ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 25 – ARCHITECTURAL SERVICES DEPARTMENT Subhead 000 Operational expenses

Members are invited to recommend to Finance Committee the creation of the following supernumerary post in the Architectural Services Department for about nine years with immediate effect upon approval of the Finance Committee up to 31 March 2027 –

1 Chief Quantity Surveyor (D1) (\$138,500 - \$151,550)

PROBLEM

Over the past few years, there has been a drastic upsurge in the demand for professional support by the Architectural Services Department (ArchSD) in the delivery of various healthcare projects, in particular mega hospital redevelopment projects under the Ten-year Hospital Development Plan (10-year HDP). These mega projects often involve technically complex in-situ redevelopment which must be completed within tight timeline. They require dedicated directorate support in the quantity surveying discipline so as to provide holistic steer and oversight at the design, planning and implementation stage. The existing directorate manpower of ArchSD in quantity surveying is unable to cope with the drastic increase in workload.

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PROPOSAL

2. We propose to create a supernumerary Chief Quantity Surveyor (CQS) (D1) post under the Quantity Surveying Branch (QSB) of ArchSD to strengthen professional support in quantity surveying for the delivery of the projects under the 10-year HDP at strategic level. The post is proposed to be created for about nine years up to 31 March 2027 to tie in with the duration of the 10-year HDP.

JUSTIFICATION

Ten-year Hospital Development Plan

- 3. The healthcare sector of Hong Kong is facing the challenge of a rapidly ageing population. Long-term planning is needed in order to ensure timely commencement, progression and completion of major hospital development projects for meeting future service demand. In the 2016 Policy Address, the Government announced that \$200 billion would be set aside for the Hospital Authority (HA) to implement the 10-year HDP. The 10-year HDP covers the redevelopment or expansion of 11 hospitals, construction of a new acute hospital, three community health centres and one supporting services centre for HA.
- 4. Upon completion of the 10-year HDP, there will be around 5 000 additional beds, 94 additional operating theatres, increased capacity of specialist outpatient clinics and general outpatient clinics, and other additional related hospital facilities. Projects that have already commenced under the 10-year HDP include the construction of a new acute hospital at the Kai Tak Development Area, the redevelopment of Kwong Wah Hospital, Kwai Chung Hospital, Prince of Wales Hospital, the extension of Operating Theatre Block for Tuen Mun Hospital and the expansion of Haven of Hope Hospital. Other projects in the pipeline include redevelopment of Queen Mary Hospital, Grantham Hospital and Our Lady of Maryknoll Hospital, etc. As the vote controller of all healthcare projects, ArchSD has the responsibility to ensure government funds are spent in a cost-effective manner on the projects.
- 5. Over the past five years, the demand for ArchSD's professional services for healthcare projects has surged drastically as reflected by the phenomenal increase in the total cost of Schedule 1¹ hospital projects from about \$25 billion in 2013 to a projected value of about \$125 billion in total

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¹ The list of public hospitals managed by the HA are set out in Schedule 1 and Schedule 2 of the HA Ordinance. Schedule 1 hospitals refer to hospitals the management and control of which are vested in the HA under agreements with the Government.

from 2018 to 2020 (i.e. a 400% increase). For Schedule 2² hospital projects, the total cost has increased from about \$7.3 billion in 2013 to a projected value of about \$60 billion in total from 2018 to 2020 (i.e. a 720% increase).

Need to Strengthen Directorate Support in the Quantity Surveying Field

The existing staff resources in ArchSD have already been fully 6. stretched without any spare capacity to take up new projects, nor to cope with the substantial increase in workload in the coming years. Quantity surveyors play the important role of providing professional services on budgeting, cost control, project planning, procurement, tendering, contract administration, risk management, value management, dispute resolution, etc. in the delivery of capital works projects. The workload relating to handling Schedule 1 hospital projects in terms of quantity surveying is currently shared among three teams of Quantity Surveyors (QSs) led by three Senior Quantity Surveyors (SQSs) in QSB and Project Management Branch 2 (PMB2)³ of ArchSD. These three quantity surveying teams also have to handle other large scale non-healthcare projects such as government offices, boundary crossing facilities and departmental quarters, etc. The workload relating to healthcare projects has continuously taken up a substantial amount of their time. Similarly, there are two teams of QSs led by two respective SQSs in the Subvented Projects Division (SPD) of QSB, which are responsible for handling the Schedule 2 hospital projects and all other subvented projects. The existing directorate officers overseeing these QS teams are already fully occupied with a wide range of government capital works projects and are unable to take up additional projects under the 10-year HDP without affecting the progress of other non-healthcare projects.

