



Briefing on the 10-Year Hospital Development Plan

15 September 2016



Programme

1. Welcome Message

Dr S V Lo

Director, Strategy & Planning Division

2. Introduction of the 10-year Hospital Development Plan

Mrs Sheila Mair

Senior Manager (Planning & Development)

Capital Planning Department, Strategy & Planning Division

3. Delivery of the 10-year Hospital Development Plan

Mr Andrew Wong

Chief Project Manager (Capital Projects)

Capital Planning Department, Strategy & Planning Division

4. Q&A



Briefing on the 10-Year Hospital Development Plan

15 September 2016



The 2016 Policy Address



二零一六年施政報告 2016 Policy Address





二零一六年施政報告
2016 Policy Address

To use **\$200 billion**
to implement various
hospitals projects in the
next 10 years



Introduction

to the 10-Year
Hospital
Development
Plan





Portfolio of work

1

Construction of New Acute Hospital at Kai Tak Development Area

11

Redevelopment / Expansion of existing hospitals

Including:

Queen Mary Hospital (Phase 1)

Prince of Wales Hospital (Phase 2, Stage 1)

Kwong Wah Hospital

United Christian Hospital

Operating Theatre Block for Tuen Mun Hospital

Haven of Hope Hospital

Grantham Hospital (Phase 1)

Kwai Chung Hospital

Our Lady of Maryknoll Hospital

Lai King Building in Princess Margaret Hospital

North District Hospital



Portfolio of work

- 1** Construction of New Acute Hospital at Kai Tak Development Area
- 11** Redevelopment / Expansion of existing hospitals
- 3** Construction of new Community Health Centres
- 1** Construction of new Supporting Services Centre



Deliverables

~5,000

additional hospital bed spaces

90+

additional Operating Theatres

~430,000

additional annual capacity of
general outpatient clinic
attendances

~2,800,000

additional annual capacity of
specialist outpatient clinic
attendances



Portfolio of Work



New Acute Hospital

at Kai Tak Development Area, Kowloon City

Area ~ 500,000m² CFA

Scope of Works

- Construction of a new acute hospital at the Kai Tak Development Area with inpatient and ambulatory services of major specialties
 - Provision of 2,400 beds
 - Major acute services
 - Ambulatory services
 - A&E department
 - Operating theatre
 - Oncology centre
 - Neuroscience centre





Portfolio

Redevelopment of

Queen Mary Hospital – Phase 1

Southern District

Area ~ 135,000m² CFA

Scope of Works

- Demolition of Clinical Pathology Building, University Pathology Building and Houseman Quarters
- Construction of a new hospital block to accommodate:
 - A&E department
 - Diagnostic radiology
 - Cardiac catheterization laboratories
 - Intensive care unit
 - In-patient wards for major specialties
- Provision of a new vehicular access point to the new block and a roof helipad





Portfolio

Redevelopment of

Prince of Wales Hospital - Phase 2 (Stage 1)

Sha Tin

Area ~ 190,000 m² CFA

Scope of Works

- Demolition of 4 Staff Quarters Blocks, Nursing School Lecture Theatre and Hospital old buildings
- Construction of a new in-patient extension block
 - Provision of around 450 additional beds
 - Major acute services
 - Additional operating theatres
 - Expanded radiology
 - Cardiac catheterization laboratories





Portfolio

Redevelopment of

Kwong Wah Hospital

Yau Tsim Mong

Area ~ 270,000m² CFA

Scope of Works

- Demolition of all existing buildings in phases except Tsui Tsin Tong Out-patient Building and Tung Wah Museum
- Enhancement of the museum setting
- Construction of a new hospital complex for expansion of facilities including:
 - Major ambulatory care centre
 - 350 additional beds
 - Expanded specialist out-patient department
 - Additional operating theatres
 - Expanded diagnostic and radiology services





Portfolio

Expansion of United Christian Hospital Kwun Tong

Area ~ 200,000m² CFA

Scope of Works

- Demolition of 3 existing blocks and Block P (Low)
- Construction of a new ambulatory block
 - Expanded specialist out-patient department
 - A new oncology centre
- Extension and renovation of Block S for expansion of facilities including:
 - Additional 560 beds
 - Additional operating theatres
 - Intensive care unit





Portfolio

Extension Operating Theatre Block for

Tuen Mun Hospital

Tuen Mun

Area ~ 34,000m² CFA

Scope of Works

- Construction of a new block adjacent to the existing Operating Theatre Block to accommodate:
 - 20 x OTs and 2 x Delivery OTs
 - Expanded A&E and radiology departments
 - Day surgery / delivery suites
 - Intensive care unit and isolation facilities
 - Expanded Central Sterile Supplies Department





Portfolio

Redevelopment of

Grantham Hospital - Phase 1

Southern District

Area ~ 93,000m² CFA

Scope of Works

- Demolition of Senior Staff Quarters, Nurse Quarters Block 1 and Block 2
- Construction of a new block to accommodate
 - In-patient services
 - Oncology centre
 - Ambulatory care centre
 - Research facilities
 - Ancillary and other services





Portfolio

Redevelopment of

Kwai Chung Hospital

Kwai Tsing

Area ~ 160,000m² CFA

Scope of Works

- Phased demolition of existing hospital buildings
- Construction of a new hospital campus with inpatient wards and rehabilitation facilities for delivery of a full range of psychiatric services
- Provision of 1,000 beds upon completion of the project





