LC Paper No. CB(2)1022/17-18(05)

For discussion on 19 March 2018

Legislative Council Panel on Health Services Five Hospital Projects under Ten-year Hospital Development Plan

Purpose

This paper invites Members' comments on the following five proposed hospital projects under the ten-year Hospital Development Plan (HDP) –

- (i) main works (superstructure and associated works for phase 1) for the redevelopment of Kwong Wah Hospital (KWH);
- (ii) main works for the redevelopment of Queen Mary Hospital, phase 1;
- (iii) foundation, excavation, lateral support and basement excavation works for the new acute hospital (NAH) at Kai Tak Development Area;
- (iv) preparatory works for the redevelopment of Our Lady of Maryknoll Hospital; and
- (v) preparatory works for the redevelopment of Grantham Hospital, phase 1.

- Details of the five hospital projects are at Enclosures 1 to 5 respectively.

Background

2. In the 2016 Policy Address, the Government announced that \$200 billion would be set aside for the Hospital Authority to implement a ten-year HDP. The ten-year HDP covers the construction of a new acute hospital, redevelopment and expansion of 11 hospitals, construction of three community health centres and one supporting services centre. In terms of deliverables, the ten-year HDP will provide around 5 000 additional bed spaces, 94 additional operating theatres and increased capacity of specialist outpatient clinics and general outpatient clinics.

3. To date, Government has upgraded two projects in full, namely extension of Operating Theatre Block for Tuen Mun Hospital and expansion of Haven of Hope Hospital and partially upgraded four projects, namely redevelopment of Kwai Chung Hospital (phase 1) redevelopment of KWH – demolition and substructure works for phase 1, preparatory works for NAH at Kai Tak Development Area and preparatory works for redevelopment of Prince of Wales Hospital, phase 2 (stage 1) to Category A.

Way Forward

4. Subject to Members' comments, we plan to seek funding support and approval for the five proposed hospital projects from the Public Works Subcommittee and the Finance Committee respectively in the second quarter of 2018.

Food and Health Bureau Hospital Authority March 2018

Redevelopment of Kwong Wah Hospital

Background

Kwong Wah Hospital (KWH) was established in 1911 and is a major acute hospital offering a comprehensive range of acute care services in the Kowloon Central Cluster (KCC)¹. The majority of KWH buildings were built over 50 years ago with outdated building services installation and deteriorating structural condition. Its space provision is inadequate for meeting the services demand nowadays. Located in a densely populated area, KWH is one of the busiest hospitals in the Hospital Authority (HA). In 2016-17, there were around 97 350 inpatient and day inpatient discharges and deaths, and around 362 400 specialist outpatient (clinical) attendances at the KWH, accounting for 5.5% and 4.8% respectively of that for all HA hospitals. The extremely heavy utilisation has accelerated deterioration of its facilities. Although the population of Kowloon City, Yau Tsim Mong and Wong Tai Sin districts in 2016 was 1 186 900 and is projected to decrease slightly to 1 180 700 in 2024, elderly of 65 years old or above will rise from 189 100 in 2016 to 279 500 in 2024 (representing an increase of 48%).

2. HA proposes to conduct a comprehensive redevelopment of KWH to cope with the anticipated growth in medical service demand. The redevelopment proposal will enable KWH to meet the standard of a modern acute hospital, enhance its operational efficiency and efficacy, as well as to provide a patient-oriented environment with adequate capacity and capability for the delivery of holistic and seamless healthcare services.

¹ As at end December 2017, KCC comprises the following hospitals and institutions: Hong Kong Buddhist Hospital, Hong Kong Eye Hospital, Hong Kong Red Cross Blood Transfusion Service, Kowloon Hospital, Kwong Wah Hospital, Our Lady of Maryknoll Hopsital, Queen Elizabeth Hospital, TWGHs Wong Tai Sin Hospital.

3. HA formulated the Clinical Services Plan (CSP) for KCC in 2016, providing an overarching clinical development strategy and delineating the roles of individual hospitals within the Cluster. According to the CSP, KWH will provide acute medical services and specialist care for the community, especially for residents in Yau Tsim Mong District. Hospitals and institutions in KCC will adopt a collaborative approach to ensure comprehensive care and enhance service linkage for patients from various districts in the Cluster. Under the service network arrangement, acute services for KCC will be provided by the New Acute Hospital (NAH) in Kai Tak and by KWH. The acute hospitals in KCC will be supported by the extended care hospitals nearby to enhance the continuity of care for patients within the respective catchment districts. In particular, Our Lady of Maryknoll Hospital, Wong Tai Sin Hospital and Hong Kong Buddhist Hospital will form a service network with the NAH in Kai Tak while Kowloon Hospital will provide convalescent and rehabilitation services for patients transferred from KWH.

4. Demand for healthcare services in the Kowloon region was considered as a whole in the capacity planning of KWH. Factors of consideration include the pace of population growth and ageing in the surrounding areas, cross-cluster utilisation of services, changes in service model, advancement in medical technology, and the roles of the various hospitals and how their services could complement one another. For example, in the case of hospital beds, the projected number of acute and extended care bed requirement of hospitals in the Kowloon Region is 14 200 by 2031. Taking into account the additional beds to be provided under a number of hospital projects committed in the Ten-year Hospital Development Plan for the Kowloon Region² and other capital works projects, the number of hospital beds in the Kowloon Region will be increased from 10 537 as at

² These projects include expansion of Haven of Hope Hospital with 160 additional beds, expansion of United Christian Hospital with 560 additional beds, redevelopment of Kwong Wah Hospital with 380 additional beds, redevelopment of Our Lady of Maryknoll Hospital with 16 additional beds and expansion of Lai King Building in Princess Margaret Hospital with 400 additional beds.

end March 2015 to around 13 200 in 2031^3 . HA will regularly review the service demand according to regular updates in population projection.