7. Since the earmarking of capital funding for the implementation of the 10-year HDP in 2016, only two additional time-limited non-directorate posts of QS grade have been created in ArchSD for handling healthcare projects as far as the quantity surveying discipline is concerned. Delivery of the healthcare projects is currently at the expense of other non-healthcare projects and the progress of other non-healthcare projects has been adversely affected. In addition, the healthcare projects under the purview of the existing quantity surveying teams are scattered across different branches/divisions of ArchSD without a dedicated directorate officer at CQS (D1) level to provide the necessary steer and oversight.

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² Schedule 2 hospitals are hospitals the management and control of which are vested in the HA under agreements with persons other than the Government.

PMB2 is responsible for implementation of strategies and undertaking project management of police stations, fire station complex, airport facilities under the Three-Runway System, boundary crossing facilities, departmental quarters, correctional institutions, public mortuary, healthcare projects, residential care home for the elderly complex, etc. of various scale and complexity from feasibility study, design development, public consultation through District Council and Legislative Council, contract administration to handover to users.

8. ArchSD considered it necessary to have a dedicated CQS to steer and oversee the healthcare projects holistically under the 10-year HDP through a three-pronged strategic approach (by cost management⁴, devising procurement and contract strategy⁵, as well as risk and value management⁶) to ensure synergy and consistency of management, smooth project implementation and sound budget control within the cost cap of \$200 billion.

- 9. Adequate directorate support in ArchSD is pivotal to the successful delivery of healthcare projects especially the mega hospital projects, given their severe site constraints, compact if not compressed completion programme, complicated and complex technical interface issues and possible serious repercussion in case of mishandling of incidents/delay in resolving problems. This is particularly important for mega and complex in-situ hospital redevelopment projects, which normally comprise large floor space with considerable number of medical and related function rooms and highly complex installations for different operational needs. Implementation of these projects often entails extensive technical inputs and co-ordination to be provided by several teams of professionals.
- 10. Delivery of the healthcare projects under the 10-year HDP within the cost cap of \$200 billion is of paramount importance. There is an urgent need to enhance ArchSD's management steer for high level support in respect of cost planning and procurement arrangements of the projects at current stage while major main building works are yet to be commenced on site. On top of the usual planning on procurement and contract strategy, phasing, budgeting and cost control, extra efforts are required to devise vigorous risk and value management strategy in order to ensure that all project risks are identified and contained, and the proposed scheme and construction method of the 10-year HDP projects are the most optimal and value for money. This becomes highly important in view of the escalating construction costs in recent years and the Government's initiatives to enhance the cost control mechanism of public works projects. We propose to create a dedicated supernumerary CQS (D1) post in QSB of ArchSD to accommodate an officer with extensive experience and professional knowledge on cost, procurement and contractual aspects to oversee and monitor the programme, cashflow and contract

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Cost management involves cost planning, estimating, budgeting and controlling (through cashflow monitoring) so as to keep project costs within the approved budget.

Devising procurement and contract strategy involves planning on packaging and phasing of works, mode of delivery and form of contract, as well as vetting contract requirements based on operational needs, etc.

Risk management involves risk planning, identification, analysis, evaluation and treatment for the purpose of better delivery of project, more efficient use of resources and enhanced project management. Value management involves analysis of functions, components, goods and services, from the point of view of the system as a whole, to satisfy the required functions of the project at the lowest total cost without compromising quality and standard of performance, thus achieving value for money purpose.

administration, as well as to manage the costs, risks and value of the projects with a view to ensuring smooth delivery of the healthcare projects under the 10-year HDP within the cost cap of \$200 billion. The Financial Secretary has announced in the 2018-19 Budget that the Government will start planning for the second 10-year HDP and other public healthcare facilities. We will revisit the staffing needs of ArchSD in due course.

Establishing a New Division under Quantity Surveying Branch for Healthcare Projects

- 11. The proposed supernumerary CQS post in QSB will report to the Assistant Director (Quantity Surveying). The post holder will head a new division (i.e. Division 4) in QSB and mainly be responsible for the following work relating to the Schedule 1 hospital projects under the 10-year HDP
 - (a) providing steer and direction to the new quantity surveying division, co-ordinating with the Food and Health Bureau (FHB), the Financial Services and the Treasury Bureau (FSTB), the Development Bureau (DEVB) and HA, and overseeing delivery of the projects in accordance with set standards and time frame within the approved scope and budget, as well as the established cost control and project management mechanism;
 - (b) taking measures to enhance the accuracy of cost estimate, vetting of contractual requirements based on operational needs, planning of procurement and contract strategy, and mitigation of potential risks/hazards for avoidance of project cost overrun; and
 - (c) overseeing financial details, cashflow and works progress of the projects during development and construction, as well as finalisation of project account for the completed projects.
- 12. The post holder will also oversee the delivery of the Schedule 2 hospital projects under the 10-year HDP through leading and steering the professional team in quantity surveying aspect under SPD that is responsible for providing timely and professional technical advices to FHB and FSTB, with due consideration of the value for money and compliance with the government recognised standards in respect of procurement, design and construction. The job description of the proposed supernumerary CQS post is at Enclosure 1.

