Services Department
- ^ Supernumerary post created for Energizing Kowloon East Office from 1 July 2012 to 31 March 2022
- % Supernumerary post created for Project Cost Management Office from 28 June 2016 to 31 March 2019
- § Proposed new division
- ▭ Proposed new post
- ▭ (with dashed border) Supernumerary post created for Land Supply Section proposed to be converted to a permanent post
- ▭ (with dotted border) Posts proposed to be redeployed

### Existing Organisation Chart of Water Supplies Department

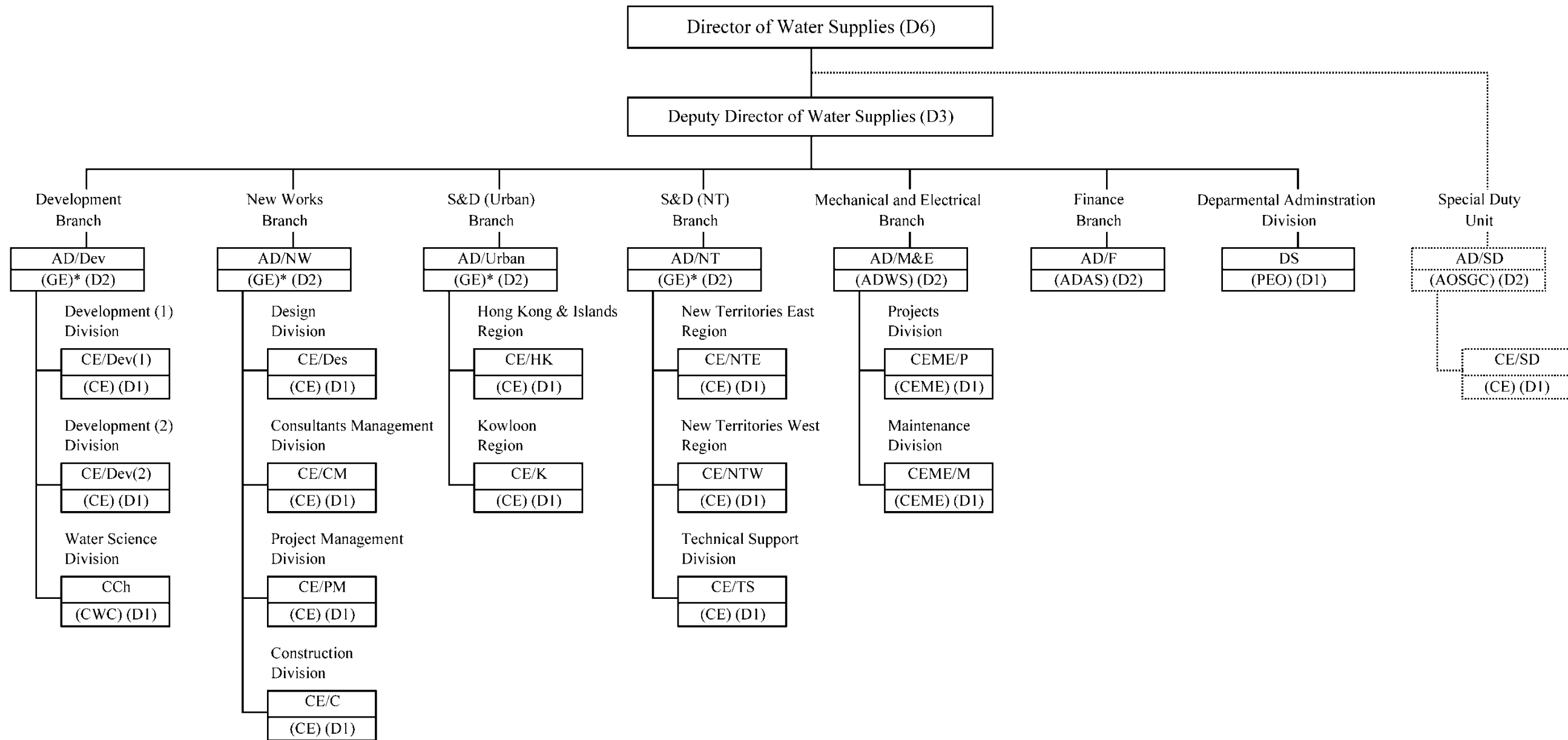


**Legend**

ADAS	Assistant Director of Accounting Services	CE/Des	Chief Engineer/Design	GE	Government Engineer
ADWS	Assistant Director of Water Supplies	CE/Dev(1)	Chief Engineer/Development(1)	PEO	Principal Executive Officer
AD/Dev	Assistant Director/Development	CE/Dev(2)	Chief Engineer/Development(2)	S&D (NT)	Supply and Distribution (New Territories)
AD/F	Assistant Director/Finance	CE/HK	Chief Engineer/Hong Kong	S&D (Urban)	Supply and Distribution (Urban)
AD/M&E	Assistant Director/Mechanical and Electrical	CE/K	Chief Engineer/Kowloon		
AD/NW	Assistant Director/New Works	CE/NTE	Chief Engineer/New Territories East		
AD/NT	Assistant Director/New Territories	CE/NTW	Chief Engineer/New Territories West		
AD/Urban	Assistant Director/Urban	CE/PM	Chief Engineer/Project Management		
CCh	Chief Chemist	CE/TS	Chief Engineer/Technical Support		
CWC	Chief Waterworks Chemist	CEME/P	Chief Electrical & Mechanical Engineer/Projects		
CE/C	Chief Engineer/Construction	CEME/M	Chief Electrical & Mechanical Engineer/Maintenance		
CE/CM	Chief Engineer/Consultants Management	DS	Departmental Secretary		

\* (subject to the approval of the Legislative Council Finance Committee to regrade the post from Assistant Director of Water Supplies)

**Proposed Organisation Chart of Water Supplies Department after Setting up of Special Duty Unit**



**Legend**

ADAS	Assistant Director of Accounting Services	CE/CM	Chief Engineer/Consultants Management	DS	Departmental Secretary
ADWS	Assistant Director of Water Supplies	CE/Des	Chief Engineer/Design	GE	Government Engineer
AOSGC	Administrative Officer Staff Grade C	CE/Dev(1)	Chief Engineer/Development(1)	PEO	Principal Executive Officer
AD/Dev	Assistant Director/Development	CE/Dev(2)	Chief Engineer/Development(2)	S&D (NT)	Supply and Distribution (New Territories)
AD/F	Assistant Director/Finance	CE/HK	Chief Engineer/Hong Kong	S&D (Urban)	Supply and Distribution (Urban)
AD/M&E	Assistant Director/Mechanical and Electrical	CE/K	Chief Engineer/Kowloon		
AD/NW	Assistant Director/New Works	CE/SD	Chief Engineer/Special Duty		
AD/NT	Assistant Director/New Territories	CE/NTE	Chief Engineer/New Territories East		
AD/SD	Assistant Director/Special Duty	CE/NTW	Chief Engineer/New Territories West		
AD/Urban	Assistant Director/Urban	CE/PM	Chief Engineer/Project Management		
CCh	Chief Chemist	CE/TS	Chief Engineer/Technical Support		
CWC	Chief Waterworks Chemist	CEME/P	Chief Electrical & Mechanical Engineer/Projects		
CE/C	Chief Engineer/Construction	CEME/M	Chief Electrical & Mechanical Engineer/Maintenance		

\* (subject to the approval of the Legislative Council Finance Committee to regrade the post from Assistant Director of Water Supplies)

**Proposed Job Description of  
Deputy Secretary (Works) 3, Development Bureau**

**Rank:** Principal Government Engineer (D3)

**Responsible to:** Permanent Secretary for Development (Works)

**Main Duties and Responsibilities**

1. To provide policy steer and high level input on the establishment of water safety regulatory regime including overseeing necessary studies relating to water safety regime for Hong Kong.
2. To monitor the performance of Water Supplies Department (WSD) in relation to water quality issues, review Hong Kong Drinking Water Standards, as well as support the operation of the Drinking Water Safety Advisory Committee.
3. To oversee and provide steer on all aspects of work carried out by WSD in relation to implementation of the Action Plan for Enhancing Drinking Water Safety.
4. To oversee work on secretariat support to the International Expert Panel on Drinking Water Safety.
5. To assist in devising and implementing policies in regard to procurement, administration of contracts and consultancies, lift and escalator safety.
6. To serve as board members of the Central Tender Board, the Engineering and Associated Consultants Selection Board and the Architectural and Associated Consultants Selection Board.
7. To devise policies to promote local professional services including seizing construction-related job opportunities outside Hong Kong.
8. To assist the Permanent Secretary for Development (Works) in directing, co-ordinating and determining the need for supporting services to the Works Group of Departments and assume housekeeping responsibilities in respect of the Electrical and Mechanical Services Department.