5. A comprehensive redevelopment of KWH can augment the role of KWH as an acute hospital providing a full range of in-patient and ambulatory care services. The redevelopment project is planned to embrace the philosophy of ambulatory care as a new model of service delivery. Ambulatory care services will be delivered among different clinical specialties in a patient oriented setting with a view to reducing the need for hospitalisation. New medical oncology services including front-line management, consultation services and chemotherapy programmes will be provided in the ambulatory care centre. Other services including clinical pathology, allied health, business support and staff facilities will also be enhanced and expanded. The redeveloped KWH will also accommodate the reprovisioned facilities of Chinese Medicine services and preventive care services currently run by the Tung Wah Group of Hospitals (TWGHs), including its integrated Chinese and western medicine in-patient accommodation with over 50 self-financed beds.

The Proposed Redevelopment of KWH

6. The proposed redevelopment project involves decanting works, demolition of some existing hospital buildings, phased construction of a new hospital complex, alteration and addition works to TWGHs Tsui Tsin Tong Outpatient Building (TTT OPB), protection works for Tung Wah Museum as well as landscaping and road works. Apart from an expanded Accident & Emergency department, the redeveloped KWH will have its in-patient services considerably strengthened with ample provision of isolation facilities, appropriate alignment of

³ The estimation has included the planned capacity of the NAH. The capacity of the vacated site of Queen Elizabeth Hospital will be subject to detailed planning at a later stage.

critical care services, as well as improved access to diagnostic and treatment facilities. Upon completion of the redevelopment project, we aim to provide an additional 374 beds, 10 additional operating theatres and six haemodialysis day beds. The annual capacity for specialist outpatient clinic attendances will also be increased by 255 600 to around 600 000 upon redevelopment. The proposed service enhancement was deliberated at this Panel on 11 June 2012 (Paper Ref: LC Paper No. CB(2)2279/11-12(03)).

Project Implementation

7. The project is being implemented in two stages, namely preparatory works and main works. On 8 February 2013, the Finance Committee (FC) of the Legislative Council approved the upgrading of the preparatory works for the redevelopment of KWH to Category A at an estimated cost of \$552.7 million in money-of-the-day (MOD) prices, covering site surveys and investigations, decanting works and consultancy services for outline sketch design, detailed design, as well as tender documentation and assessment for the main works. In consideration of the long construction period for the main works of the project and the complex nature of this large-scale redevelopment project, HA proposes to implement the main works in two phases with a view to minimising the risk of higher-than-expected tender prices due to additional premium allowed for long contract periods, as well as reducing both programme and cost risks. With the support of the Panel on 15 February 2016 (Paper Ref: LC Paper No. CB(2)836/15-16(05), FC approved on 29 April 2016 to upgrade part of the proposed main works to Category A at an approved project estimate of \$654.8 million in MOD prices to carry out the demolition, foundation works, and excavation and lateral support works for phase 1. Such works commenced in June 2016 and are expected to be completed in late 2018.

8. We plan to seek funding approval from FC to upgrade part of the remaining main works in the current legislative session, namely superstructure and associated works for phase 1, covering –

- (a) construction of the first phase of a new hospital complex;
- (b) provision of associated external and landscaping works; and
- (c) consultancy services for contract administration and site supervision.

A site plan showing the location of the proposed hospital complex (phase 1) is at **Annex 1 to Enclosure 1**.

9. Funding approval for the remaining part of the redevelopment project will be sought at a later stage to dovetail with the implementation programme. The scope of the remaining main works will mainly comprise demolition of the East and North Wings of the existing Main Hospital Building, TWGHs Yu Chun Keung Memorial Medical Centre and Staff Barracks for the construction of phase 2 of the new hospital complex, as well as alteration and addition works to TWGHs TTT OPB.

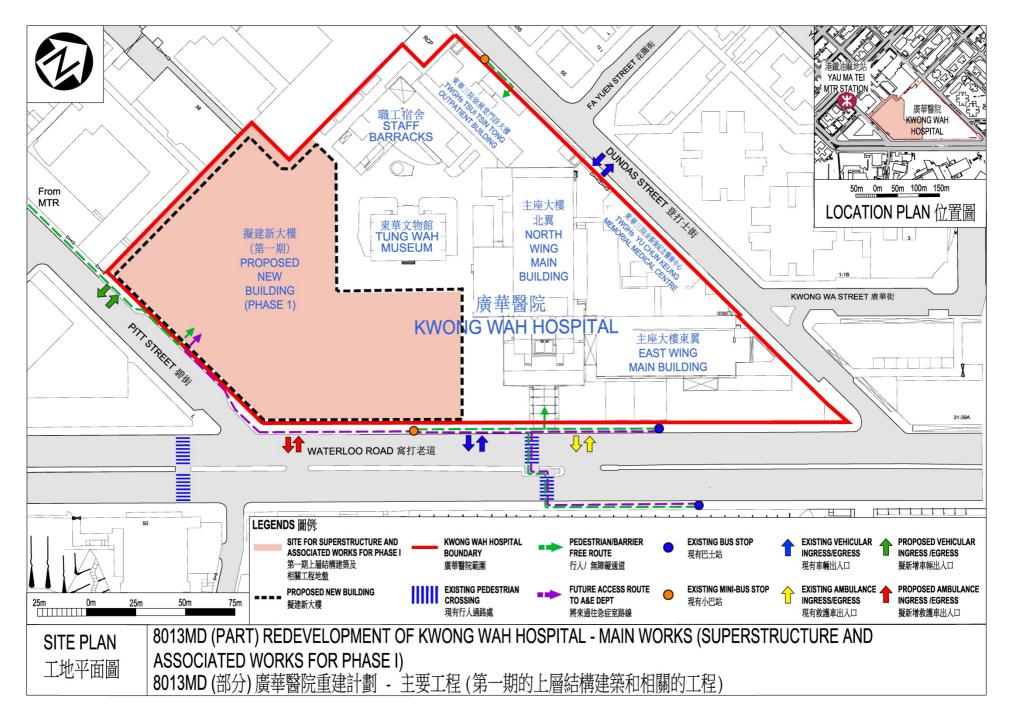
10. The estimated cost of the proposed works as described in paragraph 8 is in the order of \$10,083.3 million in MOD prices⁴. The HA has invited tenders for the proposed works in January 2018. Subject to FC's funding approval, we plan to award the contract to the successful tenderer with a view to commencing the proposed works in the fourth quarter of 2018 for completion in the second quarter of 2021. Subject to subsequent funding approval of FC for the remainder of the

⁴ This figure represents the latest estimate of capital cost pending tender return. We plan to update the cost estimate before submission to FC.

main works, we aim to complete the entire redevelopment project in 2025 tentatively. KWH will remain operational at all times during the works and any disruption of services, if unavoidable, will be kept to a minimum.

