

**For discussion
on 24 April 2018**

Legislative Council Panel on Health Services

**Proposed Creation of a Supernumerary Post of Chief Quantity Surveyor
in the Architectural Services Department**

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 intensive directorate support in the quantity surveying discipline so as provide holistic steer and oversight at the design, planning and implementation stage. The existing directorate manpower in quantity surveying is unable to cope with the drastic increase in workload.

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 duration of the post is about nine years from 2018-19 to 2026-27.

BACKGROUND AND JUSTIFICATIONS

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 bed spaces, 94 additional operating theatres, increased capacity of specialist outpatient clinics and general outpatient clinics, and other additional related hospital facilities. Projects that have already been 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 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 2018 to 2020 (i.e. a 720% increase).

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.

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.

Need to Strengthen Directorate Support in the Quantity Surveying Field

6. The existing staff resources in ArchSD have already been fully stretched without any spare capacity to take up new projects, nor to cope with the substantial increase in workload in the coming years. The workload relating to handling Schedule 1 hospital projects by ArchSD are currently shared among three teams of Quantity Surveyors (Qs) which are led by three Senior Quantity Surveyors (SQSs) in the QSB and Project Management Branch 2 (PMB2) of ArchSD. While these three quantity surveying teams also have to handle other large scale non-hospital 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 Qs 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 directorate officers in these QS teams are fully occupied with overseeing a wide range of government capital works projects and have no spare capacity to undertake additional projects under the 10-year HDP without affecting the progress of the other projects.

7. Since the earmarking of capital funding for the implementation of the 10-year HDP in 2016, as far as the quantity surveying discipline is concerned, only one additional time-limited non-directorate post has been created in the ArchSD for handling hospital projects. Delivery of the hospital projects is currently at the expense of other non-hospital projects and the progress of other non-hospital 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.

8. Quantity surveyors play the important role of providing professional services on budgeting, cost control, project planning, tendering, contractual advice, risk management, value engineering, dispute resolution, etc. in the delivery of capital works projects. There is a lack of dedicated directorate support in the quantity surveying discipline in ArchSD to steer and oversee the healthcare projects holistically under the 10-year HDP through a three-pronged strategic approach (by cost management³, devising procurement and contract strategy⁴, as well as risk and

³ Cost management involves cost planning, estimating, budgeting and controlling (through cashflow monitoring) so as to keep project costs within the approved budget.

value management⁵) to ensure synergy and consistency of management, smooth project implementation and secure sound budget control within the cost cap of \$200 billion.

9. It is pivotal to strengthen the directorate support in ArchSD to ensure 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 coordination 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 directorate quantity surveyor post with extensive experience and professional knowledge on cost, procurement and contractual aspects to oversee and monitor the programme, cashflow and contract 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

⁴ 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.

⁵ 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.

\$200 billion. Furthermore, 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. The input of ArchSD will be required in the planning process.

Establishing a New Division under Quantity Surveying Branch for Healthcare Projects

11. The proposed supernumerary CQS post in the QSB will report to the Assistant Director (Quantity Surveying) of ArchSD. The post holder will head a new Division in the 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 quantity surveying division, coordinating 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 oversee the delivery of the Schedule 2 hospital projects under the purview of SPD through leading and steering the professional team in quantity surveying aspect to provide 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 design and construction. The job description of the proposed CQS post is at **Enclosure 1**.

13. The duration of the proposed CQS post is about nine years from

2018-19 to 2026-27 in order to assist in taking forward the various healthcare projects under the 10-year HDP up to 2026-27.

14. One SQS and four Qs will be redeployed from other Divisions of QSB and PMB2 to the new division to be headed by the proposed CQS to rationalise the chain of command and enhance the delivery of healthcare projects. In addition, one existing QS post created for 10-year HDP and one new time-limited SQS post to be created 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 is at **Enclosure 2**.

ALTERNATIVES CONSIDERED

15. We have critically examined whether the duties of the proposed 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 third-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**.

FINANCIAL IMPLICATIONS

16. The proposed creation of the CQS (D1) post will require an additional

notional annual mid-point salary 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 provisions in the 2018-19 draft Estimates to meet the cost of this proposal and will reflect the resources required in the Estimates of subsequent years.

ADVICE SOUGHT

19. Members are invited to comment on the staffing proposal for which we plan to seek the necessary funding approval from the Legislative Council.