-----

**Proposed Job Description of  
Deputy Secretary (Works) 1, Development Bureau**

**Rank:** Administrative Officer Staff Grade B1 (D4)

**Responsible to:** Permanent Secretary for Development (Works)

**Main Duties and Responsibilities -**

1. To oversee the formulation of policies on heritage conservation, devise new initiatives on heritage conservation, oversee the work of the Commissioner for Heritage's Office as well as provide policy support and guidance to the Antiquities and Monuments Office of the Leisure and Cultural Services Department.
2. To assist in overseeing the implementation of the Public Works Programme by reviewing and updating procedures and practices; as well as monitoring the overall spending on public works projects.
3. To oversee the formulation of policy and strategy on greening, landscape and tree management.
4. To oversee the provision of support to and liaison with the statutory Construction Industry Council.
5. To oversee branch administration, resource planning, media relations and publicity matters as well as financial management of bureau resources.
6. To monitor the overall financial management, manpower and public relations matters of the Works Group of Departments.
7. To oversee the implementation of the construction workers registration system in conjunction with the Construction Workers Registration Authority.
8. To assist the Permanent Secretary for Development (Works) to housekeep the Architectural Services Department.

-----

**Proposed Job Description of  
Deputy Secretary (Works) 2, Development Bureau**

**Rank:** Principal Government Engineer (D3), Multi-disciplinary

**Responsible to:** Permanent Secretary for Development (Works)

**Main Duties and Responsibilities -**

1. To formulate policies and oversee their implementation on slope safety, cavern and underground space development.
  2. To oversee the implementation of major infrastructural projects, such as the Kai Tak Development and the Liantang / Heung Yuen Wai Boundary Control Point.
  3. To oversee the implementation of the pier improvement programme.
  4. To formulate policies and oversee their implementation on construction industry security of payment.
  5. To formulate policies and oversee their implementation to enhance productivity and innovation in the construction industry.
  6. To oversee the holistic review of the Waterworks Ordinance (WVO) and Waterworks Regulations (WVR) and formulate policies in ensuring water supply reliability and sustainability in Hong Kong including providing high level steer on the total water management strategy and oversee the implementation of various initiatives under the strategy.
  7. To provide high-level steer on the implementation of the Sustainable Lantau Blueprint and reclamations outside Victoria Harbour.
  8. To formulate policies and oversee their implementation on construction safety and environment, construction standards and materials, green procurement, disposal of marine mud as well as disposal of construction and demolition materials in public works.
  9. To formulate policies and oversee their implementation on the flood prevention and revitalisation of major nullahs in Hong Kong.
  10. To oversee implementation of smart city initiatives in public works projects and formulate policies to deal with impact of climate changes on public works infrastructures.
  11. To assist the Permanent Secretary for Development (Works) to housekeep the Water Supplies Department, the Drainage Services Department and the Civil Engineering and Development Department.
-

**Proposed Job Description of  
Principal Assistant Secretary (Works) 5, Development Bureau**

**Rank:** Government Engineer (D2)

**Responsible to:** Deputy Secretary (Works)2

**Main Duties and Responsibilities -**

1. To provide high-level technical input to steer the implementation of various projects and initiatives of Lantau development and conservation as set out in the Sustainable Lantau Blueprint, such as strategic studies for artificial islands in the central waters including development of the proposed East Lantau Metropolis, topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge and Sunny Bay reclamation.
  2. To provide secretariat support to the Lantau Development Advisory Committee chaired by the Secretary for Development.
  3. To support the land supply initiatives through reviewing and formulating works policies with a view to expediting land supply, overseeing the provision of infrastructure support to various land supply initiatives and proposals and providing high level technical input to coordinate and oversee the implementation of the associated works projects.
  4. To provide support to Permanent Secretary for Development (Works) and Deputy Secretary (Works)2 in handling technical matters related to the Steering Committee on Land Supply, Task Force on Land Supply, Land Supply Tracking Subcommittee, Committee on Planning and Land Development and Strategic Planning Committee of the Hong Kong Housing Authority.
  5. To assist in formulating and implementing policies on construction safety and environment, construction standards and materials, and green procurement in public works.
  6. To assist in formulating and implementing policies in regard to disposal of marine mud as well as handling matters relating to disposal of construction and demolition materials for public works.
  7. To assist in formulating and implementing policies in regard to flood prevention and revitalisation of major nullahs in Hong Kong, and in housekeeping the Drainage Services Department.
-

Summary of changes in the Sections in the  
proposed re-organisation of Works Branch of Development Bureau

Works Division	Section(s) under the Division before the re-organisation			Section(s) under the Division after the re-organisation		
	Section name	D2 staff	D1 staff	Section name	D2 staff	D1 staff
1	Works Policies 3 Section	PAS(W)1	CAS(W)6	Works Policies 1 Section <i>(renamed from Works Policies 3 Section)</i>	PAS(W)1	CAS(W)6
2	Infrastructure Coordination Section	PAS(W)2	CAS(W)3	Works Policies 2 Section <i>(renamed from Infrastructure Coordination Section)</i>	PAS(W)2	CAS(W)3
	Works Policies 1 Section	PAS(W)3	CAS(W)4, CAS(W)5	Works Policies 3 Section <i>(renamed from Works Policies 1 Section)</i>	PAS(W)3	CAS(W)4
	Works Policies 2 Section	PAS(W)4	CAS(W)7	-		
	Land Supply Section	PAS(W)5	-	Works Policies 5 Section <i>(renamed from Land Supply Section)</i>	PAS(W)5	CAS(W)5 <i>(redeployed from the original Works Policies 1 Section)</i>
3 (new)	-			Works Policies 4 Section <i>(redeployed from original Works Policies 2 Section of Works Division 2)</i>	PAS(W)4	CAS(W)7
				Drinking Water Safety Unit <i>(a new unit )</i>	-	-



**Existing Job Description of  
Chief Assistant Secretary (Works)5, Development Bureau**

**Rank:** Chief Geotechnical Engineer (D1)

**Responsible to:** Principal Assistant Secretary (Works)3

**Main Duties and Responsibilities -**

1. To assist in formulating and implementing policies on construction safety and environment, construction standards and materials, and green procurement in public works.
2. To provide secretariat support to the Panel of Enquiry for taking regulating actions against contractors with poor site safety and environmental records.
3. To assist in formulating and implementing policies in regard to flood prevention and the delivery of flood prevention projects.
4. To assist in formulating and implementing policies in regard to road excavation permits, disposal of marine mud as well as handling matters relating to disposal of construction and demolition materials for public works.
5. To assist in formulating and implementing works policy on slope safety.
6. To assist in housekeeping the Drainage Services Department.

-----

**Proposed Job Description of  
Chief Assistant Secretary (Works) 5, Development Bureau**

**Rank:** Chief Geotechnical Engineer (D1)

**Responsible to:** Principal Assistant Secretary (Works)5

**Main Duties and Responsibilities -**

1. To assist in formulating and implementing policies on construction safety and environment, construction standards and materials, and green procurement in public works.
2. To provide secretariat support to the Panel of Enquiry for taking regulating actions against contractors with poor site safety and environmental records.
3. To assist in formulating and implementing policies in regard to flood prevention and revitalisation of major nullahs in Hong Kong.
4. To assist in formulating and implementing policies in regard to disposal of marine mud as well as handling matters relating to disposal of construction and demolition materials for public works.
5. To assist in overseeing the implementation of various projects and initiatives of Lantau development and conservation as set out in the Sustainable Lantau Blueprint, such as strategic studies for artificial islands in the central waters including development of the proposed East Lantau Metropolis, topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge and Sunny Bay reclamation.
6. To assist in housekeeping the Drainage Services Department.