Public Consultation

11. HA consulted the Yau Tsim Mong District Council (YTMDC) on the proposed project on 30 November 2017. Members of the YTMDC supported the proposed project.



Redevelopment of Queen Mary Hospital, Phase 1 - Main Works

Background

At present, the Hospital Authority (HA) provides public hospital services for the Central and Western District and the Southern District of Hong Kong Island through its Hong Kong West Cluster $(HKWC)^1$. The population of the above-mentioned two districts in 2016 was 518 300 and is projected to reach 515 400 in 2024, where elderly of 65 years old or above will rise from 84 500 in 2016 to 125 300 in 2024, representing an increase of 48%.

2. Established in 1937, the Queen Mary Hospital (QMH) is a major acute hospital in the HKWC, serving the residents of the Central and Western District and the Southern District, as well as treating many patients in other geographical districts in Hong Kong. It provides a full range of acute and tertiary services, including 24-hour Accident and Emergency (A&E) services, in-patient service, ambulatory care and rehabilitation services, as well as specialist services covering a wide range of specialties and subspecialties.

3. Being the teaching hospital of the Li Ka Shing Faculty of Medicine of the University of Hong Kong, QMH is responsible for providing professional clinical training, pioneering innovative technology and conducting clinical trials for new treatment modalities. In addition, QMH serves as a tertiary and quaternary referral centre for many complex and advanced services such as organ transplant, neonatal intensive care, coronary care, burns and reconstructive surgery and neurosurgery, for the entire territory. Since July 2003, QMH has become the only

¹ As at end December 2017, HKWC comprises the following hospitals and institutions: Queen Mary Hospital, the Tung Wah Hospital, the Grantham Hospital, The Duchess of Kent Children's Hospital at Sandy Bay, the Tung Wah Group of Hospitals Fung Yiu King Hospital, the MacLehose Medical Rehabilitation Centre and the Tsan Yuk Hospital.

designated liver transplant centre in Hong Kong to provide world-class standard liver transplant service. The A&E Department of QMH has been designated as one of the five trauma centres in the territory.

4. Having established for 80 years, the design of existing facilities in QMH is outdated and no longer meets the service requirements and workflow logistics of a modern tertiary acute hospital. In addition to insufficient clinical space having regard to service demands and technological advancements, the existing buildings are set within a difficult topography and cannot facilitate clinical convenience. The site has a single major access point, connecting to the only narrow two-lane road, both being shared by ambulances, services traffic and public transport. The redevelopment of QMH is imperative in order to address the infrastructural problems of the hospital site.

The proposed redevelopment of QMH, phase 1

5. The Clinical Services Plan (CSP) for the HKWC formulated by HA in 2013 sets out the clinical strategies, models of care and future service development in the cluster, and also guides the planning for the redevelopment of QMH. Underpinned by the CSP for the HKWC, a concept plan for the redevelopment of QMH has been developed, which aims to renew the hospital in phases into a modern health sciences centre and to modernise its facilities to cope with the growing clinical service and teaching demands. The redevelopment plan will provide additional space and maximise floor areas to meet operational needs, be adaptable to service development, as well as promote integrated research and education. The redeveloped QMH will adopt a patient-oriented design and be equipped with state-of-the-art medical equipment, with well-coordinated services and improved accessibility for more cost-effective and efficient operations to meet the long-term needs of the community. The concept plan recommends, as the

phase 1 redevelopment of QMH, the construction of a new hospital block at the north end of the hospital campus that has large floor plates with convenient connections between the A&E Department and hot floors² so as to strengthen emergency services for critical patients.

Project Implementation

6. The proposed phase 1 redevelopment of QMH is to be implemented in two stages, namely preparatory works and main works. The preparatory works involve the conversion of the vacated Senior Staff Quarter (SSQ) into clinical pathology laboratories, staff accommodation, teaching facilities and car parking facilities for the decanting of the existing facilities and equipment in the Clinical Pathology Block (CPB), University Pathology Building (UPB) and Housemen The preparatory works was deliberated at this Panel on Quarters (HQ). 17 February 2014 (Paper Ref: LC Paper No. CB(2)849/13-14(03)). The Finance Committee (FC) of the Legislative Council subsequently approved on 12 July 2014 the upgrading of the preparatory works for the redevelopment of QMH, phase 1 to Category A at an estimated cost of \$1,592.8 million in money-of-the-day (MOD) Preparatory works of the project commenced in July 2014 and the prices. conversion of the SSQ was substantially completed in March 2017. Decanting of the existing facilities is expected to be completed by the third quarter of 2018.

7. The main works of redevelopment of QMH, phase 1 is one of the projects under the Ten-year Hospital Development Plan deliberated at this Panel on 18 January 2016 (Paper Ref: LC Paper No. CB(2)652/15-16(04)). The scope of the main works comprises the following -

² Hot floors refer to floors where critical services are delivered, e.g. A&E, Intensive Care Unit, operating theatres and emergency diagnostic facilities.