Encl. 1

13. The duration of the proposed CQS post is about nine years up to 31 March 2027 in order to assist in taking forward the various healthcare projects under the 10-year HDP up to 2026-27.

One SQS and four QSs will be redeployed from other divisions of QSB and PMB2 to the new Division 4 to be headed by the proposed CQS to rationalise the chain of command and enhance the delivery of healthcare projects. In addition, one existing time-limited QS post created for 10-year HDP and one newly created time-limited SQS post will be deployed to the new division. The new Division 4 will be responsible for project cost control; ensuring effective procurement; planning on contract strategy and tendering process; risk and value management; liaising closely with the Project Cost Management Office of DEVB; ensuring compliance with procurement regulations by providing contractual advice as well as liaising with the Legal Advisory Division (Works) of DEVB on legal and tendering issues, etc. The proposed organisation chart showing the new Division 4

Encl. 2 is at Enclosure 2.

ALTERNATIVES CONSIDERED

We have critically examined whether the duties of the proposed 15. supernumerary CQS post could be absorbed by the existing relevant directorate officers in ArchSD. Chief professional officers of other disciplines are already heavily overloaded with existing workload and have no spare capacity to absorb the duties of the proposed CQS post. The four CQSs in ArchSD are working on a wide range of capital works projects, including government offices, departmental quarters, boundary crossing facilities, airport facilities under the Three-Runway System, police stations, fire station complex, correctional institutions, schools, leisure, sports and cultural facilities, markets, columbarium and crematorium, residential care home for the elderly complex, etc. Having regard to their portfolio and current workload as well as the complexity and huge volume of work envisaged to be undertaken by the dedicated team, we consider it not feasible for the existing CQSs to absorb any such additional work without compromising the delivery of their existing duties. The details of the work schedule of the existing four CQSs are at Enclosure 3.

Encl. 3 at Enclosure 3.

FINANCIAL IMPLICATIONS

- 16. The proposed creation of the supernumerary CQS (D1) post will require an additional notional annual salary cost at mid-point of \$1,765,200. The additional full annual average staff cost, including salaries and staff on-cost, is about \$2,552,000.
- 17. The notional annual salary cost at mid-point for one additional SQS (non-directorate) post is \$1,389,540 and the additional full annual average staff cost, including salaries and staff on-cost, is about \$1,974,000.

18. ArchSD has included the necessary provision in the 2018-19 Estimates to meet the cost of this proposal and will reflect the resources required in the Estimates of subsequent years.

PUBLIC CONSULTATION

19. The Panel on Health Services was consulted on the proposed creation of the supernumerary CQS post at its meeting on 24 April 2018. Members in general supported the proposal. At the Panel meeting, Members asked about the role of ArchSD as the vote controller of all capital works projects under the 10-year HDP and the respective responsibilities of ArchSD and HA in the delivery of healthcare projects. In this connection, we set out in Enclosure 4 the workflow of the 10-year HDP as well as the respective roles and responsibilities of ArchSD and HA in the delivery of healthcare projects.

ESTABLISHMENT CHANGES

20. The establishment changes in ArchSD for the last two years are as follows –

	Number of Posts				
Establishment (Note)	Existing (as at 1 May 2018)	As at 1 April 2018	As at 1 April 2017		
A	40#	40	39	39	
В	588	584	572	561	
С	1 241	1 236	1 226	1 224	
Total	1 869	1 860	1 837	1 824	

Note:

Encl. 4

- A ranks in the directorate pay scale or equivalent
- B non-directorate ranks, the maximum pay point of which is above MPS 33 or equivalent
- C non-directorate ranks, the maximum pay point of which is at or below MPS 33 or equivalent
- # as at 1 May 2018, there was one unfilled directorate post in ArchSD

CIVIL SERVICE BUREAU COMMENTS

21. The Civil Service Bureau supports the proposed creation of the supernumerary CQS post in ArchSD. The grading and ranking of the proposed post are considered appropriate having regard to the level and scope of the responsibilities and professional inputs required.

ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE SALARIES AND CONDITIONS OF SERVICE

22. As the directorate post is proposed on a supernumerary basis, its creation, if approved, will be reported to the Standing Committee on Directorate Salaries and Conditions of Service in accordance with the agreed procedure.

Food and Health Bureau May 2018

Job Description of the Proposed Chief Quantity Surveyor Post

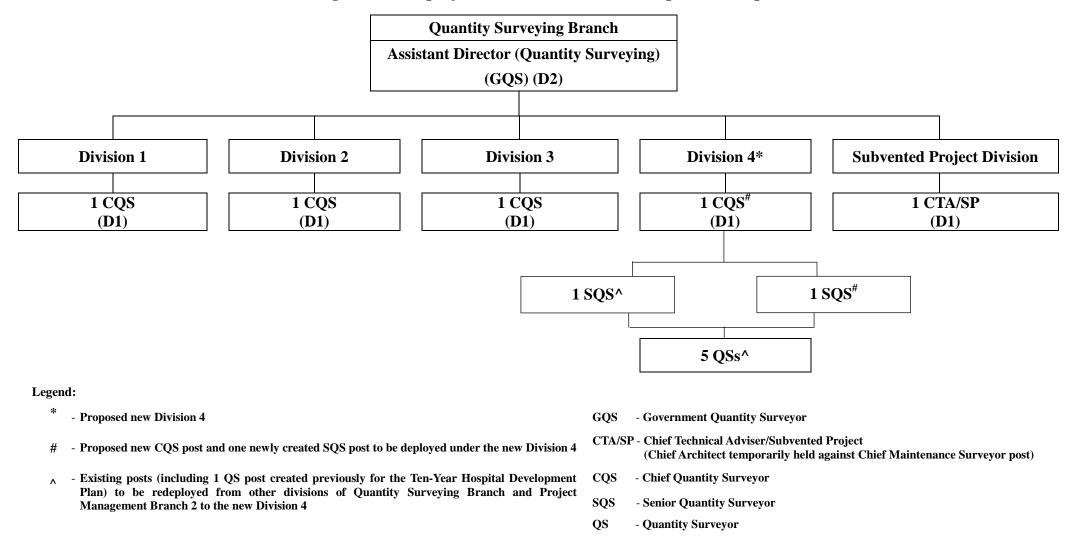
Rank : Chief Quantity Surveyor (D1)

Responsible to : Assistant Director (Quantity Surveying) (D2)

Main Duties and Responsibilities –

- (i) To steer, lead and oversee a new quantity surveying division and co-ordinate with policy bureaux in planning, monitoring the programme, setting and controlling the budget, devising the procurement and contract strategy, managing the costs, risks and value of healthcare projects under the Ten-year Hospital Development Plan (the 10-year HDP) at strategic level.
- (ii) To provide technical advice on cost control, project expenditure, procurement arrangement and contract administration of projects to policy bureaux and government departments in respect of planning and implementation of healthcare projects under the 10-year HDP.
- (iii) To oversee the preparation of technical feasibility studies and preliminary estimates of healthcare projects under the 10-year HDP.
- (iv) To oversee the preparation of tender documents for tendering and act as a member in the Tender Assessment Panel to carry out assessment on the tender proposals.
- (v) To oversee the preparation of cost estimate, cashflow forecast and programme in seeking funding from the Public Works Sub-committee and Finance Committee of the Legislative Council.
- (vi) To oversee financial details, cashflow and works progress of healthcare projects under the 10-year HDP during development and construction in accordance with the set standards and time frame, as well as the approved scope and budget.
- (vii) To act as the Surveyor, Director's Representative, and Overseer in the building contract, consultancy agreement, entrustment agreement, and monitor the performance of contractors and consultants as appropriate for Schedule 1 hospital projects under the 10-year HDP.
- (viii) To oversee the finalisation of project account for the completed healthcare projects under the 10-year HDP after handover and commissioning of the facilities.

Proposed organisation chart for the new Division 4 under Quantity Surveying Branch, Architectural Services Department for handling healthcare projects under the Ten-Year Hospital Development Plan



Note: Existing CQS post of Chief Project Manager 102 under Project Management Branch 1, which is responsible for implementation of strategies and undertaking project management of schools, government offices, departmental quarters, data centre, etc., is not shown in this organisation chart of Quantity Surveying Branch.