-----

**Proposed Job Description of  
Principal Assistant Secretary (Works) 4, Development Bureau**

**Rank :** Government Engineer (D2), Multi-disciplinary

**Responsible to :** Deputy Secretary for Development (Works) 3

**Main Duties and Responsibilities –**

1. To assist in implementing post-quake reconstruction work in Sichuan including project and funding management; technical audit coordination; and providing technical support to other policy bureaux.
2. To assist in handling matters relating to the Mainland/Hong Kong Closer Economic Partnership Arrangement consultations/implementation including mutual recognition of professional qualifications.
3. To assist in handling matters relating to negotiations of trade-in-services agreements of World Trade Organization Agreement of Government Procurement, free trade agreements, Trans-Pacific Partnership Agreement (TPPA) and other multilateral/bilateral trade negotiations in connection with the construction industry.
4. To assist in formulating and implementing strategies to promote local professional services in the Mainland and overseas construction and engineering related markets.
5. To assist in formulating and implementing policies on procurement practices in relation to project planning, design, tendering, contract administration and site supervision.
6. To assist in formulating and implementing policies on management of contractors and consultants including administration and performance monitoring.
7. To assist in vetting submissions to the Central Tender Board, Engineering and Associated Consultants Selection Board and Architectural and Associated Consultants Selection Board.
8. To assist in housekeeping the Electrical and Mechanical Services Department.

-----

**Proposed Job Description of  
Chief Assistant Secretary (Works) 7, Development Bureau**

**Rank :** Chief Architect (D1)

**Responsible to :** Principal Assistant Secretary for Development (Works) 4

**Main Duties and Responsibilities –**

1. To assist in reviewing the public works procurement policies and system, and formulating and implementing policies in regard to contract and consultancy services procurement, and management of contractors and consultants including administration, performance monitoring and regulating actions.
2. To assist in handling matters related to the Mainland/Hong Kong Closer Economic Partnership Arrangement consultations/implementation (including key development areas), other Mainland cooperation agreements and trade agreements with overseas economies; and the promotion of local professional services in the Mainland and overseas construction and engineering related markets.
3. To assist in formulating and implementing policy in regard to lift and escalator safety.
4. To assist in housekeeping Electrical and Mechanical Services Department.

-----

**Schedule of Responsibilities for  
D2 Officers of Works Branch, Development Bureau (DEVB(WB)) other than  
the Legal Advisory Division (Works)**

1. Upon the creation of Deputy Secretary (Works) 3 (DS(W)3) post ranked at Principal Government Engineer (D3), DEVB(WB) proposes to re-distribute the duties among various divisions within DEVB(WB).

**Commissioner for Heritage (C for H) ranked at Administrative Officer Staff Grade C (AOSGC) (D2)**

2. C for H assists Deputy Secretary (Works) 1 (DS(W)1) in the implementation and monitoring of policies on heritage conservation, and in devising and taking forward initiatives on the subject, including initiatives under the Built Heritage Conservation Fund, which comprise the Revitalising Historic Buildings Through Partnership Scheme, Financial Assistance for Maintenance Scheme, and funding schemes for public education, community involvement, publicity activities and academic research. C for H is responsible for implementing the heritage impact assessment mechanism for new capital works projects, devising economic incentives for the conservation of privately-owned historic buildings, and taking forward heritage conservation and revitalisation projects. He also serves as the focal point of contact on heritage conservation matters both locally and overseas, and spearheads the engagement of stakeholders and the public in the implementation of heritage conservation initiatives and liaises with organisations concerned on related matters. In addition, he provides policy support and guidance to the Antiquities and Monuments Office of the Leisure and Cultural Services Department. Moreover, he is responsible for conducting research on policies, legislation and practices on heritage conservation both locally and overseas, and overseeing the handling of enquiries, complaints and suggestions from the public and media on heritage conservation matters. There is no change in duties upon re-organisation.

**Head of Greening, Landscape and Tree Management Section (H/GLTMS) D2**

3. H/GLTMS assists DS(W)1 in formulating policies and strategies on greening, landscape and tree management to ensure seamless integration from landscape design and planting in the upstream to vegetation maintenance in the downstream, overseeing the work of the Greening and Landscape Office and the Tree Management Office, overseeing the co-ordination of greening, landscape and

tree management matters and setting up protocol of liaison with relevant bureaux and departments, and to deal with cross-bureau and cross-departmental issues, serving as the focal point of contact on greening, landscape and tree management matters both locally and overseas, overseeing manpower development, community involvement and public education programmes, and handling of enquiries, complaints and suggestions from the public and media on greening, landscape and tree management matters. There is no change in duties upon re-organisation.

**Principal Assistant Secretary (Works) 1 (PAS(W)1) ranked at AOSGC (D2)**

4. Upon re-organisation, PAS(W)1 will be under DS(W)1 instead of both DS(W)1 and Deputy Secretary (Works) 2 (DS(W)2). PAS(W)1 will assist DS(W)1 in providing policy guidance to the statutory Construction Industry Council (CIC) and to act as the focal point of liaison between the Government and CIC, and to handle matters of the next phase of the Consultancy Study on Development Strategy for the Hong Kong Construction Industry – Vision 2030, covering construction cost, quality control and project overrun. He is also responsible for monitoring overall construction manpower situation, devising construction manpower policies, providing policy support to the establishment of the Hong Kong Institute of Construction and providing career progressive pathways to practitioners in the industry, overseeing the implementation of enhancements to the Supplementary Labour Scheme in respect of applications from public sector projects, providing steer on matters under the Construction Workers Registration Ordinance, and supporting the development of the Zero Carbon Building. There is no change in duties upon re-organisation.

**Principal Assistant Secretary (Works) 2 (PAS(W)2) ranked at Government Engineer (GE) (D2)**

5. PAS(W)2 assists DS(W)2 in providing high-level technical input and coordinating with works departments in the implementation of major infrastructure development projects so as to ensure that the best possible support is provided to various client bureaux. PAS(W)2 also assists in overseeing the implementation of major infrastructure projects, such as the Kai Tak Development, Liantang/Heung Yuen Wai Boundary Control Point, development of cycle track networks in the New Territories and Pier Improvement Programme. Furthermore, he is responsible for taking forward the initiative of enhancing land supply through rock cavern development and underground space development in urban areas, and providing policy steer for the public engagement of potential cavern and underground development sites such as the relocation of the Sha Tin sewage treatment works to caverns. In addition, he coordinates technical input on works aspects of planning and development issues, such as studies related to the development of the Lok Ma

Chau Loop, North East New Territories New Development Areas (NDAs), Hung Shui Kiu NDA, etc. Also, he assists DS(W)2 in the housekeeping of the Civil Engineering and Development Department, and provides support to the Permanent Secretary for Development (Works) (PS(W)) in handling matters related to the MTR Corporation Limited's board business, Ocean Park re-development projects and Hong Kong Disneyland projects. He also assists in coordinating works policy input on climate change and biodiversity in support of the work of the Steering Committee on Climate Change. Upon re-organisation, PAS(W)2 will take up the following additional work, including policy issues related to control of slope safety for both man-made and natural terrains as well as matters in regard to the West Kowloon Cultural District project currently undertaken by PAS(W)3. Also, he will handle the planning and engineering studies of various projects of reclamation outside Victoria Harbour for land supply currently undertaken by Principal Assistant Secretary (Works)5.

### **Principal Assistant Secretary (Works) 3 (PAS(W)3) ranked at GE (D2)**

6. Among the new measures undertaken by DEVB(WB), PAS(W)3 takes up the policy issues related to innovation in construction industry including implementation for the Building Information Modelling technology. Also, in the holistic legislative review on Waterworks Ordinance and its Regulations, he provides high level steer for the proposed amendment bill and, when necessary introducing new legislation for new water sources including reclaiming water, recycling grey water and harvesting rainwater plus implementing desalination. However, PAS(W)3 is already fully occupied with his existing work on policy matters in relation to water, drainage, lift safety as well as construction standards. Upon re-organisation, the policy matters related to drainage services, control of slope safety for both man-made and natural terrains and lift and escalator safety, policy input to construction safety, construction standards, environmental management and green procurement including promoting the use of green construction materials currently undertaken by him will be put under other PASs.

7. After re-organisation, PAS(W)3 will continue assisting DS(W)2 in the housekeeping of the Water Supplies Department and provide policy input and steer on total water management strategy, reliable supply of water including securing supply from Dongjiang and exploring alternative water sources such as seawater desalination as well as the delivery of infrastructural projects for enhancing water supplies. PAS(W)3 is also responsible for policy issues related to the regulatory control of water-cooled air-conditioning systems for the prevention of Legionnaires Disease as well as the policy input to security of payment and wage payment, including introduction of legislation. Furthermore, PAS(W)3 will continue to undertake the new measures as mentioned in paragraph 6 above.