- (a) demolition of CPB, UPB and HQ for the construction of a new block to accommodate –
 - (i) A&E Department including A&E Diagnostic Radiology Unit and facilities;
 - (ii) emergency medicine (cum clinical toxicology) wards;
 - (iii) Medical Assessment and Planning Unit;
 - (iv) Diagnostic Radiology Department;
 - (v) Peri-operative Centre;
 - (vi) cardiac catheterization laboratories;
 - (vii) Intensive Care Unit, Critical Care Unit, Paediatric IntensiveCare Unit and Post Anaesthetic Care Unit;
 - (viii) in-patient wards including General Wards, Neuroscience Wards; Obstetrics and Labour Wards, Paediatric Wards, Surgical Wards, Medical Wards, Isolation Wards and Cardiothoracic Surgery Ward;
 - (ix) core laboratories;
 - (x) call rooms;
 - (xi) ancillary supporting facilities; and
- (b) provision of a new roof helipad, five link bridges connecting the new block and Block K and a new vehicular ingress and egress point from Pokfulam Road to the new block.

8. A site plan showing the location of proposed main works of redevelopment of QMH, phase 1 is at **Annex 1 to Enclosure 2**.

9. The estimated cost of the proposed main works is about \$16,166.9 million in MOD prices³. The Architectural Services Department invited

³ This figure represents the latest estimate of capital cost pending completion of tender assessment. We plan to

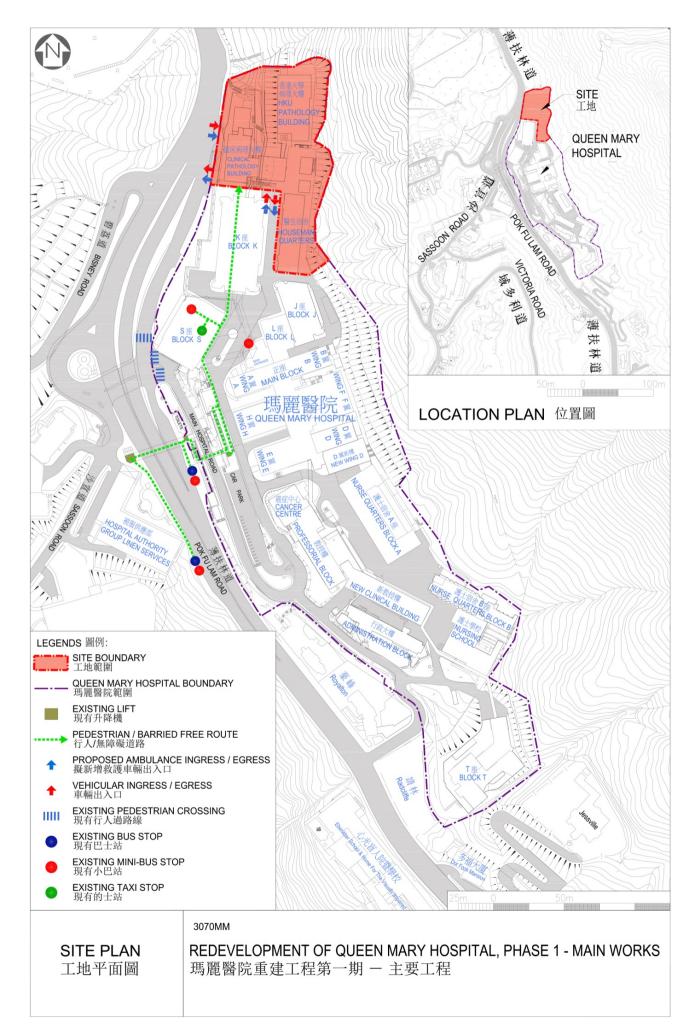
tenders for the proposed main works in September 2017. Subject to FC's funding approval, we plan to award the contract to the successful tenderer with a view to commencing the proposed main works in September 2018 for completion by 2024. QMH will remain operational at all times during the works and any disruption of services, if unavoidable, will be kept to a minimum.

10. To fully achieve the objective of redeveloping QMH into a modern health sciences centre which is adaptable to future service delivery models with adequate capacity and capability to meet the long-term needs of the community, we will continue to review the need of carrying out further redevelopment works in other parts of QMH.

Public Consultation

11. HA consulted the Southern District Council (SDC) and the Culture, Leisure and Social Affairs Committee (CLSAC) of the Central and Western District Council (C&W DC) on the proposed main works of redevelopment of QMH, phase 1 on 11 January and 8 February 2018 respectively. In general Members of the SDC supported the proposed project, and Members of the CLSAC of C&W DC supported the proposed project in principle.

update the cost estimate before submission to FC.



New Acute Hospital at Kai Tak Development Area

Background

The population of the Kowloon region¹ is projected to increase from 3 667 000 in 2016 to 3 809 100 in 2024 (representing an increase of 4%), where elderly of 65 years old or above will rise from 583 900 in 2016 to 829 000 in 2024 (representing an increase of 42%). To meet the long-term rising demand for healthcare services and facilities in Kowloon arising from the growing and aging population, the Government has reserved sites in the Kai Tak Development Area (KTDA) for the construction of the new acute hospital (NAH).

2. The Kai Tak Development is a major development project covering the ex-airport site, together with adjoining districts of Kowloon City, Wong Tai Sin and Kwun Tong. The KTDA will have a mix of housing, community, business, tourism and infrastructural uses. With the Government's plan to strive for increasing the development intensity in the Kai Tak Development, the population of KTDA is envisaged to be increased to about 134 000 upon completion of the planned developments in the KTDA.

3. Hospital Authority (HA) formulated the Clinical Services Plan (CSP) for Kowloon Central Cluster $(KCC)^2$ in 2016, providing an overarching clinical development strategy and delineated the roles of individual hospitals within the cluster. According to the CSP, NAH will take a leading role in coordinating care

¹ The Kowloon region refers to the catchment districts of three hospital clusters in the Hospital Authority, namely Kowloon Central, Kowloon East and Kowloon West Clusters, which include Yau Tsim Mong, Kowloon City, Wong Tai Sin, Kwun Tong, Sai Kung, Sham Shui Po, Kwai Tsing, Tsuen Wan and Lantau Island.