Major Duties and Responsibilities of the Existing Chief Quantity Surveyors of the Architectural Services Department (ArchSD)

Currently, there is a total of four Chief Quantity Surveyor (CQS) posts in ArchSD and their respective work portfolio are detailed as follows –

- 1. CQS in Division 1 of Quantity Surveying Branch (QSB), titled CQS/1, is responsible for the provision of quantity surveying services for capital works projects such as government offices, joint-user buildings, schools, judiciary buildings, data centre, vehicle examination centre, etc. as well as provision of contractual advice, consultant management and other quantity surveying services.
- 2. CQS in Division 2 of QSB, titled CQS/2, is responsible for the provision of quantity surveying services for capital works projects such as police stations, fire station complex, airport facilities under the Three-Runway System, boundary crossing facilities, departmental quarters, correctional institutions, public mortuary, healthcare projects (other than projects under the Ten-year Hospital Development Plan to be transferred to Division 4), residential care home for the elderly complex, etc. as well as provision of advisory services on estimates, cost and other quantity surveying services.
- 3. CQS in Division 3 of QSB, titled CQS/3, is responsible for the provision of quantity surveying services for capital works projects such as leisure, sports and cultural facilities, columbarium and crematorium, markets, etc. as well as all facilities upkeep works under maintenance term contracts, minor works projects and fitting-out projects.
- 4. CQS in Project Management Branch 1, titled Chief Project Manager 102, is responsible for implementation of strategies and undertaking project management of schools, government offices, departmental quarters, data centre, etc. of various scale and complexity from feasibility study, design development, public consultation through District Council and Legislative Council, contract administration to handover to users. He/She is also responsible for providing professional advisory services on funding and procurement arrangement, cost estimation, contractual issues, etc. to the policy bureaux and client departments.

Workflow for Delivery of a Capital Works Project under the Ten-Year Hospital Development Plan (10-year HDP)

The 10-year HDP covers the redevelopment or expansion of 11 hospitals, construction of a new acute hospital, three community health centres and one supporting services centre for the Hospital Authority (HA). The Architectural Services Department (ArchSD) is the vote controller of all these healthcare projects while the Food and Health Bureau assumes an overall policy role in overseeing the delivery of the 10-year HDP. The division of projects between ArchSD and HA to serve as the works agent is set out below –

Works Agent					
By ArchSD	Ву НА				
Redevelopment of Queen Mary Hospital (Phase 1)	New Acute Hospital at Kai Tak Development Area	Redevelopment of Kwong Wah Hospital			
Redevelopment of Kwai Chung Hospital	Redevelopment of Prince of Wales Hospital (Phase 2) (Stage 1)	Expansion of United Christian Hospital			
Community Health Centre in North District	Extension of Operating Theatre Block for Tuen Mun Hospital	Expansion of Haven of Hope Hospital			
Community Health Centre in Shek Kip Mei	Expansion of North District Hospital	Redevelopment of Grantham Hospital, Phase 1			
Community Health Centre in ex-Mong Kok Market Site	Expansion of Lai King Building in	Redevelopment of Our Lady of Maryknoll			
Hospital Authority Supporting Services Centre	Princess Margaret Hospital	Hospital			

- 2. Being the vote controller of all healthcare projects under the 10-year HDP, ArchSD has the responsibility to ensure government funds are spent in a cost-effective manner on the projects. The proposed Chief Quantity Surveyor (CQS) will assist the vote controller in providing professional services on cost management, devising procurement and contract strategy, as well as risk and value management in the delivery of the 10-year HDP.
- 3. ArchSD is also the works agent of projects such as Redevelopment of Queen Mary Hospital (Phase 1) and Kwai Chung Hospital as set out in the left column of the above table. As the works agent of those projects, ArchSD is responsible for building design and engagement of works contractors to implement the projects. The proposed CQS will lead a new division and provide professional services on budgeting, cost control, project planning, procurement, tendering, contract administration, risk management, value management, dispute resolution, etc. in the delivery of these projects.
- 4. For projects such as Redevelopment of Kwong Wah Hospital and Expansion of United Christian Hospital as set out in the middle and right columns of the above table, HA is the works agent who is responsible for building design and engagement of works contractors to implement the projects. ArchSD acts as the technical adviser for these projects and is responsible for ensuring that these projects conform to government requirements. The proposed CQS will oversee the delivery of these projects through leading and steering the professional team in quantity surveying aspect to provide timely and professional technical advices, with due consideration of the value for money and compliance with the government recognised standards in respect of procurement, design and construction.
- 5. The general workflow for delivery of a capital works project under the 10-year HDP and the working relationship between ArchSD and HA are set out in the flow chart below. The proposed CQS will provide dedicated directorate support to ArchSD which plays the role of vote controller, works agent and technical adviser for the 10-year HDP.

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