# For discussion on 13 December 2019

#### **Legislative Council Panel on Health Services**

#### **Enhancement of the Public Health Facilities of the Department of Health**

#### **PURPOSE**

This paper briefs members on the plans for enhancing the public health facilities under the Department of Health ("DH"), including the proposed enhancement of the Public Health Laboratory Centre ("PHLC") and the proposed reprovisioning of the Victoria Public Mortuary ("VPM") at Kennedy Town.

# (A) Public Health Laboratory Centre

#### **Background**

2. The PHLC is part of the Public Health Laboratory Services Branch ("PHLSB")<sup>1</sup> of Centre for Health Protection under the DH, which provides accurate and efficient clinical diagnostic and public health laboratory services to the public and private healthcare institutions in Hong Kong. Commissioned in 2002 at the junction of Nam Cheong Street and Cornwall Street in Shek Kip Mei, the PHLC has laboratories for conducting various types of tests, and accommodates other ancillary facilities. These laboratories are accredited by the International Organisation for Standardisation, and are designated by the World Health Organisation ("WHO") as reference laboratories for various communicable diseases. At present, the PHLC is designated as a Biosafety level 2 in accordance to the WHO Laboratory Biosafety Manual<sup>2</sup>. In 2018, the PHLSB conducted some 6.54 million tests.

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<sup>&</sup>lt;sup>1</sup> The PHLSB comprises four functional divisions, namely, the Microbiology Division, the Histopathology and Cytology Division, the Chemical Pathology and Haematology Division and the Neonatal Screening Division.

According to the Manual, there are four levels of laboratory facilities. They are designated as basic – Biosafety Level 1, basic – Biosafety Level 2, containment – Biosafety Level 3, and maximum containment – Biosafety Level 4. Biosafety level designations are based on a composite of the design features, construction, containment facilities, equipment, practices and operational procedures required for working with agents from the various risk groups. The Manual is available at https://www.who.int/csr/resources/publications/biosafety/WHO\_CDS\_CSR\_LYO\_2004\_11/en/.

#### Justifications for Enhancement

- 3. The PHLC has been providing safe and reliable laboratory services through its well-trained professionals. With the advancement in laboratory technology, laboratory testing has become increasingly important in tackling communicable diseases. To keep up with the international standards in providing public health laboratory services, and to deliver more laboratory services with higher efficiency, it is essential for DH to enhance the existing facilities of the PHLC. This includes upgrading the microbiology laboratories and the supporting facilities by setting up a laboratory suite that meets biosafety level 3<sup>3</sup> as specified in the WHO Laboratory Biosafety Manual.
- 4. As part of the enhancement, the DH plans to integrate the PHLSB's services by relocating the Chemical Pathology and Haematology Division from Lek Yuen Health Centre to the PHLC and constructing a pathology store in the PHLC. Upon completion of the project, all laboratories and ancillary facilities of the PHLSB will be accommodated in the same building for optimal use of existing resources to achieve synergy. It will facilitate immediate deployment and utilisation of manpower and equipment in the PHLC to meet the urgent and surging service demand arising from the emerging communicable diseases in Hong Kong. Converting the existing facilities to enhance and integrate the existing laboratory services would be more cost-effective than building a new laboratory centre.
- 5. Precautions have been taken, and will continue to be taken upon completion of the enhancement works, to ensure the safety of the PHLC's laboratories and the surrounding areas. For example, the PHLC has formulated guidelines and safety manuals for handling leakage incidents. Regular risk assessments and drills are conducted to familiarise staff with the emergency procedures. Moreover,

a. The ventilation system shall maintain directional airflow from entrance into laboratory suite with proper monitoring at all times, and with no recirculation of air to other areas within the building;

<sup>&</sup>lt;sup>3</sup> Biosafety level 3 laboratory facility requirements include:

b. Work surfaces should be impervious to water and easy to clean and disinfect;

c. The laboratory shall have readily available and preferably foot, elbow or electronically-operated handwashing facilities;

d. Emergency eyewash stations and showers shall be readily available;

e. An autoclave shall be available within the laboratory suite for sterilization of potentially infectious materials and wastes;

f. Biological safety cabinets should be sited away from walking areas and out of cross currents from doors and ventilation systems;

g. The laboratory must be separated from other areas and not accessible by the general public;

h. The laboratory is sealable to permit fumigation; and

i. Entry into the laboratory is through ante-room with interlocking double-door system.

professional training on various safety procedures are provided to the staff before they start working in the laboratories. Such training covers operation of laboratory equipment, personal protective equipment and disinfection, laboratory waste disposal and handling of accidents. In fact, since its operation in 2002, there has been no leakage of hazardous chemicals or highly dangerous pathogens.