² As at end December 2017, KCC comprises the following hospitals and institutions: Hong Kong Buddhist Hospital, Hong Kong Eye Hospital, Hong Kong Red Cross Blood Transfusion Service, Kowloon Hospital, Kwong Wah Hospital, Our Lady of Maryknoll Hopsital, Queen Elizabeth Hospital, TWGHs Wong Tai Sin Hospital.

across KCC. A comprehensive range of specialty services including a neuroscience centre and an oncology centre will be provided, and it will serve as a designated trauma centre. Hospitals and institutions in KCC will adopt a collaborative approach to ensure comprehensive care and enhance service linkage for patients from various districts, including KTDA, Kowloon City, Wong Tai Sin and Kwun Tong, etc.

4. Under the service network arrangement, acute services for KCC will be provided by the NAH at KTDA and by Kwong Wah Hospital (KWH). The acute hospitals in KCC will be supported by the extended care hospitals nearby to enhance the continuity of care for patients within the respective catchment districts. In particular, Our Lady of Maryknoll Hospital, Wong Tai Sin Hospital and Hong Kong Buddhist Hospital will form a service network with the NAH in Kai Tak while Kowloon Hospital will provide convalescent and rehabilitation services for patients transferred from KWH. The NAH at KTDA is one of the projects covered by the Ten-year hospital development plan deliberated at this Panel on 18 January 2016 (Paper Ref: LC Paper No. CB(2)652/15-16(04)).

The Proposed NAH at KTDA

5. As guided by the CSP and taking into account the roles of various hospitals in the Kowloon region, the NAH will be established as an acute hospital delivering a comprehensive range of secondary and tertiary hospital services, with modern service models, advanced technology and facilities. NAH will be a designated trauma centre. It will also provide Accident and Emergency, in-patient, out-patient, ambulatory and rehabilitation services.

6. Taking into account future medical needs, a neuroscience centre will also be set up under the NAH providing tertiary and quaternary services to KCC

and the neighbouring clusters. Services provided by the NAH, including radiotherapy and laboratory services, will be complementary to that of the adjacent Hong Kong Children's Hospital. Upon completion of the NAH, most of the services of Queen Elizabeth Hospital (QEH) will be relocated to the new hospital at KTDA. HA will study the development of a new hospital at the vacated King's Park site where the existing QEH is situated.

Project Implementation

7. The construction of NAH project will be implemented in three stages namely (a) the preparatory works; (b) the foundation, excavation and lateral support, as well as basement excavation works; and (c) the main works. Discussion on the preparatory works took place in this Panel on 15 May 2017 (Paper Ref: LC Paper No. CB(2)1352/16-17(03). The Finance Committee (FC) of the Legislative Council subsequently approved on 19 July 2017 the upgrading of the preparatory works for the construction of NAH to Category A at an estimated cost of \$769.3 million in money-of-the-day (MOD) prices, covering consultancy services for design, preparation of tender documentation and tender assessment for the proposed NAH and the adjoining section of the waterfront promenade, and site investigations and minor studies for the proposed works.

8. The detailed design of the second stage i.e. the foundation, excavation and lateral support and basement excavation works of the proposed NAH, has been completed in February 2018. To dovetail with the implementation programme, we plan to seek funding approval from FC to upgrade the second stage of the project, covering –

- (a) foundation;
- (b) excavation and lateral support;
- (c) basement excavation works;
- (d) pile cap construction works; and

(e) basement slab works.

9. Funding approval for the main works of the project will be sought at a later stage to dovetail with the implementation programme. The scope of the main works will comprise construction of an acute hospital and provision of a continuous traffic-free pedestrian waterfront promenade at the strip of land adjoining the site for the NAH. The NAH will provide 2 400 in-patient and day beds and associated medical and supporting facilities, 37 operating theatres, a neuroscience centre, an oncology centre, specialist outpatient clinics with a capacity of 1 410 000 annual outpatient clinic attendance, a community health centre, an oral maxillofacial surgery and dental unit, and a helipad.

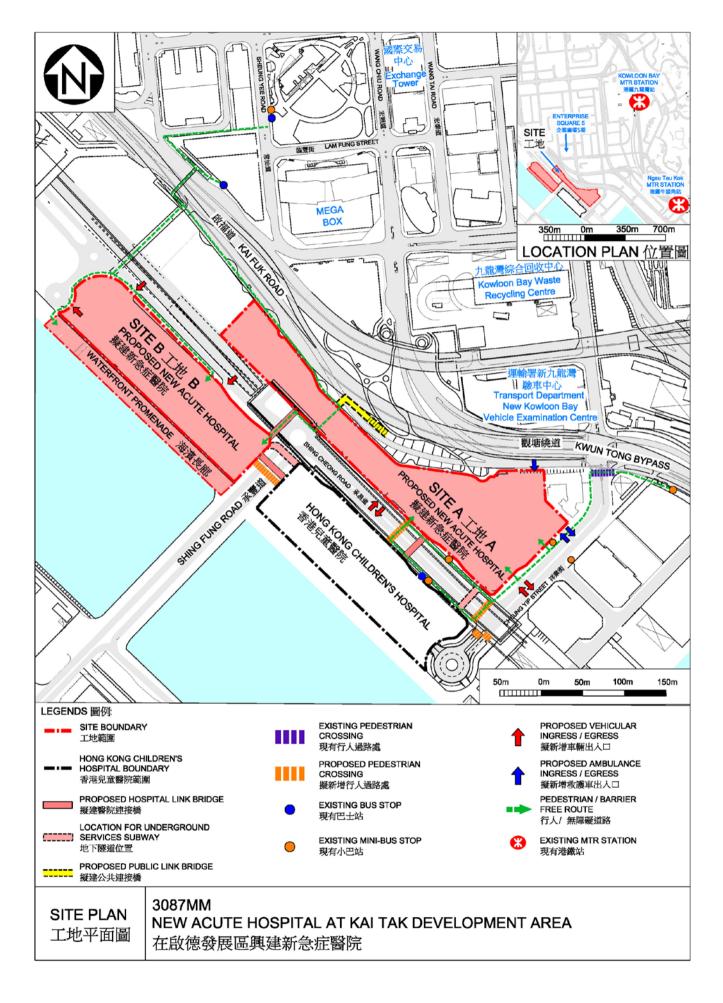
10. The estimated cost of the proposed second stage works is in the order of \$5,356.8 million in MOD prices³. HA invited tenders for the proposed works in March 2018. Subject to FC's funding approval, we plan to award the contract to the successful tenderer with a view to commencing the proposed works in the third quarter of 2018. Subject to subsequent funding approval of FC for the main works, we aim to complete the whole project in 2024 tentatively.

