

Co-creation of DSD's Assets @ Harbourfront

PURPOSE

This paper provides an overview on the work of Drainage Services Department (DSD) in enhancing the livability of Hong Kong as well as the connectivity and vibrancy of the Victoria Harbour waterfront.

BACKGROUND

2. DSD's vision is to provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong. Our facilities play an integral part of urban infrastructure, and they become closely linked with the community. As always committed to innovation, we have been practicing the concept of "Blue-Green Drainage Infrastructure" to build a liveable city. Embracing a spirit of "coexisting and sharing", we have been adopting a "design thinking" approach to develop our facilities and would take opportunities for land co-use with public, thereby achieving a win-win situation. We will also continue to deliver river revitalisation works to promote the culture of water-friendliness and improve local environment.

PAST PROJECTS

3. Over the years, DSD have implemented several projects with land co-use concept. Some of our drainage facilities had been constructed underneath existing recreational areas such that no extra land was taken up. Open space for a pet garden and Tai Chi garden have been created on top of our drainage facilities and opened for public enjoyment. To enhance the connectivity of our facilities with neighboring areas, maintenance access was also shared for public use. In our river revitalisation project, we do not only aim to alleviate the flood risks, but also take chance to enhance the natural ecosystems. More details of these projects are provided in **Appendix A**.

ONGOING PROJECTS

4. DSD will continue our effort in strengthening our engagement and relationship with the community. The following projects are some of our on-going projects with co-creating public open space at our assets near harbourfront.

To Kwa Wan Harbourfront

5. The 140m long waterfront strip of land inside To Kwa Wan Preliminary Treatment Works (TKWPTW) is currently served as the emergency vehicular access (EVA) of the facility and not open to public. We plan to convert the waterfront EVA to a promenade for public enjoyment.

6. The proposed release of waterfront area, together with the proposed Hoi Sham Park Extension at its northern side, could form a continuous open space of about 880m long waterfront passage connecting Kowloon City Ferry Pier to Hung Hom in long term. Our target is to tie in its commissioning with the opening of the Hoi Sham Park Extension.

Kwun Tong Harbourfront

7. Various DSD projects in the vicinity to the existing Kwun Tong promenade near Cha Kwo Ling have been underway. More public accessible space will be created through our enhancement and upgrading works at Kwun Tong Sewage Pumping Station (KTSPS) and Kwun Tong Preliminary Treatment Works (KTPTW).

8. A landscaped deck on top of the KTSPS is currently under construction and about 11,000m² of open space with greenery, seating, shades, children playing area and elderly exercise area will be created for public enjoyment. The southwest and southeast site boundaries of KTPTW will be set back by 15m and 3m respectively for providing a continuous waterfront promenade and improving the connectivity under the Tsui Ping River revitalization project.

9. DSD will revitalise the nullah along Tsui Ping Poad and King Yip Street into Tsui Ping River. In sync with enhancing flood prevention capacity, the existing nullah will be revived with environmental, ecological and landscaping upgrading. The construction of cross-river walkway at the river mouth as well as walkways and landscaped decks along the river will create a new landmark for the public to enjoy the river view and engage in leisure

activities, and at the same time provide a pleasant and easy passageway for public to access to the harbourfront from inland of Kwun Tong area that create synergy with our projects at Kwun Tong harbourfront.

Tai Kok Tsui Harbourfront

10. We are constructing a drainage facility at the outlet of the Cherry Street Box Culvert (CSBC) along the waterfront of the Yau Ma Tei typhoon shelter. The maintenance access area, about 885m², above the drainage facility will be designed with landscape and play features, and a stretch of new waterfront about 85m long will be provided upon completion of the construction works. Both facilities will be opened for public enjoyment.

CO-CREATION WITH NON-GOVERNEMENT ORGANISATION

11. To enhance the play experience of the planned open space, DSD commissioned a “play consultant” to review and study the play space on the landscaped deck of the KTSPS and the open space above the CSBC.