## **Project Scope**

- 6. The scope of the project comprises
  - (a) alterations to the first to third floors of the PHLC so as to (i) upgrade the microbiology laboratories and its supporting facilities; (ii) relocate the Chemical Pathology and Haematology Division from Lek Yuen Health Centre in Sha Tin; and (iii) construct a pathology store; and
  - (b) improvements to the ventilation system and air conditioning installations of the laboratories of the PHLC.

A site and location plan is at **Enclosure 1**.

# (B) Victoria Public Mortuary

# Background

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7. In operation since 1972, the VPM is one of the four public mortuaries<sup>4</sup> in Hong Kong. The Land Use Review on the Western Part of Kennedy Town<sup>5</sup> proposes, amongst others, the relocation of incompatible uses at the waterfront (including the existing VPM located at Sai Ning Street) for the provision of waterfront promenade and open space in the western part of Kennedy Town. To this end, the subject site at the western end of Victoria Road<sup>6</sup> has been identified for reprovisioning the VPM, and

Among the four public mortuaries in Hong Kong, three are specialised forensic pathology facilities of the Forensic Pathology Service of the DH for conducting medico-legal investigation of deaths that are reportable to the Coroner in accordance with the Coroners Ordinance (Cap. 504). They are VPM, Fu Shan Public Mortuary in Shatin, New Territories East, and Kwai Chung Public Mortuary, in New Territories West. Separately, Kowloon Public Mortuary ("KPM") at Hung Hom, Kowloon is reserved for storage of bodies during emergency situations.

<sup>&</sup>lt;sup>5</sup> The Land Use Review was conducted by the Planning Department with a view to enhancing the land use in the Western District and to grasping the opportunity of the commissioning of the Mass Transit Railway ("MTR") West Island Line in 2014.

<sup>&</sup>lt;sup>6</sup> The relevant areas are proposed to be rezoned as "Other Specified Uses" annotated "Public

the provision of ancillary facilities of the DH, including an emergency response supplies store and a personal protective equipment ("PPE") store, at an existing cavern at southeast of the site. The site of the existing VPM will be used for the provision of waterfront promenade and park<sup>7</sup>.

## Justifications for the Reprovisioning

- (i) Enhance body storage capacity
- 8. Owing to the increase in population and ageing population, the number of deaths is expected to increase. Based on the latest population and deaths projection<sup>8</sup> and taking into account the need to provide storage spaces for use during emergencies or times of disaster, public mortuaries in Hong Kong should provide not less than 1 900 body storage spaces by 2046, whereby Hong Kong Island would require not less than 350 body storage spaces. Furthermore, public mortuaries should also provide body storage spaces to cope with emergency need in case of major incidents, such as natural disaster and fire.
- 9. Currently, the total regular body storage capacity of the three public mortuaries is 506. The overall average utilisation rate of the three public mortuaries has reached 108% in 2018. The three public mortuaries would usually reach their critical storage limits after long holidays and during winter, whereby KPM will be opened to receive bodies overflowing from these three mortuaries. The reprovisioned VPM, with body storage capacity increased from 70 to 358, will cater for the projected caseload of Hong Kong Island up to 2046.
- (ii) Meet public demand and expectation
- 10. The existing VPM has an area of 890 square meters, including one body loading/unloading bay. The space of the existing VPM limits the body storage capacity and size of public waiting area. The reprovisioning of VPM is necessary to cope with the increasing service demand, enhance the quality of service that meets the up-to-date standards and workflow, and further safeguard infection control, occupational safety and health, as well as environmental protection. This could ensure that safe and efficient mortuary service is provided to the public.