11. A site plan showing the location of the proposed development is at **Annex 1 to Enclosure 3**.

Public Consultation

12. HA consulted the Wong Tai Sin District Council (DC) and Kwun Tong DC both on 9 January 2018, Yau Tsim Mong DC on 25 January 2018 and Kowloon City DC on 1 February 2018. Members of these four DCs supported the proposed project.

³ This figure represents the latest estimate of capital cost pending tender return. We plan to update the cost estimate before submission to FC.



Redevelopment of Our Lady of Maryknoll Hospital

Background

Founded by the Maryknoll Sisters in 1961, Our Lady of Maryknoll Hospital (OLMH) provides holistic care to patients and is committed to promoting primary health in the community. With 236 beds, OLMH offers both in-patient and out-patient services as a community hospital.

2. Hospital Authority (HA) formulated the Clinical Services Plan (CSP) for Kowloon Central Cluster (KCC)¹ in 2016, providing an overarching clinical development strategy and delineated the roles of individual hospitals within the cluster. According to the CSP, acute services for KCC will be provided by the New Acute Hospital (NAH) in Kai Tak and by Kwong Wah Hospital (KWH). The acute hospitals in KCC will be supported by the extended care hospitals nearby to enhance the continuity of care for patients within the respective catchment districts. In particular, OLMH, Wong Tai Sin Hospital (WTSH) and Hong Kong Buddhist Hospital will form a service network with the NAH in Kai Tak while Kowloon Hospital will provide convalescent and rehabilitation services for patients transferred from KWH. OLMH will focus its efforts on serving the needs of the residents in Wong Tai Sin (WTS) district as a non-acute hospital principally providing ambulatory care services and elective in-patient services.

3. The service demand in WTS district, where OLMH is situated, has been growing over the years. The population of WTS district was 425 200 in 2016 and is projected to reach 426 000 in 2024. Moreover, the elderly population aged

¹ As at end December 2017, KCC comprises the following hospitals and institutions: Hong Kong Buddhist Hospital, Hong Kong Eye Hospital, Hong Kong Red Cross Blood Transfusion Service, Kowloon Hospital, Kwong Wah Hospital, Our Lady of Maryknoll Hopsital, Queen Elizabeth Hospital, TWGHs Wong Tai Sin Hospital.

65 or above in the district is expected to increase from 73 300 in 2016 to 102 400 in 2024 (representing a notable increase of 40%). There is also a trend of increasing service utilisation in OLMH. The number of inpatient and day inpatient discharges and deaths increased from 10 170 in 2010-11 to 12 468 in 2016-17 while the specialist outpatient (clinical) attendances rose from 68 309 in 2010-11 to 68 720 in 2016-17. The limited capacity of the hospital buildings poses constraint to expand or improve the existing facilities through expansion or re-planning to resolve operational deficiencies. The antiquated design of the existing wards does not support quality patient care and the spacing between beds is sub-optimal from infection control perspectives.

4. There are a total of three blocks in OLMH. Except for the Out-patient Department (OPD) Building which was completed in 1999, the other two hospital buildings were constructed over 50 years ago and have deteriorated to an unsatisfactory state. Full repair and maintenance has become uneconomically costly. Perennial problems of water leakage through the building fabric occurs while the physical constraints such as limited capacity in headroom, configuration, floor plate size and structural loading have impeded expansion to meet growing service demand or improvements of facilities. The haphazard and piecemeal developments in OLMH over the years have also resulted in functionally interrelated departments, such as the Rehabilitation Departments and Integrated Community Health Promotion Centre being scattered over different parts of the hospital, thus compromising their operational effectiveness and efficiency. The redevelopment of OLMH is one of the projects covered by the Ten-year Hospital Development Plan deliberated at this Panel on 18 January 2016 (Paper Ref: LC Paper No. CB(2)652/15-16(04)).

The Proposed Redevelopment of OLMH

5. The scope of the proposed project comprises the redevelopment of the North and East Wings of OLMH into a new block and the refurbishment of the OPD Building. The redeveloped OLMH will have a planned capacity of 252 inpatient and day beds (including an additional 16 haemodialysis day beds to be provided upon redevelopment of OLMH) in total, providing the following scope of services and facilities –

- (a) in-patient care services;
- (b) ambulatory services including a community health centre², a day surgery centre, an endoscopy unit, an electro-diagnostic unit, a cardiac diagnostic & care centre, a renal dialysis centre;
- (c) diagnostic and ancillary services, including X-ray department, computed tomography scanner, allied health, pharmacy and dispensary as well as core laboratory and pathology;
- (d) administrative services including hospital administration, medical staff and nursing administration, reception and admissions, death registry, staff accommodation, medical records, library, lecture hall, etc.; and
- (e) support services including kitchen, canteen, central sterile supplies, staff common room, mortuary and viewing room, chapel, pastoral ministry, linen & laundry, maintenance, stores, etc.

² The proposed community health centre comprises a general out-patient clinic, integrated clinic providing family medicine and other specialist out-patient services, community multi-specialty clinic and multi-disciplinary and patient empowerment services, etc. The additional annual capacity for specialist and general out-patient clinic attendances will be 75 900 and 20 800 respectively.