#### **Principal Assistant Secretary (Works) 4 (PAS(W)4) ranked at GE (D2)**

8. Currently, PAS(W)4 works under DS(W)2. Upon re-organisation, PAS(W)4 will work under DS(W)3 and assist DS(W)3 in formulating and implementing policies on procurement of construction and consultancy services as well as management of contractors and consultants including administration of DEVB(WB)'s approved lists of public works contractors/suppliers and performance monitoring. PAS(W)4 represents DEVB(WB) in various trade consultations regarding the construction sector including Mainland/Hong Kong Closer Economic Partnership Arrangement (CEPA) consultations, World Trade Organization/Government Procurement Agreement consultations and other free trade agreement negotiations. He is responsible for handling works-related Mainland affairs including implementing CEPA market liberalisation measures, and providing support to other bureaux on various platforms such as the Hong Kong/Guangdong Co-operation Joint Conference and other Mainland/Hong Kong co-operation initiatives. He also provides support for carrying out a strategic review of the Hong Kong's procurement and contract administration systems so as to enhance competition, productivity, innovation and creativity leading to the cost-effective delivery of quality infrastructure, and for exploring liberalisation measures that are more favourable than CEPA for the construction stakeholders to access the Pilot Free Trade Zones in the Mainland and other emerging markets. He also assists in handling matters related to promotion of local professional services regarding construction and engineering in Mainland and overseas markets, providing secretariat support to the working group on professional services of the Economic Development Commission as well as assisting DS(W)3 in the housekeeping of the Electrical and Mechanical Services Department. With the re-organisation, PAS(W)4 will also take up the policy issues related to lift and escalator safety.

#### **Principal Assistant Secretary (Works) 5 (PAS(W)5) ranked at GE (D2)**

9. PAS(W)5 assists DS(W)2 in providing policy steer and input for taking forward various projects and initiatives of Lantau development and conservation as set out in the Sustainable Lantau Blueprint. In particular, he provides high-level technical input to steer the strategic studies for artificial islands in the central waters between Hong Kong Island and Lantau Island including development of the proposed East Lantau Metropolis, implementation of topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge, Sunny Bay and Siu Ho Wan reclamations. He also provides secretariat support to the Lantau Development Advisory Committee chaired by the Secretary for Development (SDEV). In addition, PAS(W)5 supports the land supply initiatives through reviewing and formulating works policies with a view to



expediting land supply, overseeing the provision of infrastructure support to various land supply initiatives and proposals and providing high level technical input to coordinate and oversee the implementation of the associated works projects. He also provides support to PS(W) and DS(W)2 in handling technical matters related to the Steering Committee on Land Supply, Task Force on Land Supply, Land Supply Tracking Subcommittee, Committee on Planning and Land Development and Strategic Planning Committee of the Hong Kong Housing Authority.

10. Upon re-organisation, PAS(W)5 will also take up the housekeeping of the Drainage Services Department including policy input and steer on the flood prevention strategy as well as the delivery of infrastructural projects for enhancing flood prevention. He will also be responsible for providing policy input to construction safety, construction standards, environmental management and green procurement including promoting the use of green construction materials.

#### **Head of Project Cost Management Office (H/PCMO) ranked at GE (D2)**

11. H/PCMO is under the direct command of PS(W) in devising, promoting, coordinating and overseeing the implementation of cost management policies for capital works projects. In particular, he steers and promotes reviews of various works policies with a view to enhancing cost management, works with other policy teams under DEVB(WB), coordinates works departments' efforts in cost management and vets capital works projects from a cost management angle. In addition, he provides cross-bureau and high-level technical support regarding project cost estimation and budget control issues of major capital works projects, as well as promotes cost control and cost saving measures in the private building sector through collaboration with the CIC. To ensure the effectiveness of cost management efforts and create synergy, H/PCMO also monitors the overall delivery of the Capital Works Programme, reviews and updates procedures and practices, monitors the overall spending on capital works projects, vets the technical feasibility of proposed capital works projects, approves their technical feasibility statements, and vets submissions related to the Capital Works Resource Allocation Exercise and the Capital Works Reserve Fund Estimates in conjunction with the Financial Services and the Treasury Bureau. There is no change in duties upon re-organisation.

#### **Deputy Head of Energizing Kowloon East Office (DH/EKEO) ranked at Government Architect (D2)**

12. DH/EKEO assists Head of Energizing Kowloon East Office in overseeing tasks related to the conceptual master plan of Kowloon East (KE) and exploring

different strategies to expedite the development and transformation of KE into an additional Central Business District. DH/EKEO is responsible for coordinating and monitoring planning and engineering studies, public works projects, urban design and development of the master greening plan. DH/EKEO conducts research and feasibility studies to release the potential of government land, improve walkability, enhance the environment and develop KE into a smart city. DH/EKEO also provides professional advice to development proposals, coordinates and liaises with various bureaux and departments, advises on the feasibility, budgeting, programming, public consultation strategy, design and implementation of public works projects, and facilitates place making events that are conducive to the urban regeneration of KE. DH/EKEO also assists DS(W)1 in the housekeeping of the Architectural Services Department. There is no change in duties upon re-organisation.

## **Action Plan for Enhancing Drinking Water Safety in Hong Kong**

On 21 September 2017, the Government launched the Action Plan for Enhancing Drinking Water Safety in Hong Kong (the Action Plan) which comprises the following components in order to restore public confidence in drinking water safety-

- (i) establishing drinking water standards and implementing an enhanced water quality monitoring programme (the Enhanced Programme);
- (ii) tightening up plumbing material control and commissioning requirements for new plumbing installations;
- (iii) promoting Water Safety Plan (WSP) for Buildings;
- (iv) enhancing publicity and public education; and
- (v) developing a drinking water safety regulatory regime.

2. The Water Supplies Department (WSD) has been supplying drinking water in full compliance with the World Health Organization Guidelines for Drinking-water Quality (WHO Guidelines) up to the connection points to the consumers (connection points). With reference to overseas practices and the advice from the International Expert Panel on Drinking Water Safety (IEP)<sup>1</sup> appointed by the Secretary for Development (SDEV), the Works Branch of the Development Bureau (DEVB(WB)) and WSD have formulated the Action Plan which is detailed in the ensuing paragraphs.

### ***(i) Establishing drinking water standards and implementing the Enhanced Programme***

3. Hong Kong has all along been making reference to the Guideline Values (GVs)/Provisional Guideline Values (PGVs) of the WHO Guidelines in monitoring the quality of drinking water up to the connection points. In response to the recommendations of the Commission of Inquiry into Excess Lead Found in Drinking Water (CoI) on the establishment of the Hong Kong Drinking Water Standards, WSD has engaged an expert consultant to carry out a comprehensive review on drinking water quality standards and methodologies of setting these standards in overseas jurisdictions<sup>2</sup>.

---

<sup>1</sup> The IEP was appointed by the SDEV in June 2016 to advise SDEV on the proposal of DEVB/WSD on drinking water safety.

<sup>2</sup> They include two international organisations (viz. World Health Organization (WHO) and European Union (EU)) and seven overseas nations (viz. the United Kingdom (UK), United States of America (USA), Canada, Australia, New Zealand, Singapore and Japan).

4. In view of the public concern over possible metal contamination in drinking water, the expert consultant has focused on the 12 metal parameters (including lead) in the WHO Guidelines in the first stage of the review study<sup>3</sup>. Having taken into account the consultant's findings and IEP's advice, WHO's GVs/PGV for the 12 metal parameters, including 10µg/Litre(L) for lead<sup>4</sup> are recommended to be adopted as the drinking water standards in Hong Kong. Nonetheless, IEP advised that a review on the aforesaid standards should be carried out when new information is available from WHO's revision of its Guidelines or when sufficient local data is available, say in three to five years' time, with a view to establishing a set of drinking water standards tailored for Hong Kong, including the appropriateness to adopt standards beyond WHO Guidelines for certain parameters. Against this, IEP advised that the current water quality monitoring programme<sup>5</sup> of WSD be enhanced by collecting random water samples from consumers' drinking taps for testing six metals, viz. lead, cadmium, chromium, nickel, copper, and antimony, which could be present in the internal plumbing systems. The collection and testing of water samples will commence by the end of 2017. Further, we will continue to complete the remaining stage of the review of the WHO parameters and seek IEP's endorsement by the end of 2018; and in the interim the IEP has recommended that the corresponding WHO's GVs/PGVs should also be adopted as drinking water standards for compliance monitoring.

5. With reference to overseas practices<sup>6</sup>, the number of water samples should be calculated according to the population of the 18 district council districts. Accordingly, about 670<sup>7</sup> premises will be randomly selected from over 2.9 million water accounts in the territory each year under the Enhanced Programme.

6. In regard to the water sampling protocol, the IEP has endorsed the adoption of a two-tier sampling protocol<sup>8</sup> for the six metal parameters involving the testing of stagnant water, namely (i) Tier 1 – Random Day Time (RDT)<sup>9</sup> sampling

---

<sup>3</sup> The next stage of the review will be on the non-metal parameters in the WHO Guidelines.