Portfolio

Redevelopment of

Our Lady of Maryknoll Hospital

Wong Tai Sin

Area ~ 48,000 m² CFA

Scope of Works

- Redevelopment of North and East wings into a new block
- Refurbishment of the Out Patient Building
- Provision of:
 - Inpatient care services
 - Ambulatory services
 - Day surgery services
 - Endoscopy unit and electro-diagnostic unit
 - Cardiac diagnostic & care centre
 - Renal dialysis centre





Portfolio

Expansion of

Lai King Building of Princess Margaret Hospital Kwai Tsing

Area ~ 60,000m² CFA

Scope of Works

- Construction of a new extension block
 - Provision of around 400 additional beds
 - Expansion of diagnostic radiology service
 - Provision of a geriatric day hospital with enhanced rehabilitation services





Portfolio

Expansion of North District Hospital Sheung Shui

Area ~ 100,000m² CFA

Scope of Works

- Expansion of the existing hospital
 - Provision of additional 600 beds
 - Increased capacity of specialist out-patient clinic attendances





Portfolio

Development of Community Health Centres

- Provision of general out-patient services, multi-disciplinary support services and patient empowerment services in a community setting

North District

Ex-Mong Kok Market Site

Shek Kip Mei





Summary

10-Years...

Portfolio

- 1** New Acute Hospital
- 11** Redeveloped / Expanded Hospitals
- 3** Community Health Centres
- 1** Support Services Centre

Complexity

Teaching Hospital – Community Hospital

Total CFA

~ 1.8 Million m²



Huge Opportunity

+

Huge Challenge

So how do we deliver it?



Delivery

of the
10-Year
Hospital Development
Plan



Background

Hospital Categorization

Hospital Authority Ordinance categorizes all Hong Kong hospitals into 2 broad categories:



Schedule 1

Hospitals Built on
Government Property

Examples:

Queen Mary Hospital

New Acute Hospital (Kai Tak)

Prince of Wales Hospital

Schedule 2

Hospitals Built on
Non-Government Property

Examples:

Kwong Wah Hospital

United Christian Hospital

Grantham Hospital



Delivery of the 10-Year Hospital Development Plan

Background

Historically

The procurement route and process would vary according to the hospital categories



Schedule 1

Hospitals Built on
Government Property



No

Yes



Schedule 2

Hospitals Built on
Non-Government Property



Capital Planning
Department
Hospital
Authority

Yes

No



Delivery of the 10-Year Hospital Development Plan

Hospital Development Plan

Works Agent

Projects

Schedule 1

Redevelopment of Queen Mary Hospital (Phase 1)

Redevelopment of Kwai Chung Hospital

Community Health Centre in North District

Community Health Centre in Shek Kip Mei & Ex-Mong Kok Market

Hospital Authority Supporting Services Centre in Tin Shui Wai

New Acute Hospital at Kai Tak Development Area

Redevelopment of Prince of Wales Hospital (Phase 2) (Stage 1)

Extension of Operating Theatre Block for Tuen Mun Hospital

Expansion of North District Hospital

Expansion of Lai King Building in Princess Margaret Hospital

Schedule 2

Redevelopment of Kwong Wah Hospital

Expansion of United Christian Hospital

Expansion of Haven of Hope Hospital

Redevelopment of Grantham Hospital, Phase 1

Redevelopment of Our Lady of Maryknoll Hospital



Delivery of the 10-Year Hospital Development Plan

Hospital Development Plan

Works Agent

Projects

By ArchSD

Redevelopment of Queen Mary Hospital (Phase 1)

Redevelopment of Kwai Chung Hospital

Community Health Centre in North District

Community Health Centre in Shek Kip Mei & Ex-Mong Kok Market

Hospital Authority Supporting Services Centre in Tin Shui Wai

By HA

New Acute Hospital at Kai Tak Development Area

Redevelopment of Prince of Wales Hospital (Phase 2) (Stage 1)