Project Implementation

6. The redevelopment of OLMH will be implemented in two stages namely preparatory works and main works. Before we can embark on the main works, we need to conduct site investigation, develop detailed design and prepare tender documents. We plan to engage professional consultants to carry out the preparatory works.

7. The proposed preparatory works comprise -

- (a) site investigation including site survey, ground investigation, and slope and geologic survey;
- (b) building survey including inspection and assessment of condition and elements of existing buildings;
- (c) renovation of the OPD Building for decanting;
- (d) other decanting works; and
- (e) consultancy services for outline sketch design, detailed design as well as tender documentation and assessment for the main works.

8. The remaining stage (i.e. main works) will mainly cover demolition of North and East Wings, construction of a new building and refurbishment of the OPD Building upon decanting of facilities to the new block.

9. A site plan showing the location of the proposed redevelopment of OLMH is at **Annex 1 to Enclosure 4**.

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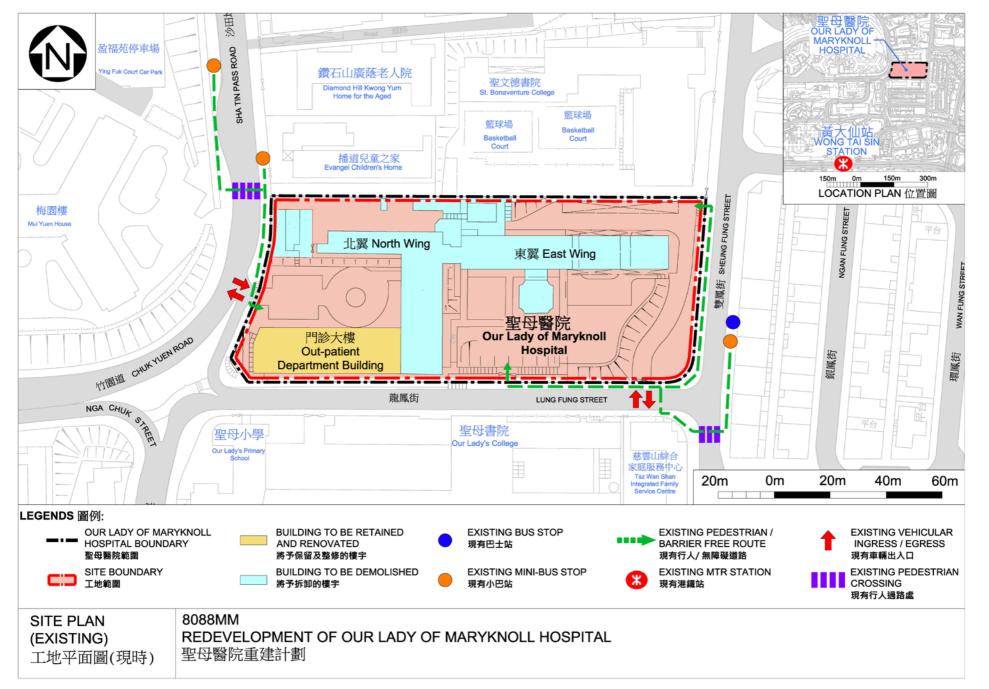
10. The estimated cost of the proposed preparatory works is in the order of \$197.0 million in money-of-the-day prices³. The HA invited tenders for the proposed works in February 2018. Subject to the Finance Committee's funding approval, we plan to award the contract to the successful tenderer with a view to commencing the preparatory works in the second quarter of 2018 for completion in 2024. Funding approval for the main works of the project will be sought at a later stage to dovetail with the implementation programme.

11. During the redevelopment, we plan to decant in-patient and selected clinical services to hospitals in KCC which are geographically closer to OLMH and also located in WTS District. The OPD Building of OLMH would maintain operational and the services of general and specialist out-patient clinics would not be affected. Services such as allied health and endoscopic diagnostic examination will be decanted to the OPD Building. Any disruption of services, if unavoidable, will be kept to a minimum.

Public Consultation

12. HA consulted the Wong Tai Sin District Council (WTS DC) on the proposed redevelopment of OLMH on 9 January 2018. While Members of the WTS DC supported expediting the redevelopment of OLMH, they urged HA to include extra medical services (including the Accident and Emergency services, 24-hour out-patient services and increased number of hospital beds) in the redeveloped hospital. HA will continue to explore the feasibility of making available space for provision of additional hospital beds in OLMH.

³ This figure represents the latest estimate of capital cost pending tender return. We plan to update the cost estimate before submission to the Finance Committee.



附件 4 附錄 1 Annex 1 to Enclosure 4

Redevelopment of Grantham Hospital, phase 1

Background

Established in 1957 by the Hong Kong Anti-Tuberculosis Association (currently known as Hong Kong Tuberculosis, Chest and Heart Disease Association (HKTCHDA)), Grantham Hospital (GH) is one of the seven hospitals in the Hong Kong West Cluster (HKWC)¹ of Hospital Authority (HA) with 388 beds (as at 31 March 2017), serving the residents of the Central and Western District as well as the Southern District.

2. According to the population estimates published by the Census and Statistics Department and population projections of 2015-2024 by the Planning Department, although there will be a slight decrease from 518 300 in 2016 to 515 400 in 2024 in the overall population served by HKWC, the elderly population (aged 65 or above) will increase from 84 500 in 2016 to 125 300 in 2024 (representing an increase of 48%). Given the anticipated rise in the elderly population, it is important to allow patients, especially those with chronic conditions, to have timely and one-stop comprehensive ambulatory care on a multidisciplinary basis in order to prevent long-term complications.