<sup>4</sup> As far as lead is concerned, there is no other jurisdictions currently adopting an enforcement standard of lead lower than the PGV of 10µg/Litre under the WHO Guidelines and there is also the possible contribution of compliant copper alloy fittings to lead in drinking water, and hence 10µg/L for lead is adopted. As for the other 11 metal parameters, in view of the precautionary approach adopted by the WHO in the derivation of their GVs/PGVs, it is recommended to adopt these values as standards at this stage. The standards for the six metals to be tested are: Lead: 10µg/L; Antimony: 20µg/L; Cadmium: 3µg/L; Chromium:50µg/L; Copper: 2 000µg/L and Nickel:70µg/L.

<sup>5</sup> At present, WSD has been taking water samples for monitoring from its waterworks including water treatment works, service reservoirs and from publicly accessible places such as shopping centres, clinics, community facilities, sports grounds, markets, government offices, estate management offices, etc.

<sup>6</sup> The sampling rates in UK are: one sample for population < 100; four samples for population between 100 and 4 999; and eight samples for population between 5 000 and 100 000.

<sup>7</sup> Based on the latest population data published by the Census and Statistics Department in February 2017.

<sup>8</sup> Taking into account the findings of the review of the water sampling protocols adopted in two international organisations (viz. WHO and EU) and several overseas nations (viz. UK, Germany, United States of America (USA), Canada, Australia, New Zealand, Singapore and Japan) for water quality monitoring.

<sup>9</sup> For RDT sampling, a 1L unflushed sample will be taken at random during normal working hours in daytime from a drinking water tap of consumer. No flushing will be carried out by the sampler before

for determining the metal exposure of consumers to the six metals; and (ii) Tier 2 – 30-minute stagnation (30MS) sampling<sup>10</sup> for verification of exceedance found in the Tier 1 water sample, which will be tested in case of exceedance being found in the Tier 1 water sample<sup>11</sup>. If there is no similar exceedance in the Tier 2 water sample, there should be no metal contamination in the plumbing installation of the concerned premises. If exceedance is found in both Tier 1 and Tier 2 water samples in a premises, WSD will provide necessary advice and assistance to the affected premises.<sup>12</sup>

***(ii) Tightening up plumbing material control and commissioning requirements for new plumbing installations***

7. As water quality from consumers' taps will be affected by their internal plumbing systems (including the materials used), the Action Plan includes strengthening the regulatory control of internal plumbing systems. On tightening up of plumbing material control and the management and training of licensed plumbers, WSD has implemented a number of measures since 2015. Further, DEVB and WSD have commenced a legislative review in regard to the parties responsible for design, construction and maintenance of plumbing installations.

8. On the commissioning requirements for new plumbing installations, WSD has engaged the University of Hong Kong to develop a systematic flushing protocol to ensure adequately flushing of new plumbing installations (systematic flushing protocol) to reduce metal leaching from new pipes and fittings before the new plumbing installations are put into use, as new pipes and fittings will have higher metal leaching rate. Progressive steps have been taken to tighten up the commissioning requirements for new plumbing installations in stages : (a) starting with the mandatory requirement in July 2017 for applying the systematic flushing protocol to all newly installed inside services after obtaining approval for water supply and before occupation; (b) with the next stage of implementation in October 2017 involving the taking of a 6-hour stagnation (6HS) water sampling test after the flushing; and (c) finally making the satisfactory 6HS water sampling test result a condition for approval of effecting the water supply in new buildings in January

---

taking the water sample whilst the internal plumbing system may or may not have been used by the consumer before the sampling. Therefore, RDT samples involve taking unflushed samples with various stagnation times. The 4<sup>th</sup> Edition incorporating the 1st Addendum of the World Health Organization Guidelines for Drinking-water Quality indicates that Random Day Time samples reflect most truly the water that the consumer drinks.

<sup>10</sup> For 30MS sampling, the tap should first be flushed for 5 minutes and then stagnated for 30 minutes before a 1-L unflushed sample is taken.

<sup>11</sup> Tier-2 30MS water sample will not be tested if there is no exceedance found in the Tier-1 RDT water sample.

<sup>12</sup> In case of exceedance of the respective standard of the parameters being found in the 2-Tier water samples, WSD will notify the affected parties of the test results, provide information on the related health risks, and advise on possible mitigation measures and the follow-up actions. WSD will publish the water quality test results regularly.

2018. In line with the Enhanced Programme, all six metals have been included in the water sampling test for new plumbing installations subject to review in due course when more test results are available. We will also review the aforesaid measures and consider if further requirements are necessary. We are also conducting a holistic review on the roles and responsibilities of the contractors, licensed plumbers and workers, including exploring the introduction of a registration regime for plumbing contractors in the Waterworks Ordinance (WVO) to undertake more complex and large-scale plumbing works. The amendments to the WVO will be carried out in phases.

***(iii) Promoting WSP for Buildings***

9. WSD has developed its own WSP following the WHO Guidelines to ensure drinking water quality from source to distribution. In regard to the inside services, WSD has spelt out in the WSP its regulatory, monitoring and advisory role. The IEP acknowledged that WSD has generally followed the methodology advocated by the WHO in its development of WSP and considered that WSD should be responsible for the water supply chain from source to distribution up to the connection point designated as “WSP for WSD”, whilst building owners should be responsible for the inside services (i.e. beyond the connection point) designated as “WSP for Buildings”.

10. Notwithstanding this, WSD has engaged an expert consultant to review the WSP for WSD and provide advice on the development and promotion of WSP for Buildings. With reference to overseas experience and advice of the consultant on WSP for WSD, WSD has enhanced its WSP followed by establishing and implementing in July 2017 the Drinking Water Quality Management System (DWQMS) that has embraced the enhanced WSP. In addition, WSD will promote the WSP for Buildings to building owners and property management agents as water quality might deteriorate within buildings due to, for instance, water stagnation at dead ends of the inside services, ingress of foreign materials to the water tanks or lack of proper maintenance of the internal plumbing system. WSP for Buildings will provide a systematic and effective management tool for building owners and management agents to properly maintain and clean their plumbing systems and play a vital role in safeguarding drinking water quality in Hong Kong.

11. To assist building owners and property management agents in establishing and implementing WSP for their buildings on a voluntary basis, WSD has developed guidelines and templates for their reference. The guidelines and templates for general buildings and schools were promulgated in conjunction with the announcement of the Action Plan on 21 September 2017 after successful trials at several buildings and schools. WSD will continue to work on other specific buildings such as elderly homes and promulgate the corresponding templates in due course. In this regard, WSD has launched the Quality Water Supply Scheme for

Buildings – Fresh Water (Management System) (QMS) in November 2017 and will continue to reach out to stakeholders to encourage development and implementation of WSP for Buildings to safeguard the quality of drinking water in buildings. QMS has combined the WSP for Buildings and the existing voluntary Quality Water Supply Scheme for Buildings – Fresh Water (Plus) (Q-Plus); and WSD will award certificates to successful buildings to recognise the responsible parties' efforts in enhancing water safety.

***(iv) Enhancing publicity and public education***

12. The implementation of the Action Plan, notably the Enhanced Programme and WSP for Buildings, will require public participation and endorsement of building owners and property management agents. In addition, suitable advice should also be tendered to the public, including flushing before using newly installed plumbing systems, adopting a good habit of flushing drinking water taps which have not been used for a few hours or more, and purchasing WSD approved taps with a “General Acceptance” label.

13. After the public announcement of the Action Plan on 21 September 2017, WSD has progressively rolled out the publicity and public education on the safe use of water through various channels such as dedicated webpages, leaflets, posters, television and radio Announcement of Public Interest (API), public seminars and briefings to different users/stakeholder groups including property management agents and operators of specific premises, such as kindergartens, welfare units, schools, etc. WSD briefed the Chairmen and Vice-Chairmen of the District Councils the Action Plan on 13 October 2017. In October and November 2017, WSD held several seminars for the public and professional bodies raise awareness of the Action Plan to their members, and organised some discussion forums with operators of specific premises to promote the Enhanced Programme and water use tips.

14. On the promotion of WSP for Buildings, the focus will be to explain the key features of the WSP and how its implementation can bring about enhancement of the drinking water safety in the participating buildings, and to highlight that technical advice and assistance will be provided by WSD to facilitate implementation. WSD held some briefing sessions on QMS in November 2017 in this regard and will continue the promotion work in due course.