Extension of Operating Theatre Block for Tuen Mun Hospital

Expansion of North District Hospital

Expansion of Lai King Building in Princess Margaret Hospital

Redevelopment of Kwong Wah Hospital

Expansion of United Christian Hospital

Expansion of Haven of Hope Hospital

Redevelopment of Grantham Hospital, Phase 1

Redevelopment of Our Lady of Maryknoll Hospital

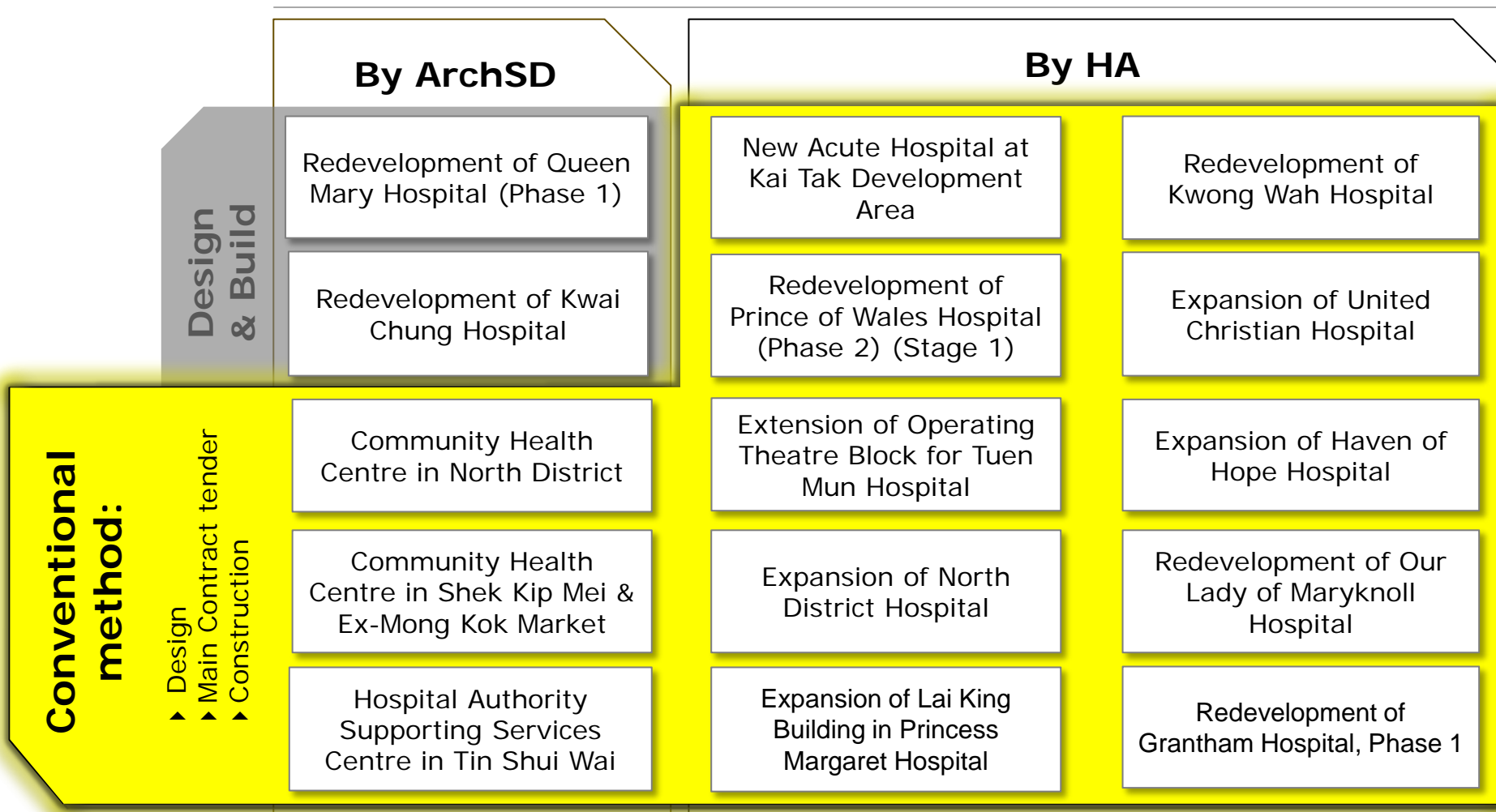


Delivery of the 10-Year Hospital Development Plan

Hospital Development Plan

Works Agent

Projects





Procurement Principles



Goal

- International Best Practice
- Innovative Designs
- Efficient and effective planning
- State-of-the-art technology

Process

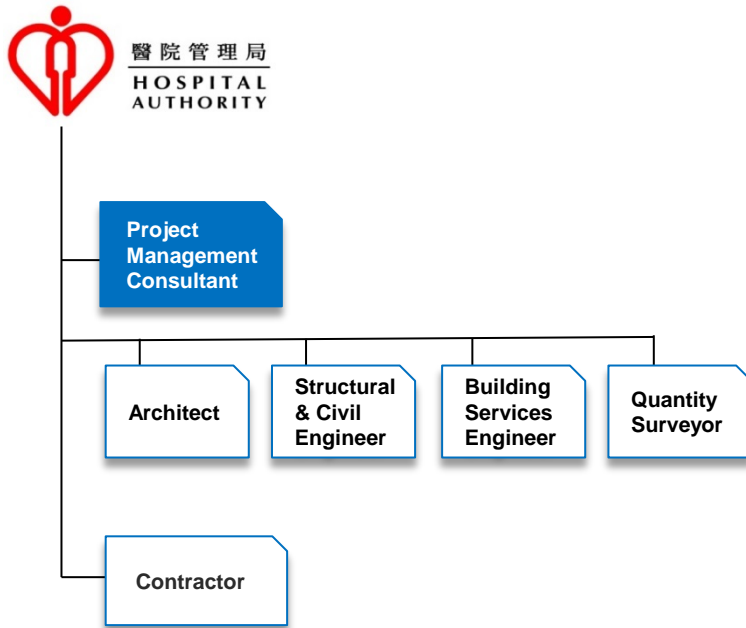
- Open and fair competition
- Probity and Ethics in procurement
- Align with government tendering procedures
- World Trade Organization Compliant



