# Work of the Drainage Services Department in Eastern District

#### **Background**

The Government has completed a review on the roles, functions and composition of the District Councils (DCs), and made a number of recommendations including the enhancement of communication between DCs and the Government through the attendance of DC meetings by department heads. All DCs supported this proposal. To pursue the initiative, the Director of Drainage Services will attend the Eastern DC meeting on 3 July this year to brief the Eastern DC on the functions of the Drainage Services Department (DSD) and the drainage issues relating to Eastern District, and to hear the views of DC members.

# **Organisation Structure and Scope of Work**

- 2. Established on 1 September 1989, DSD is one of the nine departments under the Development Bureau. To date, DSD has an establishment of about 1,900.
- 3. DSD serves to protect the public against flooding and provide effective public sewage treatment services through planning, construction and operation of the stormwater drainage system as well as the sewage collection, treatment and disposal facilities.

4. Organisationally, DSD consists of the Headquarters and four branches, namely the Sewage Services Branch, Operations Maintenance Branch, Projects and Development Branch, and Electrical and Mechanical Branch. At present, the drainage works in Eastern District are undertaken by the Project Management Division and the Drainage Projects Division of the Projects and Development Branch. Treatment Division 2 of the Electrical and Mechanical Branch is in charge of the daily operation and maintenance of sewage treatment facilities including the preliminary treatment works in North Point, Shau Kei Wan and Chai Wan, the Cape Collinson Correctional Institution Sewage Treatment Plant and two pumping stations in the District; while the Hong Kong and Islands Division of the Operations and Maintenance Branch is responsible for the routine maintenance and operation of sewers and drains in the District.

# **Drainage and Sewerage in Eastern District**

#### Stormwater Drainage System

- 5. Some areas in Eastern District were prone to flooding during heavy rainstorms in the past. DSD completed the Drainage Master Plan Study for Northern Hong Kong Island in 1999 which recommended a series of drainage improvement works in the District. Since the completion of these works in 2009, the drainage capacity in the District has been increased.
- 6. Having taken into account the latest planned development of the District and potential impacts of climate change, we are conducting the Drainage Master Plan Review Study for Northern Hong Kong Island to examine the drainage system in the whole Northern Hong Kong Island including Eastern District and provide long-term improvement recommendations to further reduce the flood risk in the District. The

review study was substantially completed, which recommended that the rain collection capacity of the inlets be enhanced and that the drainage capacity of specific areas be improved through the enlargement of drainage pipes or construction of additional ones. The review study recommends to construct drains at the Shau Kei Wan mid-levels to intercept most of the upper catchment stormwater, thus reducing the runoff flowing to the downstream drainage system and uplifting the flood protection capacity. Adopting an interception approach at the upstream area reduces excavation works in busy roads and avoids bringing nuisance to nearby residents and shops.

- 7. To address the flooding situation in areas being prone to flooding in Eastern District such as Quarry Bay Street and Chai Wan Roundabout, we completed the construction of additional gullies at Mount Parker Road in Quarry Bay and flood wall at Fei Tsui Road near Fung Wah Estate in Chai Wan in 2017 and 2018 respectively. Modification of manhole covers at Nam Hong Street besides Yiu Tung Estate will be carried out in 2018, to prevent stormwater spilling over from the manhole during heavy rains.
- 8. We carry out regular inspection and clearance of drains in Eastern District. In 2017-18, drains of 41 km and 29 km in length were inspected and cleared respectively, costing about \$3.64 million.

#### Sewerage System

9. The sewerage of Eastern District is well developed and generally satisfies the needs of the District. To improve the water quality of the Victoria Harbour, DSD commenced the Harbour Area Treatment Scheme (HATS) in 1994, the largest sewerage infrastructure project in Hong Kong. The HATS was implemented in two stages at a total cost of \$25.8 billion. Stage 1 was commissioned in 2001 while Stage 2A commenced construction in 2009 and came into full operation in December 2015. The

works relating to Eastern District included the construction of a deep sewage tunnel of about 2 km in length and the upgrading of the North Point Preliminary Treatment Works. At present, all sewage generated on both sides of the Victoria Harbour is conveyed through the deep sewage tunnel to the Stonecutters Island Sewage Treatment Works for chemically enhanced primary treatment and disinfection before discharge into the waters west of the Victoria Harbour. As such, the water quality of the Victoria Harbour has been further improved.

10. In addition, we carry out regular inspection and clearance of sewers in the District. In 2017-18, 35 km and 28 km of sewers were inspected and cleared respectively at a cost of about \$5.04 million.

# Rehabilitation of Pipes

11. Having been in use for decades, some of the existing pipes in Eastern District are gradually ageing with wear and tear. To facilitate the formulation of appropriate rehabilitation strategies, we have commenced condition surveys for underground sewers and drains in phases since 2014. The first stage of the surveys was completed in December 2017. Subject to funding approval, the rehabilitation works for about 0.6 km pipes, together with the second stage of the surveys for about 2.9 km pipes, are expected to commence in late 2018 for completion in 2022 at a cost of about \$16 million.

# **Environmental Improvement**

12. We have been committed to beautifying our facilities and hence the environment in the District through extensive planting and greening works. The greening works at the North Point Preliminary Treatment Works were completed in 2017 at a cost of around \$1 million. Its greening area is more than 3,600 m<sup>2</sup>. Together with greening facilities at preliminary

treatment works in Chai Wan and Shau Kei Wan, the total greening area of our facilities in the District reaches 6,000 m<sup>2</sup>.

# **Views from District Council**

13. We are thankful to all Eastern DC members for their valuable advice on our work. We will continue working closely with Eastern DC, hearing the public's views, improving the drainage system in the District, and providing an even better living environment for the residents.

**Drainage Services Department July 2018**