***(v) Setting up a drinking water safety regulatory regime***

15. On the front of developing a drinking water safety regime in Hong Kong, DEVB(WB) engaged consultants to study the water safety regimes of leading jurisdictions as well as to explore a suitable control framework for Hong Kong. DEVB has also set up an Inter-bureau/departmental Working Group on

Water Safety Issues<sup>13</sup> which has reviewed the studies and considered that an office independent from WSD together with a regulatory mechanism should be established to develop drinking water quality objectives, standards, and regulatory and monitoring controls. While further studies will be continued to explore the scope and details of the water safety regulatory regime, a dedicated team will be set up in DEVB(WB) to monitor the performance of WSD on drinking water safety. Furthermore, DEVB(WB) will set up a Drinking Water Safety Advisory Committee with members comprising academics, medical experts, etc. to give advice on various water safety issues. With the assistance of the Advisory Committee, DEVB(WB) will draw up a suitable drinking water safety regulatory regime.

---

<sup>13</sup> The work of the Working Group on Water Safety was completed in September 2017.



**Proposed Job Description of  
Assistant Director/ Special Duty, Water Supplies Department (WSD)**

**Rank:** Administrative Officer Staff Grade C (D2)

**Responsible to:** Director of Water Supplies

**Main Duties and Responsibilities -**

1. To oversee the review study on drinking water standards and consolidate necessary information from enhanced water quality monitoring programme to facilitate the Works Branch of the Development Bureau (DEVB(WB)) to review drinking water standards for Hong Kong.
2. To undertake a comprehensive review of Waterworks Ordinance (WVO) / Waterworks Regulations (WWR) in safeguarding the safety of drinking water in Hong Kong through enhanced regulatory control of the internal plumbing systems.
3. To supervise the internal audits for water quality monitoring and the Drinking Water Quality Management System (DWQMS), and to liaise with DEVB(WB) and the Department of Health on drinking water quality issues.
4. To oversee the public relations work of WSD including the publicity and public education on the safe use of water.
5. To review and re-engineer business processes, operational procedures and institutional structure of WSD to strengthen internal governance; enhance efficiency and effectiveness; and monitor the compliance of established departmental policies / regulations in the course of carrying out the reviews.
6. To lead a multi-disciplinary team of staff comprising officers of engineering grade and other professional, technical and general grades in the Special Duty Unit.
7. To undertake any other duties as assigned by the Director of Water Supplies.

-----

**Proposed Job Description of  
Chief Engineer/ Special Duty, Water Supplies Department (WSD)**

**Rank:** Chief Engineer (D1)

**Responsible to:** Assistant Director/Special Duty

**Main Duties and Responsibilities -**

1. To lead a team of professional staff to carry out holistic review and revamp of the Waterworks Ordinance (WVO) / Waterworks Regulations (WWR) in safeguarding the safety of drinking water in Hong Kong through enhanced regulatory control of the internal plumbing systems.
2. To engage stakeholders which include plumbing materials suppliers, licensed plumbers, plumbing workers, professional bodies, training institutions, developers, consultants, contractors, property management sectors and government departments in formulating the legislative proposals.
3. To oversee business impact assessment on the legislative proposals.
4. To plan and oversee the public consultation which involves briefing sessions to plumbing trade organisations and public forums for the proposed legislative amendments.
5. To prepare the Drafting Instructions for the proposed legislative amendments.
6. To follow up with the Law Draftsman in drafting the amendment bills.
7. To undertake any other duties as assigned by Assistant Director/Special Duty.

-----

**Schedule of Responsibilities of Other Existing Directorate Officers in  
Water Supplies Department (WSD)**

The other directorate officers at the appropriate levels in WSD are fully engaged in their respective duties. As shown in the ensuing paragraphs, they each have a heavy portfolio of work, and none of them has the capacity or time to take on the work of Assistant Director/Special Duty (AD/SD) and Chief Engineer/Special Duty (CE/SD).

**Directorate at D2 Level**

Assistant Director/Development (AD/Dev) ranked at Government Engineer (GE) (D2)  
(subject to the approval of the Legislative Council Finance Committee to regrade the  
post from Assistant Director of Water Supplies)

2. AD/Dev is the head of the Development Branch overseeing the Development (1) Division, the Development (2) Division and the Water Science Division. He is fully engaged in the following responsibilities: overseeing and ensuring that the qualities of the water supplies are controlled and monitored in accordance with the established standards/guidelines; implementing and reviewing the Total Water Management Strategy covering both demand and supply management, including water loss management, water conservation promotion, development of new water sources from desalination, reclaimed water, recycled grey water and rainwater harvesting; overseeing the resources planning, supply planning, professional statistical services, crisis management, contingency planning as well as research and development functions; formulating strategies and administering agreements in relation to the Dongjiang water supply, as well as monitoring the supply of Dongjiang water; reviewing and overseeing the implementation of and improvement on current policies, practices and performance standards so as to enhance efficiency, productivity and quality of services; administering and overseeing the planning and deployment of financial and human resources in the Branch, carrying out grade management of technical staff of the civil engineering discipline and water science disciplines for optimum utilisation and overseeing training activities.

Assistant Director/New Works (AD/NW) ranked at GE(D2)

(subject to the approval of the Legislative Council Finance Committee to regrade the post from Assistant Director of Water Supplies)

3. AD/NW is the head of the New Works Branch overseeing the Construction Division, the Consultants Management Division, the Design Division and the Project Management Division. He is fully engaged in the following responsibilities: overseeing the implementation of new projects (new works and major replacement/rehabilitation works) to achieve their objectives in time and within budget; formulating and implementing policies and procedures on consultants management, construction and design matters, as well as project management procedures for delivery of projects in the Public Works Programme; overseeing the management of consultants and contractors in the course of project delivery and steering in minimising and resolving disputes arising from works contracts and consultants' agreements; assisting in soliciting funds for capital works projects and overseeing the control of expenditure under the Capital Works Reserve Fund; administering and overseeing the planning and deployment of financial and human resources in the Branch for optimum utilisation.

Assistant Director/Urban (AD/Urban) ranked at GE (D2)

(subject to the approval of the Legislative Council Finance Committee to regrade the post from Assistant Director of Water Supplies)

4. AD/Urban under the Supply and Distribution (Urban) Branch is the head of the Hong Kong and Islands Region, the Kowloon Region, the Operation Section, the Quantity Surveying Section, the Reservoir Safety Section and the Slope Safety Section. He is fully engaged in the following responsibilities: overseeing the water supply and distribution functions of the Hong Kong and Islands Region and Kowloon Region, and monitoring the implementation of approved programmes, policies and procedures; administering matters in relation to water supply applications in Hong Kong and Islands Region and Kowloon Region, and ensuring compliance with the Waterworks Ordinance and Regulations; administering and overseeing the customer services functions of the Hong Kong and Islands Region and Kowloon Region including customer complaint handling, responding to customer complaints/enquiries from Legislative Council, Ombudsman, bureaux and the public; overseeing the specialised functions on ensuring the safety of reservoirs and slopes and on proper management of slopes and trees under the jurisdiction of the Department; reviewing the existing water supply and distribution policies, practices and performance standards, and proposing and implementing improvement measures to enhance

efficiency, productivity and quality of services; administering and overseeing the planning and deployment of financial and human resources in the Branch for optimum utilisation and overseeing the works carried out by the consultants for the Hong Kong and Islands Region, Kowloon Region and the Sections under control.

Assistant Director/New Territories (AD/NT) ranked at GE (D2)

(subject to the approval of the Legislative Council Finance Committee to regrade the post from Assistant Director of Water Supplies)

5. AD/NT under the Supply and Distribution (NT) Branch is the head of the NT East and NT West Regions and the Technical Support Division. He is fully engaged in the following responsibilities: overseeing the water supply and distribution functions of the NT East and NT West Regions, and monitoring the implementation of approved programmes, policies and procedures; administering matters in relation to water supply applications in the NT East and NT West Regions, and ensuring compliance with the Waterworks Ordinance and Regulations; administering and overseeing the customer services functions of the NT East and NT West Regions including customer complaints handling, responding to customer complaints/enquiries from Legislative Council, Ombudsman, bureaux and the public; overseeing the Technical Support Division including formulation of policies, procedures and control measures for water supply applications, administration of Quality Water Supply Schemes for Buildings, management of licensed plumbers, and taking prosecution actions under the Waterworks Ordinance and administering the operations of the Customer Telephone Enquiry Centre, the Customer Enquiry Centres and the Document Management Centre; administering and overseeing the planning and deployment of financial and human resources in the Branch for optimum utilisation and overseeing the works carried out by the consultants for the NT East and NT West Regions and the Technical Support Division.