HA Procurement Routes

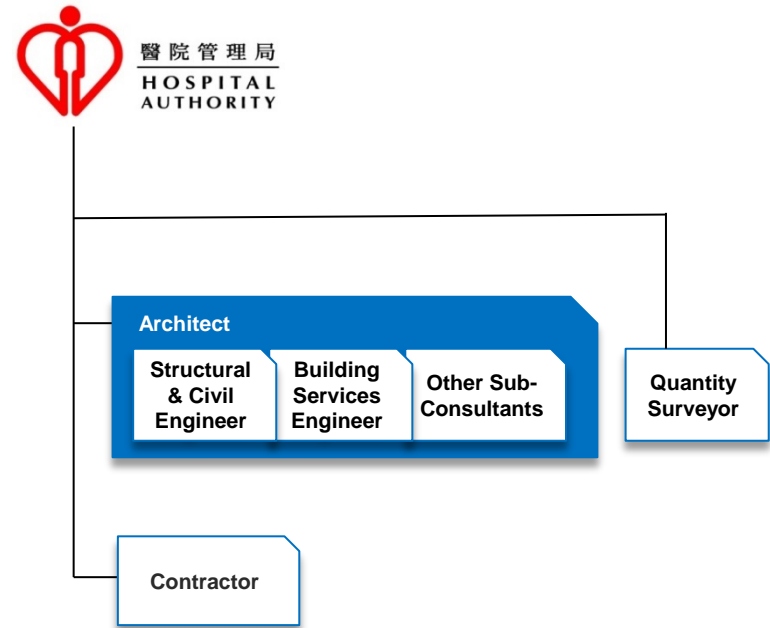


Projects procured in 2 routes



Route 1 [PMC Route]

- Appointment of Project Management Consultant
- Each consultant individually appointed
- Main Contractor directly appointed



Route 2 [Architectural Lead]

- Appointment of Architect as Lead Consultant by HA
- Sub-consultants are directly appointed by Architect
- Main Contractor directly appointed



Delivery of the 10-Year Hospital Development Plan

Hospital Development Plan

Works Agent

Projects

By ArchSD

Redevelopment of Queen Mary Hospital (Phase 1)

Redevelopment of Kwai Chung Hospital

Community Health Centre in North District

Community Health Centre in Shek Kip Mei & Ex-Mong Kok Market

Hospital Authority Supporting Services Centre in Tin Shui Wai

By HA

New Acute Hospital at Kai Tak Development Area

Redevelopment of Prince of Wales Hospital (Phase 2) (Stage 1)