**Food and Health Bureau
Architectural Services Department
April 2018**

**Job Description of the Proposed
Chief Quantity Surveyor Post**

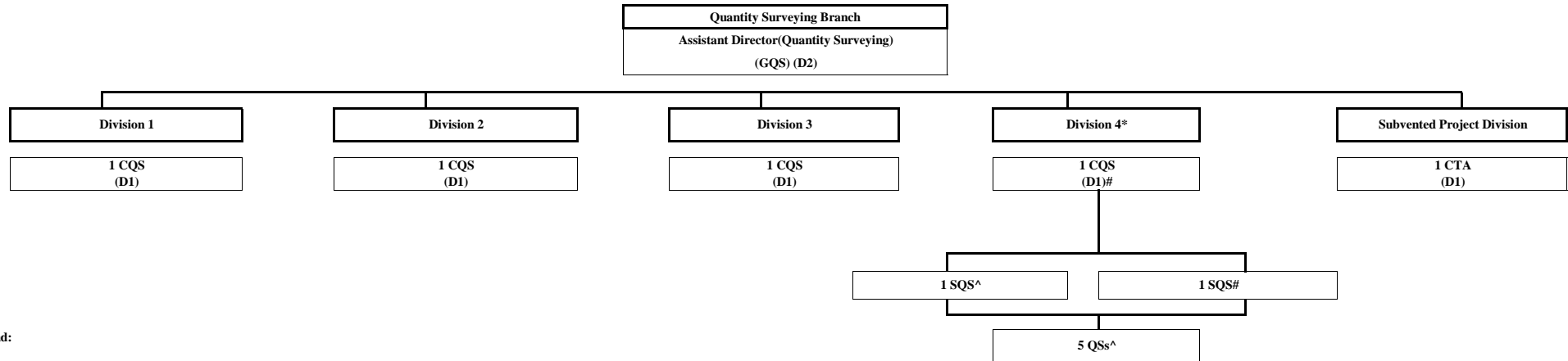
Rank : Chief Quantity Surveyor (D1)

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

Main Duties and Responsibilities –

1. To oversee, lead and steer quantity surveying division and coordinate 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 at strategic level.
2. 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.
3. To oversee the preparation of technical feasibility studies and preliminary estimates of healthcare projects.
4. 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.
5. 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.
6. To oversee financial details, cashflow and works progress of healthcare projects during development and construction in accordance with the set standards and time frame, as well as the approved scope and budget.
7. 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.
8. To oversee the finalisation of project account for the completed healthcare projects after handover and commissioning of the facilities.

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



Legend:

* Proposed new Division 4

Proposed new CQS and SQS posts to be created under the new Division 4

^ Existing posts (including 1 QS post created previously for the Ten-Year Hospital Development Plan) to be redeployed from other Divisions of Quantity Surveying Branch and Project Management Branch 2 to the new Division 4

GQS Government Quantity Surveyor

CTA Chief Technical Adviser
(Chief Architect temporarily held against Chief Maintenance Surveyor post)

CQS Chief Quantity Surveyor

QS Quantity Surveyor

SQS Senior Quantity Surveyor

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 the organisation chart of Quantity Surveying Branch.

**Major Duties and Responsibilities of
The Existing Chief Quantity Surveyors of the
Architectural Services Department**

1. Chief Quantity Surveyor, Division 1, Quantity Surveying Branch is responsible for the provision of quantity surveying services for capital work projects such as government offices, joint-user buildings, schools, judiciary buildings, departmental quarters, data centre, vehicle examination centre, etc. as well as provision of contract advice, consultant management and other quantity surveying matters.
2. Chief Quantity Surveyor, Division 2, Quantity Surveying Branch is responsible for the provision of quantity surveying services for capital work projects such as police stations, fire station complex, airport facilities under third-runway system, boundary crossing facilities, departmental quarters, correctional institutions, public mortuary, healthcare projects, residential care home for the elderly complex, etc. as well as provision of advisory services on estimates, cost and other quantity surveying matters.
3. Chief Quantity Surveyor, Division 3, Quantity Surveying Branch is responsible for the provision of quantity surveying services for capital work projects such as leisure, sports and cultural facilities, columbarium and crematorium, markets, etc. as well as all facilities upkeeping works under maintenance term contracts, minor works projects and fitting-out projects.
4. Chief Project Manager 102, Project Management Branch 1 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 and handover to users. Also providing professional advisory services on funding and procurement arrangement, cost estimation, contractual issues, etc. to the policy bureaux and client departments.