Assistant Director/Mechanical and Electrical (AD/M&E) ranked at Assistant Director of Water Supplies (D2)

6. AD/M&E is the head of the Mechanical and Electrical Branch overseeing the M&E Projects Division, the M&E Maintenance Division, the M&E Administration Unit, the Technical Development Unit, the Information Technology Management Unit and the Safety Unit. He is fully engaged in the following responsibilities: administering the planning, design, construction and commissioning of waterworks projects in relation to electrical, instrumentation and mechanical plant and equipment; overseeing the maintenance activities of all waterworks electrical, instrumentation and mechanical plant and equipment for the provision of quality water service; overseeing

the provision of workshop and engineering services for the procurement, testing and repair of water meters, as well as the provision of mechanical and electrical engineering inputs to other branches; overseeing safety aspects of all waterworks installations and construction sites and the promotion of health and safety measures at work; administering and overseeing the planning and deployment of financial and human resources in the Branch and carrying out grade management functions for staff in the mechanical, electrical and instrumentation disciplines for optimum utilisation; administering departmental information technology issues and overseeing matters relating to staff welfare, energy management and emission management for the Department.

Assistant Director/Finance (AD/F) ranked at Assistant Director of Accounting Services (D2)

7. AD/F is the head of the Finance Branch, and is responsible for the overall performance and administration of the Branch. He is fully engaged in the following responsibilities: overseeing the financial and accounting policy, financial management, systems, procedures, and internal controls in the Department; overseeing and/or coordinating the preparation of Estimates, financial reports, budgetary controls, Resource Allocation Exercise, Controlling Officer's Report; overseeing the waterworks operating accounts including water tariff review and acting as a member of the Waterworks Accounts Committee; overseeing billing, enquiry, complaints, debt collection and accounting matters related to water bills and deposits; overseeing the IT systems development, operation, maintenance, and contract management of Customer Care and Billing System and related systems and equipment; overseeing the procurement, supplies and stores matters; chairing the Departmental Tender Committee and Departmental Consultant Selection Committee; overseeing the meter reading matters; providing guidance and advice to Internal Audit Section; managing all Treasury, Supplies, and Meter Reader grades staff in the Department.

**Directorate at D1 Level**

Departmental Secretary (DS) ranked at Principal Executive Officer (D1)

8. DS is the head of the Departmental Administration Division and is responsible for the overall performance and administration of the division. He is fully engaged in the following responsibilities: serving as the principal adviser to the senior management on human resources policy and strategy, conditions of service, recruitment, promotion, retention and motivation, grade structure and departmental administration; advising the senior management on all establishment and

organisational matters and management reviews including the operation of the Departmental Establishment Committee; providing support to the senior management on posting and development matters of professional grade staff in the civil engineering discipline; formulating staff relations and staff consultative strategies and action plans; overseeing the provision of administrative support to the department, including office organisation and procedures, building management, office equipment, transport, translation service, clerical and secretarial services, etc; and managing all General Grades staff in the department.

Chief Engineer/Development (1) (CE/Dev(1)) ranked at Chief Engineer (CE) (D1)

9. CE/Dev(1) is the head of the Development (1) Division and is responsible to AD/Dev for administering the Asset Management Section, the Training and Quality Management Section, the Water Loss Management Section, the Planning Policy Section and the Supply Planning Section; overseeing the centralised function on implementing and updating the Underground and Surface Asset Management Plans; overseeing the evaluation of the implementation of approved policies and procedures on training matters and grade management and recommending improvement where necessary; overseeing recruitment, posting, promotion and career development of technical grades in the civil discipline under the central authority of the Department; overseeing the quality management function on the current operation and maintenance procedures.

10. He also formulates strategy and policy on water loss management and oversees the specialised function on leak detection in the supply and distribution systems; oversees the planning policy, the supply planning and crisis management matters; oversees the financial matters of the Development Branch and the Development (1) Division.

Chief Engineer/Development (2) (CE/Dev(2)) ranked at CE (D1)

11. CE/Dev(2) is the head of the Development (2) Division. He is responsible to AD/Dev for making forecasts of the water demand in the territorial and district basis; assessing the reliable local yield and adequacy of water supply; reviewing consumption characteristics and establishing unit demands for various categories of consumers for demand projection purpose; overseeing the implementation of various initiatives on total water management in Hong Kong.

12. He also oversees the specialised function on research and development in keeping WSD abreast of new developments in water engineering technology; provides professional advice and supporting services in the statistical field including statistical

analysis and research; oversees the implementation of water conservation programmes; and oversees office accommodation matters.

Chief Chemist (CCh) ranked at Chief Waterworks Chemist (D1)

13. CCh is the administrative and operational head of the Water Science Division and is responsible to AD/Dev for formulating policies and procedures for the Division; overseeing the planning, development, implementation and maintenance of quality assurance systems of the Division; ensuring that adequate staff in the appropriate grades and laboratory facilities are available to enable the functions of the Division to be fulfilled and its duties and responsibilities to be discharged; managing the operation of the Division's laboratories and radiation screening centres; controlling all expenditures and expenditure forecasting for the Division.

14. He also deals with all matters relating to the quality and treatment of water resources, the control of pollution in gathering grounds and the ecology of impounded waters; approves specifications for chemicals and certain other materials used in the water supply industry, vets tenders and recommends purchases for the supply of such chemicals and materials, monitors their consumption, stocks, deliveries and qualities, and ensures optimum economy in the use of chemicals; ensures that potable supplies conform to satisfactory and internationally recognised standards of quality, generally keeps abreast of research and developments on water science and the public health aspects of water quality and in consultation with the Department of Health, advises on any need to modify existing standards of quality; provides specifications for the scientific aspects of the design of new, uprated and extension water treatment works; provides scientific advice and services relating to the investigation of future water resources including desalination and water reclamation and re-use; provides a water examination service and advice on water quality and treatment to other government departments and the general public; prepares periodic reports on the work of the Division and maintains records and statistics; provides any other advisory and research service to other Branches of the department and other government departments and agencies; and deals with matters of a radiological nature and radiation monitoring of water supply.

Chief Engineer/Design (CE/Des) ranked at CE (D1)

15. CE/Des is the head of the Design Division and is responsible to AD/NW. He assists AD/NW in formulating and implementing policies and procedures on design matters. He is responsible for administering the daily function and supervising the staff of the Division; appointing the Project Officers for the Public Works Programme (PWP) projects; overseeing and controlling the preparation of engineering designs,



estimates and contract documents for new civil engineering projects and the invitation of tenders for the construction works; monitoring and controlling the progress and expenditures of individual projects; processing items in the PWP for inclusion and upgrading.

16. He also manages the Drawing Office and supports AD/NW in the grade management of the Technical Officer grade staff in the Drawing Office. He chairs the WSD's Building Information Modelling (BIM) Working Group in promoting the use of BIM in WSD, taking forward the various BIM initiatives and sharing the experience with other Works Departments and parties in the construction industry. He also chairs the Standing Committee on Civil Engineering Standards; deals with publicity issues, audit queries, contractual disputes and relevant legal matters; manages consultants projects and performs consultant management functions, if required; and oversees the training of Civil Engineering Graduates and Civil Engineering Undergraduates posted to the Division.

Chief Engineer/Consultants Management (CE/CM) ranked at CE (D1)

17. CE/CM is the head of the Consultants Management Division and is responsible to AD/NW. Other than assisting AD/NW in formulating and implementing policies and procedures on consultants management matters, CE/CM is also responsible for implementing a number of key waterworks projects including Tseung Kwan O Desalination Plant, Tai Po Water Treatment Works Expansion, Siu Ho Wan Water Treatment Works Extension, etc.

18. He also administers the daily function and supervises the staff of the Division; appoints Project Manager for each PWP project; processes items in the PWP for inclusion and upgrading; assists AD/NW in the selection and engagement of consultants; examines and where appropriate recommends approval of the site establishment and appointment of Resident Site Staff (RSS) equivalent to the rank of Senior Engineer and above; examines and where appropriate approves the appointment of RSS below the rank of Senior Engineer; assists AD/NW, as the Employer, in the management of contractors; monitors and controls progress and expenditure of individual projects; oversees project management functions on consultant-administered projects; and deals with publicity issues, audit queries, contractual disputes and relevant legal matters.

Chief Engineer/Project Management (CE/PM) ranked at CE (D1)

19. CE/PM is the head of the Project Management Division and is responsible to AD/NW. He assists AD/NW in the formulation, promulgation and implementation of the project management procedures for delivery of projects in the PWP.