Extension of Operating Theatre Block for Tuen Mun Hospital

Expansion of North District Hospital

Expansion of Lai King Building in Princess Margaret Hospital

Redevelopment of Kwong Wah Hospital

Expansion of United Christian Hospital

Expansion of Haven of Hope Hospital

Redevelopment of Grantham Hospital, Phase 1

Redevelopment of Our Lady of Maryknoll Hospital

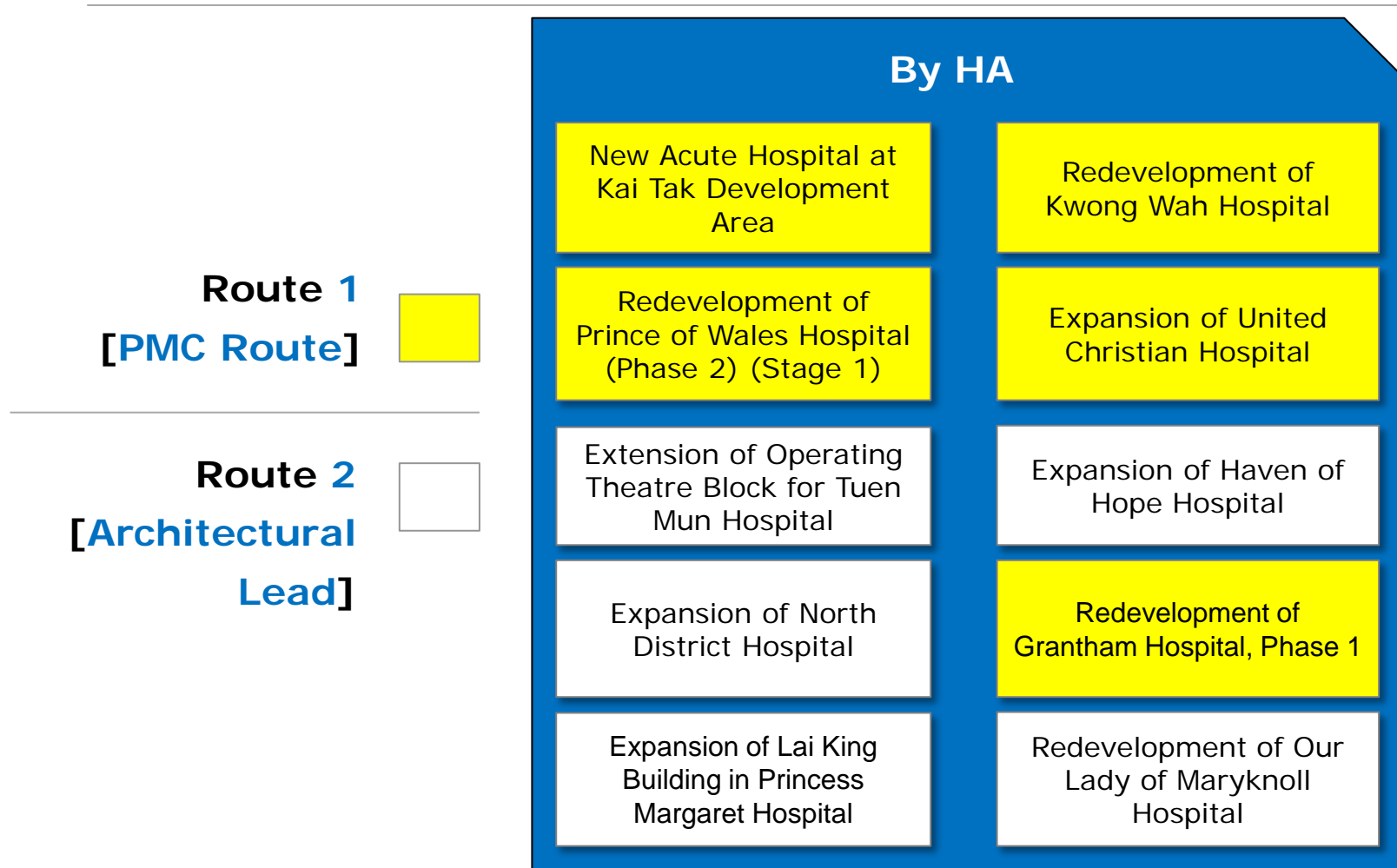


Delivery of the 10-Year Hospital Development Plan

Hospital Development Plan

Works Agent

Projects



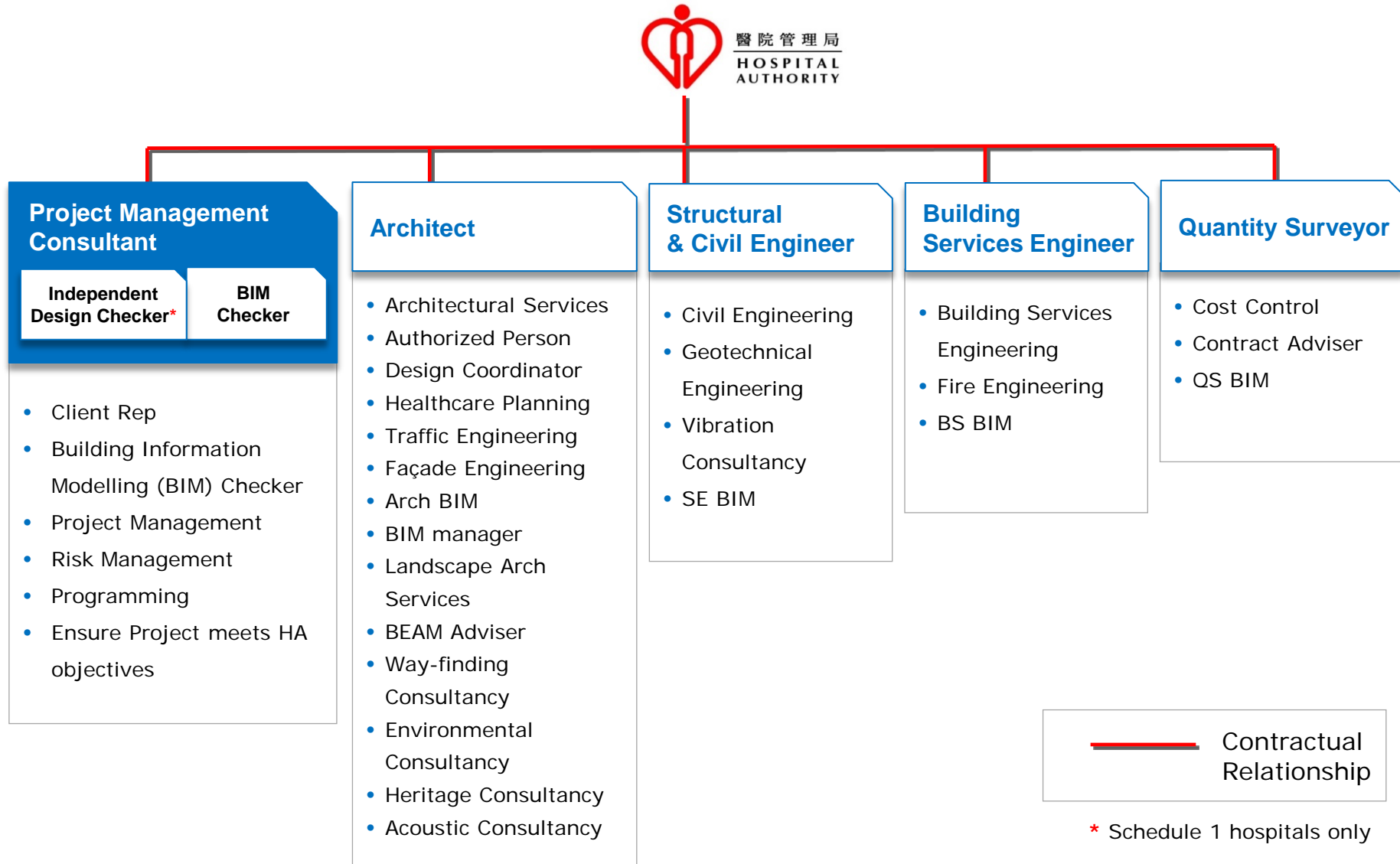


Procurement of Consultancy Services Under PMC

[Route 1]