<sup>8</sup> "Hong Kong Population Projections 2017-2066" of the Census and Statistics Department.

Mortuary" and "Green Belt (2)" in the draft Kennedy Town & Mount Davis Outline Zoning Plan No. S/H1/20 (the "OZP") for the reprovisioning of VPM. "Mortuary" use is always permitted within "Other Specified Uses" annotated "Public Mortuary". For developments within that area, buildings are restricted to a maximum building height of 60 metres above Principal Datum.

The site of the existing VPM is rezoned as "Open Space (1)" in the OZP.

- 11. As compared with the existing VPM, the reprovisioned VPM will adopt the following enhancement measures
  - (a) provision of sufficient space in the mortuary building for body loading/unloading;
  - (b) provision of more suitable venue for the bereaved families, including an indoor ceremony hall so that the bereaved families can conduct memorial ceremony under a more private setting; and
  - (c) provision of environment-friendly joss paper burning system<sup>9</sup> for use by the bereaved familiesif required.
- (iii) Utilise the existing cavern area
- 12. The cavern, located at southeast of the site for reprovisioning VPM, was developed as a magazine site by the MTR Corporation Limited ("MTRC") previously In view of the unique land use as public mortuary and the and now it is vacant. adjoining cavern being located two floors below the site entrance level, it is not suitable to use the cavern for other general uses<sup>10</sup>. In order to better utilise land resources, the DH proposes setting up ancillary facilities including a PPE store inside the cavern. Those PPE will be used by the Forensic Pathology Service of DH (including the reprovisioned VPM) as well as other DH service units. Under existing policy, the DH has to stockpile three months' quantity of PPE to cope with outbreak of infectious Currently there is a major PPE store located at the leased premises in Kwai Chung District and other small stores scattered in different locations. The long-term storage of PPE at a permanent site would allow the Government to better prepare for the outbreak of infectious diseases.

# Project Scope

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13. The scope of the project comprises –

(a) five cold rooms and one deep freezer with a total storage capacity of 358 bodies;

<sup>&</sup>lt;sup>9</sup> The environment-friendly joss paper burning system has built-in smoke and fly ash treatment system to filter the black smoke and suspended particulates produced by joss paper burning so as to reduce emission of black smoke.

<sup>&</sup>lt;sup>10</sup> According to Chapter 3 of the "Hong Kong Planning Standards and Guidelines" concerning community facilities, public mortuaries should be provided at locations which are easily accessible by the general public but separated from residential and commercial developments by topographical features and/or such land uses as public services, public utilities or open space.

- (b) four autopsy suites for routine Coroner's cases, decomposed bodies, homicidal or suspicious deaths and bodies with high risk of infectious diseases, etc.;
- (c) ancillary facilities including X-ray and Computed Tomography Scan rooms, laboratories, body identification areas, interview rooms, facilities for bereavement services, autopsy viewing rooms, gowning cum de-gowning rooms and office, etc.; and
- (d) an emergency response supplies store co-locating with a PPE store at the underground cavern area.
- 14. The reprovisioned VPM comprises five storeys, of which three storeys will be built above the road level at Victoria Road. A site and location plan is at **Enclosure 2**.
- 15. As the existing cavern was designed for temporary use as a magazine site by the MTRC, the Geotechnical Engineering Office ("GEO") of the Civil Engineering and Development Department will conduct cavern enhancement works to ensure the cavern structure is suitable for use as long-term storage. Furthermore, the GEO will carry out necessary mitigation works on the adjacent natural terrain with a view to ensuring the safe use of the reprovisioned VPM.
- 16. After the reprovisioned VPM commences operation, the existing VPM will cease operation. DH will arrange to demolish the existing VPM and return the site to the Lands Department for harbourfront development. Relevant works such as paving and installation of basic infrastructure such as railing and benches will be followed with a view to making the site accessible by members of the public pending the long-term promenade development.