20. He also administers the daily function and supervises the staff of the Division; appoints Project Manager for each PWP project; sets priority of individual projects and examines the need to use consultants for delivery of projects; reviews programmes and resources, and, if necessary, seeks approval for re-planning of projects; oversees and controls the expenditure of the Capital Works Reserve Fund (CWRP) including the compilation of out-turn forecast and the CWRP Draft Estimates; attends to matters related to the Public Works Sub-Committee and the PWP Executive Management Meeting; oversees consultants management functions on consultants projects; assists AD/NW in the management and implementation of the PWP Information System (PWPIS); assists AD/NW in the formulation and promulgation of estimating and cost control policies, procedures and practices including the use of Estimating using Risk Analysis (ERA); oversees and controls the use of ERA and other procedures and practices for project estimating; and attends to matters related to the Land Acquisition and Clearance Committee.

Chief Engineer/Construction (CE/C) ranked at CE (D1)

21. CE/C is the head of the Construction Division and is responsible to AD/NW. He assists AD/NW in the formulation, promulgation and implementation of policies and procedures on construction matters; carrying out finance planning and control on capital works expenditure; analysing tenders and drafting recommendations to the relevant tender boards and approving authorities and management of contractors including endorsement of reports on contractor's performance and resolution of contractual disputes; and carrying out planning studies and recommending water supply proposals and programmes for development of additional waterworks installations in time to meet future water demand generated from new developments and existing developments.

22. He also administers the daily function and supervises the staff of the Construction Division; exercises the powers and discharges the responsibilities imposed by the terms of the in-house construction contracts for the proper administration and supervision of the contracts; reviews and monitors the progress of works, ensuring that time schedules are met and taking corrective measures as necessary; certifies the amount of works completed by and payments due to the contractors; and oversees the Stores Control Unit, Lands Surveying Section, and the

training to Civil Engineering Graduates and Civil Engineering Undergraduates posted to the Division.

#### Chief Engineer/Regions ranked at CE (D1)

23. CE/Regions (namely Chief Engineer/Hong Kong & Islands (CE/HK), Chief Engineer/Kowloon (CE/K), Chief Engineer/New Territories East (CE/NTE) and Chief Engineer/New Territories West (CE/NTW)) are the heads of the Regions and are responsible<sup>17</sup> for planning, administering and controlling day-to-day operation and maintenance of all waterworks installations, gathering grounds, impounding reservoirs, pumping stations, water treatment works, service reservoirs and water mains, etc. up to the final connection at customers' premises within the Region to ensure a satisfactory and adequate water supply; providing customer services such as dealing with applications for water supply, inspection of complaints, enquiries from consumers on their inside services and works related to meter installation, removal and replacement; effectively controlling, using, and managing the waterworks buildings and areas within the Regions including the security aspects; controlling and monitoring funds and stores allocated to the Regions; making decisions on Regional matters and seeking policy decision from WSD headquarters; representing WSD at District Council meetings and District Lands Conferences; responding to enquiries and complaints from the District Councils, the LegCo, the Ombudsman, the media and the public; dealing with private developers, authorised persons and consulting engineers on provision of water supply for new developments and redevelopments.

#### Chief Engineer/Technical Support (CE/TS) ranked at CE (D1)

24. CE/TS is the head of the Technical Support Division and is responsible to AD/NT for planning, administering and controlling day-to-day operations of the Technical Support Division, including complaint handling and enquiry services for customer services matters; controlling and monitoring funds and stores allocated to the division; making decisions on technical support matters pertinent to water supply proposals, plumbing design submissions and installation works and seeking policy decisions from AD/NT; liaising with customers, other departments, District Council Members, Legislative Council Members and trade unions for the formulation of procedures and guidelines to facilitate the enforcement of the Waterworks Ordinance and Regulations; liaising with plumbing trade associations, material suppliers, plumbing professionals and testing agencies to review and formulate material standards or specifications and testing mechanisms for the control and approval of

---

<sup>17</sup> CE/HK and CE/K are responsible to AD/S&D(Urban) whereas CE/NTE and CE/NTW are responsible to AD/S&D(NT).

pipes and fittings for use in inside service; administering and overseeing the implementation of the Quality Water Supply Schemes for Buildings – Fresh Water (Plus) and Flushing Water; providing administrative and technical support to the Advisory Board on Licensing of Plumbers, the Technical Committee on Plumbing and the Expert Committee on Plumbing Materials and working with CE/Regions and CE/Dev(1) on the formulation of policies, standardisation of practices and procedures, monitoring of performance, methods of improvement and other matters of common concern.

25. He also oversees the centralised function on prosecution of offenders under the Waterworks Ordinance and Regulations other than those related to billing matters; manages and enhances the Mobile Geographic Information System (MGIS), the Digital Mapping System (DMS), the Electronic Mark Plant Circulation (EMPC) System and related systems.

Chief Electrical & Mechanical Engineer/Projects (CEME/P) ranked at Chief Electrical Engineer/Chief Mechanical Engineer (CEE/CME) (D1)

26. CEME/P is the head of the M&E Projects Division and is responsible to AD/M&E. He assists AD/M&E in the formulation, promulgation and implementation of policies, standards and procedures for efficient management of the M&E Projects Division.

27. He also administers and controls the planning, design, development, contract engineering, supply and installation of mechanical, electrical and instrumentation plant and equipment for new projects including consultancy works; oversees and participates in liaison with other Units, Sections, Divisions, Operational Regions, government departments, utility companies and outside bodies in connection with M&E works undertaken by the Division for smooth execution of the projects; co-ordinates with CEME/M as regards maintenance requirements for the mechanical, electrical and instrumentation plant and equipment; comments on and monitor consulting engineers' technical proposals, designs and drafts tender documents in respect of the M&E aspects; and monitors and controls project expenditure and progress of works.

Chief Electrical & Mechanical Engineer/Maintenance (CEME/M) ranked at CEE/CME (D1)

28. CEME/M is the head of the M&E Maintenance Division and is responsible to AD/M&E. He assists AD/M&E in the formulation, promulgation and

implementation of policies, standards and procedures for efficient management of the M&E Maintenance Division.

29. He also administers the function of the M&E Maintenance Division in the maintenance and repair of waterworks M&E plants and equipment; provides engineering services for the procurement, testing and repair of water meters, including upkeeping the related standard specifications and pre-qualification assessment procedures; oversees the management and operation of Lung Cheung Road M&E Workshop; establishes spares requirements for new and existing M&E plants and equipment; advises the regional Sections/Units on operating procedures of pumping and water treatment plants; provides professional advice on new projects relating to operation and maintenance aspects of M&E plants and equipment; maintains proper standards of safety for M&E plants and equipment in waterworks installations; and liaises with other Divisions, government departments and utility companies in connection with M&E aspects of work.

### **Concluding Remarks**

30. In view of their already very full work portfolio of the existing directorate officers in WSD at present as detailed above, it is operationally not possible for them to take up, in whole or in part, the duties and responsibilities of the proposed AD/SD and CE/SD in support of the numerous tasks proposed to be undertaken by the new Special Duty Unit. For these tasks to proceed smoothly as planned, it is necessary to create the posts of AD/SD and CE/SD. Any delay or failure in securing funding approval to create the two supernumerary directorate posts will adversely affect the delivery of these tasks.

**Duties and Responsibilities of Additional Time-limited Non-directorate Posts  
in Special Duty Unit of Water Supplies Department**

<b>Ranks</b>	<b>Brief descriptions of main duties/responsibilities</b>
<ul style="list-style-type: none"> <li>● Senior Engineer</li> </ul>	<ul style="list-style-type: none"> <li>● To carry out engineering duties during the planning and implementation of the Action Plan in relation to legislative review</li> </ul>
<ul style="list-style-type: none"> <li>● Senior Waterworks Chemist</li> </ul>	<ul style="list-style-type: none"> <li>● To carry out water science duties during the planning and implementation of the Action Plan in relation to research and development on water safety related issues</li> </ul>
<ul style="list-style-type: none"> <li>● Engineer/ Assistant Engineer</li> </ul>	<ul style="list-style-type: none"> <li>● To carry out engineering duties during the planning and implementation of the Action Plan in relation to legislative review and internal audit of Drinking Water Quality Management System</li> </ul>
<ul style="list-style-type: none"> <li>● Mechanical Engineer/ Assistant Mechanical Engineer</li> </ul>	<ul style="list-style-type: none"> <li>● To carry out mechanical engineering duties during the planning and implementation of the Action Plan in relation to legislative review</li> </ul>