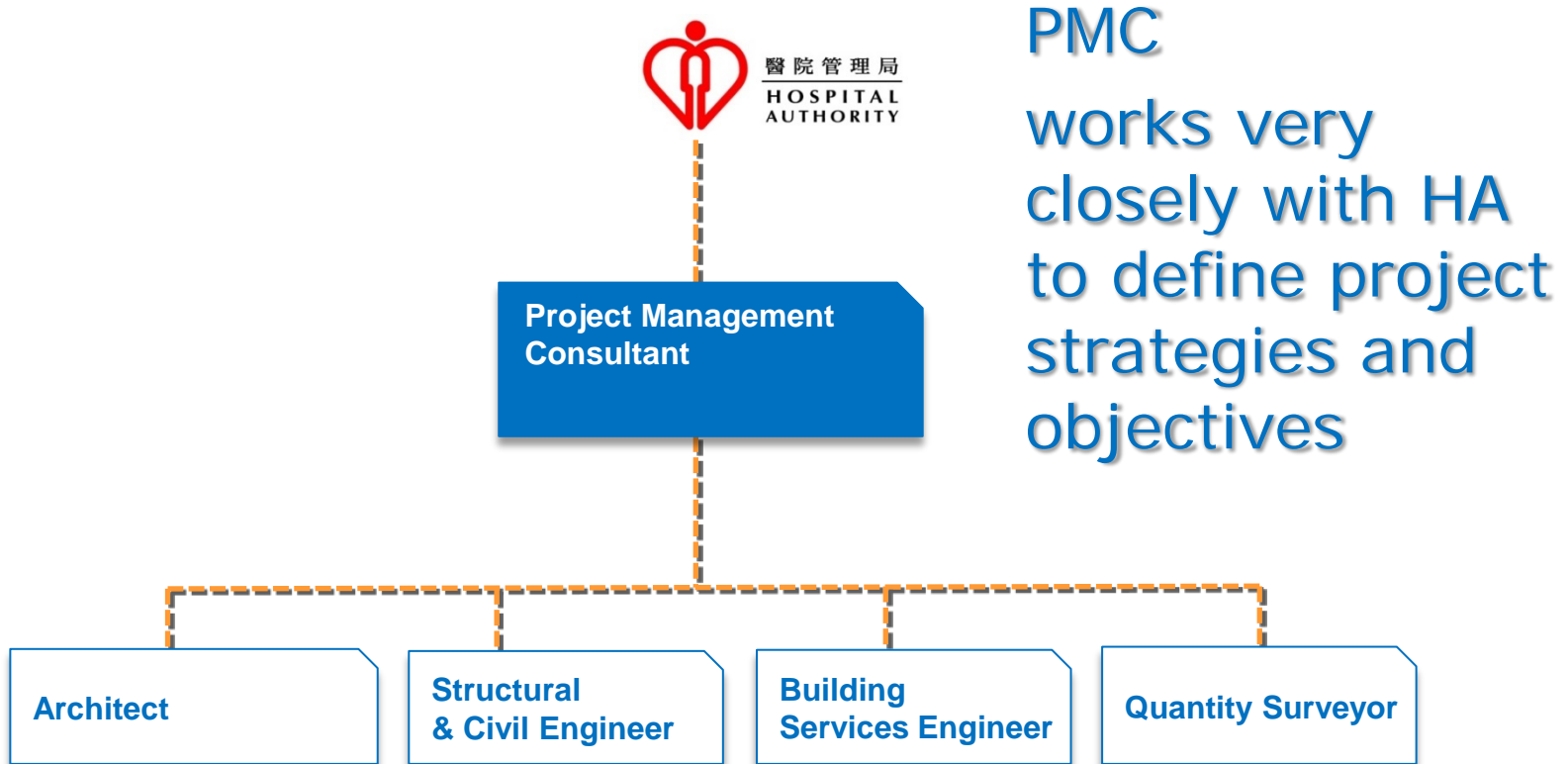


Contractual Relationship & Scope





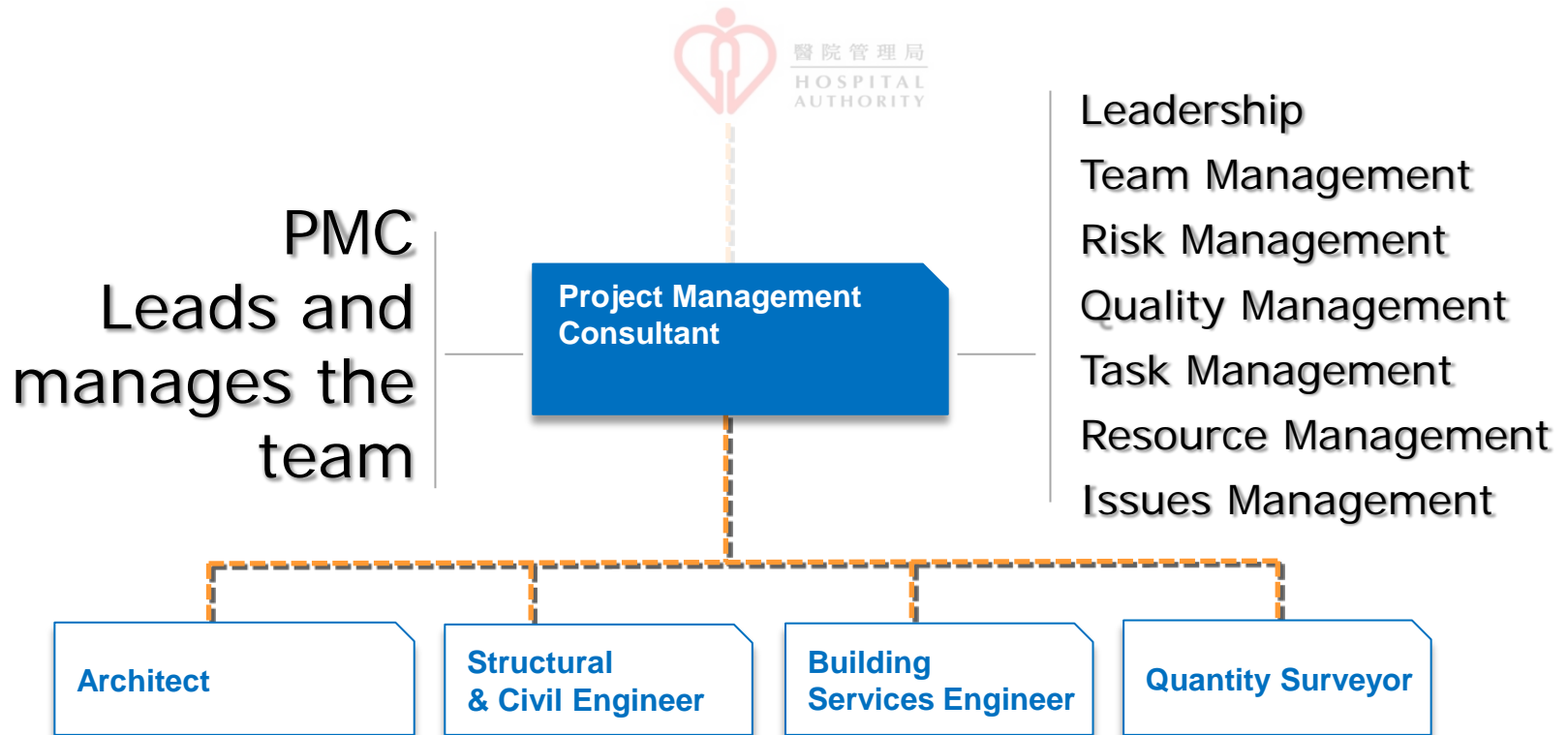
Functional Relationship



 Functional Relationship



Functional Relationship



Functional
Relationship



Introduction of

Building Information Modelling (BIM)



Consultancy

Goal

- To facilitate End Users engagement process
- To do spatial coordination to reduce clash and discrepancies
- To assist tender preparation & quantity takes off

Extent

- 3D model to allow clash analysis with approximate size, shape and location of major building components
- Anticipated Level of Details LOD 200/300

Main Contract

Goal

- Contractor develops tender BIM model for the use in construction
- Produce As-built BIM model for Facility Management