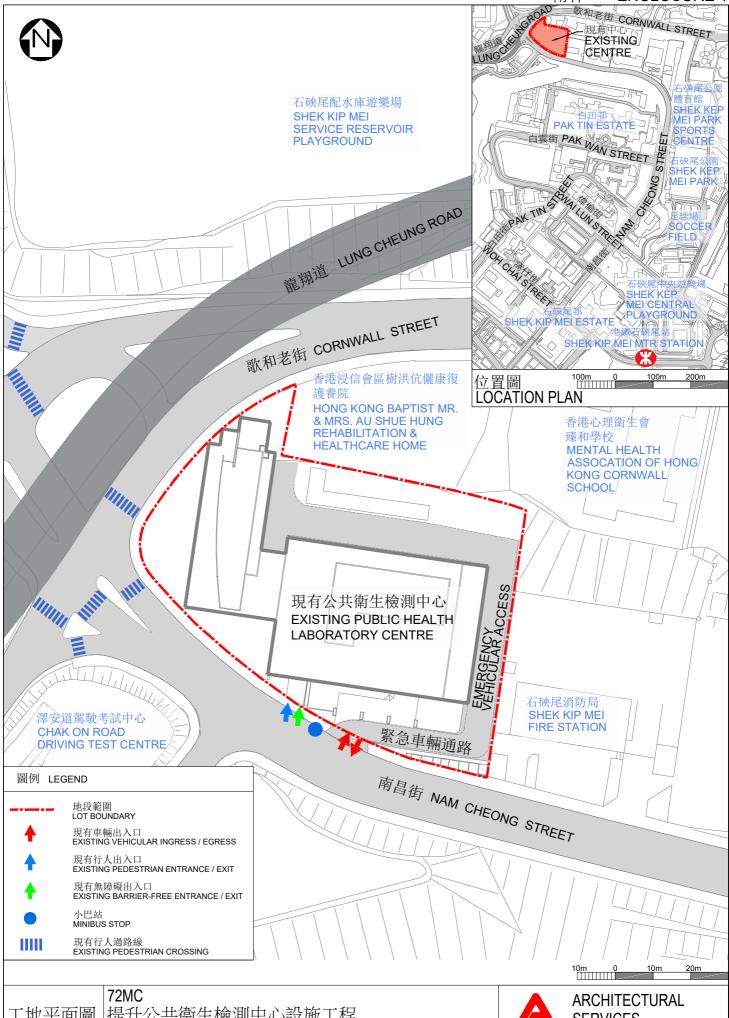
#### PROJECT ESTIMATE AND IMPLEMENTATION PLAN

- 17. For the PHLC, the estimated project cost is about \$200 million in money-of-the-day ("MOD") prices. Subject to funding approval of the Finance Committee ("FC"), we plan to commence the enhancement works in the third quarter of 2020 for completion in 2022. The enhanced PHLC is expected to commence operation in 2023.
- 18. For the VPM, the estimated project cost is about \$970 million in MOD prices. Subject to funding approval of the FC, we plan to commence cavern enhancement works and construction of the public mortuary in the third quarter of 2020 for completion in the fourth quarter of 2024. The reprovisioned VPM will commence operation in the second quarter of 2025.

#### **PUBLIC CONSULTATION**

- 19. For the PHLC, the Government consulted the Community Affairs Committee of the Sham Shui Po District Council ("SSPDC") on the proposed project on 11 July 2019 and arranged a site visit to the PHLC for its members on 13 August 2019. Subsequent to the site visit, Members of the SSPDC did not raise any objection to the proposed project.
- 20. For the VPM, the Government consulted the Food, Environment, Hygiene & Works Committee of the Central and Western District Council ("C&WDC") on the proposed project on 14 March 2019 and by circulation, the Task Force on Harbourfront Developments on Hong Kong Island of the Harbourfront Commission in November 2019. Members of both C&WDC and the Task Force generally supported the proposed project.

Food and Health Bureau Department of Health December 2019



工地平面圖 SITE PLAN 提升公共衞生檢測中心設施工程 ENHANCEMENT OF PUBLIC HEALTH LABORATORY CENTRE



ARCHITECTURAL SERVICES DEPARTMENT 建築署