3. Moreover, with an ageing population in Hong Kong, it is estimated that the number of patients diagnosed with cancer will continue to increase. Furthermore, with early diagnosis and improved treatment options, cancer patients can survive longer, meaning service needs will grow for post-treatment surveillance and follow-up. Besides, as part of a holistic approach to care, the demand for

¹ As at end December 2017, HKWC comprises the following hospitals and institutions: Queen Mary Hospital, the Tung Wah Hospital, the Grantham Hospital, The Duchess of Kent Children's Hospital at Sandy Bay, the Tung Wah Group of Hospitals Fung Yiu King Hospital, the MacLehose Medical Rehabilitation Centre and the Tsan Yuk Hospital.

integrated palliative care services is also anticipated to grow, along with the public expectation for one-stop continuous quality care at the end of life.

4. According to the Clinical Services Plan (CSP) for the HKWC formulated by HA in March 2013, GH is proposed to be redeveloped as an academic ambulatory care centre, with strong presence of cancer service, integrating clinical services, teaching and research. Ambulatory care is of increasing importance in future care models, with the aim of relieving the pressure on in-patient services, re-engineering service delivery by adopting new advancements in diagnosis and treatment through out-patient clinics, day services and community care, and facilitating the provision of one-stop services for patients on an multidisciplinary basis. The redevelopment of GH will complement the clinical programmes in the Cluster, and especially Queen Mary Hospital which will mainly concentrate on emergency and acute care.

5. The GH compound comprises the Main Hospital Building built in the 1950s, an extension block named Kwok Tak Seng Heart Centre built in 1982, and several other blocks such as staff quarters, mortuary, nursing school, etc. scattered over the hospital site without any linkage connecting the various buildings for convenient access for patient, staff and the public. The Main Hospital Building and Kwok Tak Seng Heart Centre are only connected up to the fourth floor, hindering the smooth delivery of patient services between these two blocks, which are seven-storeys high. Also, there is only one lift in the Heart Centre, which is inadequate for maintaining effective transportation and delivery flow for people and goods.

6. With most of the buildings of GH constructed over 50 years ago without any major refurbishment project undertaken, the physical conditions of the hospital blocks have deteriorated to an undesirable state. The existing facilities of GH also lag behind modern health care standards in terms of space provision, ward layout, structural loading and infection control. For example, the infrastructure of the buildings such as floor loading and floor-to-floor height cannot accommodate new requirements for major equipment, ventilation system, modern technology and research, etc., which have impeded the development of GH to incorporate appropriate modern health care service delivery models, as well as enhance teaching and research facilities to help meet rising healthcare demand.

The Proposed Redevelopment of GH

7. Underpinned by the CSP for HKWC, and given its strategic location with good public accessibility included through completion of the Mass Transit Railway South Island Line (East), we propose to redevelop GH in phases into an academic health centre with the provision of :

- (a) a premier Cancer Centre providing evidence-based cancer services including personalized care, chemotherapy and radiotherapy, complementing the oncology services in HKWC;
- (b) state-of-the-art Academic Ambulatory Care Centre which provides a comprehensive range of advanced and high-tech ambulatory services for chronic diseases, such as cardio-metabolic diseases related to the heart and diabetes and the associated complications affecting the eyes, kidneys, and other vital organs; and
- (c) Teaching and Research facilities focusing on clinical and translation research.

8. As part of 7(c) above, The University of Hong Kong proposed to HKTCHDA and HA to establish two centres, namely a Centre for Clinical Innovation and Discovery (CCID) and an Institute of Cancer Care (ICC). The establishment of a CCID and ICC will enable translational research by adopting the most advanced technology in screening, diagnosis and treatment of cancer, such as genetic and genomic development. Since cancer care involves multiple disciplines

including allied health professionals, the ICC will provide a platform for developing programmes to address the psycho-social needs of cancer patients.

9. The GH redevelopment project will be carried out in two phases. The phase 1 redevelopment will provide an additional oncology centre and three additional operating theatres upon redevelopment. The scope of facilities and services to be provided by the phase 1 redevelopment includes a Cancer Centre, an Ambulatory Care Centre, a Clinical and Translational Research Centre, ancillary as well as administrative and supporting services.

Project Implementation

10. Phase 1 of the redevelopment of GH, which is one of the projects covered by the Ten-year Hospital Development Plan discussed in this Panel on 18 January 2016 (Paper Ref: LC Paper No. CB(2)652/15-16(04)), will involve the demolition of the Senior Staff Quarters, Nurse Quarters Block 1 and Block 2, decanting works, and construction of two new blocks (Block A and Block B).

11. We propose to implement phase 1 of the redevelopment project in two stages, namely, preparatory works and main works. Before we can embark on the main works, we need to conduct site investigation, develop detailed design and prepare tender documents. We plan to engage professional consultants to carry out the preparatory works.

- 12. The proposed preparatory works comprise
 - (a) site investigation including soil investigation and geologic survey maps for the building design;

- (b) building survey including inspection and assessment of the condition of the existing buildings for planning of construction works;
- (c) decanting works for services and facilities in Nurse Quarters Block 1 and Block 2 which will be demolished under phase 1; and
- (d) consultancy services for outline sketch design, detailed design as well as tender documentation and assessment for the main works.

A site plan showing the location of the proposed phase 1 redevelopment is at **Annex 1 to Enclosure 5**.

13. The estimated cost of the proposed preparatory works is in the order of \$422.9 million in money-of-the-day prices². The HA invited tenders for the proposed works in February 2018. Subject to the Finance Committee's funding approval, we plan to award the contract to the successful tenderer with a view to commencing the preparatory works in the second quarter of 2018 for completion of phase 1 of the redevelopment project in 2024. GH will remain operational at all times during the works and any disruption of services, if unavoidable, will be kept to a minimum. Funding approval for the main works of the project will be sought in a later stage to dovetail with the implementation programme.

Public Consultation

14. HA consulted the Southern District Council (SDC) and the Culture, Leisure and Social Affairs Committee (CLSAC) of the Central and Western District Council (C&W DC) on the proposed redevelopment of GH on 16 November 2017

² This figure represents the latest estimate of capital cost pending tender return. We plan to update the cost estimate before submission to the Finance Committee.

and 8 February 2018 respectively. Members of the SDC and the CLSAC of C&W DC supported the proposed project.