**Project Management
Consultant BIM Policy /
checker**

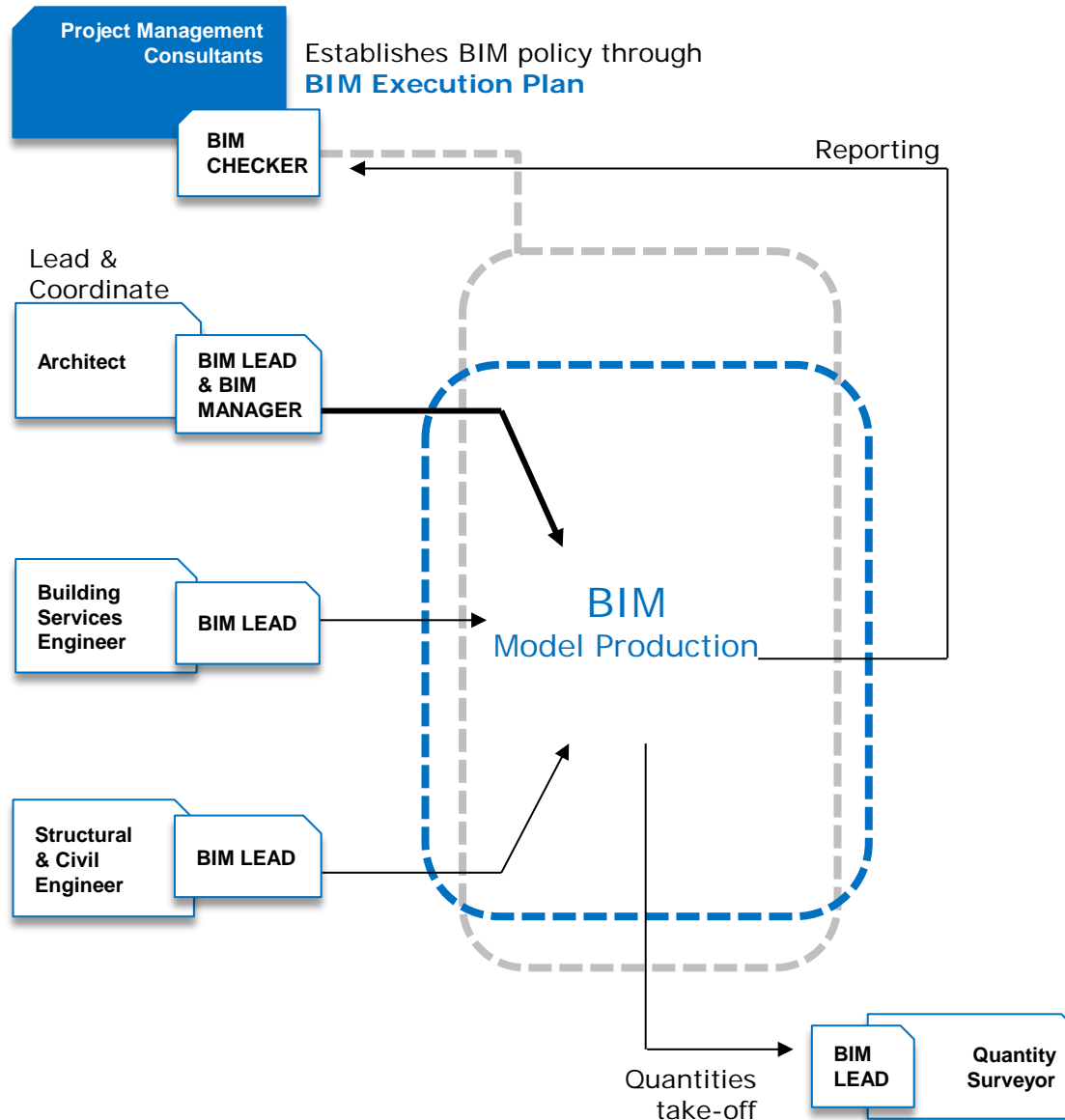
- Architect**
BIM Lead & BIM Manager

- ## Structural & Civil Engineer BIM Lead

- ## Building Services Engineer BIM Lead

- ## Quantities Surveyor BIM Lead

- Produce quantity takes off from model & drawings





Consultancy Tenders



Consultancy Tender Invitation

Project Management Consultant

- Open Tender
- For Schedule 1 Hospitals, Independent Design Checker must be a Band I Architectural Consultant on the List of the Architectural and Associated Consultants Selection Board (AACSB) to take up the role of Building Department/ Statutory Compliance
- Sub-consultants permitted ; Joint Venture not permitted



Design / Survey Consultants Tender Invitation

Architectural Consultant

**Quantity Surveying
Consultant**

**Structural & Civil
Engineering Consultant**

**Building Services
Consultant**

- Selective Tendering
- All Band I on the List of The Architectural and Associated Consultants Selection Board (AACSB)
- Sub-consultants permitted ;