12. Our proposed approach to the design of play space at Kwun Tong are (i) knowing the need of community by playable space audit; (ii) knowing the need of citizens by children participation and community engagement; and (iii) aiming bespoke design with unique solution to the site.

13. The site, locating adjacent to the Tsui Ping River and the Kwun Tong Promenade, offers worthy opportunities for children to engage nature in an urban setting. We proposed to cultivate an environment and an atmosphere for free play in this site by reconnecting the elements of nature with children and unearthing the essence of children play. **“Playful Nature”** is an attempt to deliberately integrate play with the living landscape, and promote a full-body engagement with the environment instead of leaving nature as a backdrop of children’s activities. The natural elements of Air, Sun, Sky, Ground, and Water are infused into the play settings, triggering children to play with space (play equipment and facilities); play with people (families and peers); and play with different living things (plants & animals). All of these aspects of play are necessary for the development, health and well-being of children.

14. For the open space at Cherry Street, we have proposed the theme of **“Mini City”**. The design strategies for this site are: (i) imaginative play space; (ii) waterfront enjoyment; (iii) unique identity for the Hoi Fai Road promenade; and (iv) maintenance needs.

15. The play space design responded to the result of the Playable Space Audit in the surrounding communities and integrated with the existing play equipment of Hoi Fai Road Promenade. The major play experiences include bouncing, balancing, swinging, climbing & crawling, sensory play, imaginative play and creative play. The play space encourages children to challenge themselves physically, mentally, and collaborate with others to develop their social and sensory ability while playing.

CONCLUDING REMARKS

16. Drainage and sewerage infrastructures were generally considered as “Not in my backyard” facilities. Counting on our continuous collaboration with different stakeholders and engagement with creativity expertise, it is conceivable to integrate DSD’s assets with the surrounding features to improve the harbourfront environment and have them enjoyable by the community.

Drainage Services Department
January 2021

Harbourfront Commission

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Happy Valley Underground Stormwater Storage Scheme

1. As the whole storage tank, with a capacity of 60,000m³, and other associated facilities were constructed underground, the area for amenity use by the public, including the sport pitches, would not be reduced after completion of the project.

Tai Hang Tung Storage Scheme

2. The Tai Hang Tung Storage Scheme was designed to prevent flooding in MongKok area by reducing the rainfall volume discharging into existing urban drainage systems. The stormwater storage tank, which has a 100,000m³ capacity, was constructed underneath Tai Hung Tung Recreation Ground.

Lai Chi Kok Drainage Tunnel

3. The Butterfly Valley Road Pet Garden shares with the drainage facilities of the Lai Chi Kok Drainage Tunnel. Through optimizing the operation and maintenance procedures and revising the landscape design, DSD enabled a piece of 7,000m² of land to serve the purposes of flood prevention, transportation and recreation by constructing a pet garden under the viaducts of the Tsing Sha Highway. This maximisation of land utility follows the criteria of sustainable development.

Sheung Wan Stormwater Storage Scheme

4. On top of the underground storage tank, a 5,700m² open space comprising a waterfront promenade, a plaza and a pet garden was developed with around 110 trees and over 20,000 shrubs planted. Above the underground ancillary facilities, an area of 320m² was opened to the public as a Tai Chi exercise area. The design was supported and welcomed by the public.

Harbour Area Treatment Scheme (HATS)

5. At Telegraph Bay Waterfront, DSD released part of the access road near the Cyberport Preliminary Treatment Works for the pedestrian walkway, which enhances connectivity between Cyberport Waterfront Park and Cyberport Road.

Kai Tak River Improvement Works

6. Improvement works were carried out to enhance the drainage capacity of the Kai Tak River and alleviate the flood risks in Choi Hung Road and surrounding area. We also incorporated aesthetic, greening, landscaping and ecological elements, thus revitalising the nullah into the first urban green river along a serene emerald corridor.