Joint Venture not permitted



Multi-Disciplinary Tenderers

Multi-Disciplinary Tenderers

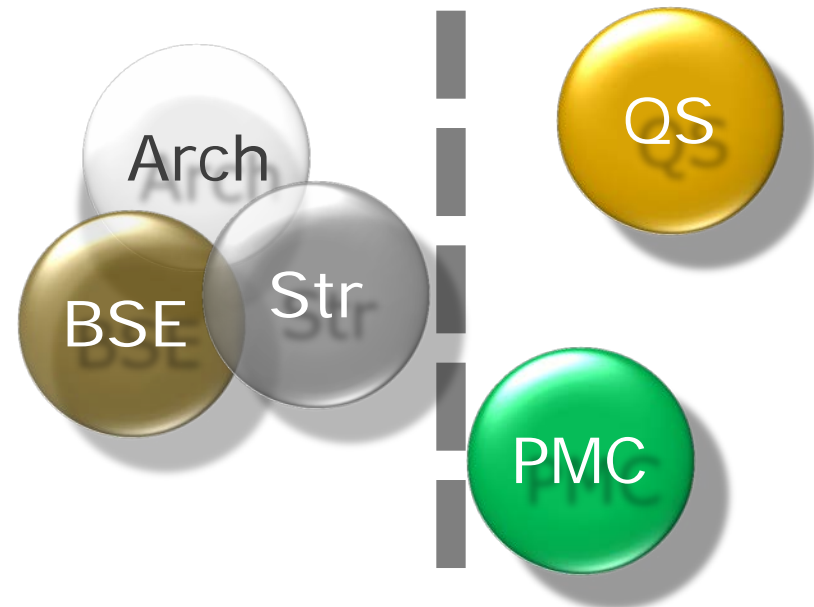
- Multi-disciplinary firms are permitted to tender and be awarded any or all of the following Agreements:

Architectural

Structural & Civil Engineering,
and

Building Services

- Firms awarded the following Agreements cannot be awarded any of the other agreements to avoid conflict of interest:
 - Project Management Consultant
 - Quantity Surveyor Agreement





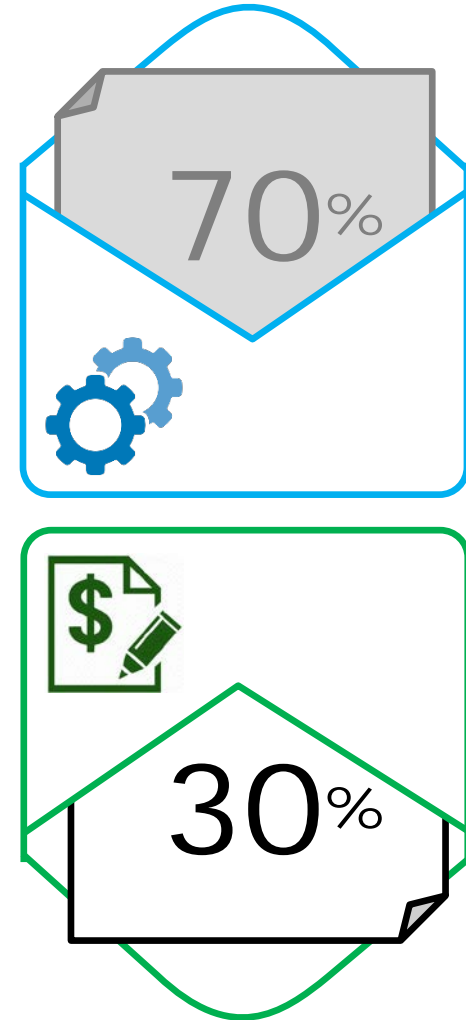
Consultancy Assessment



Two Envelopes

Two-envelope Assessment with Screening Criteria

- Screening Criteria:
(Only Tenders who pass the screening criteria will be considered for assessment)
- **70%** Technical Proposal
- **30%** Fee Proposal





Screening Criteria

Proven record of COMPLETING ONE

- Major hospital project (at a certain value) in Hong Kong or elsewhere / public or private sector

OR

- Building project of similar complexity and scale (at a certain value) in HK or elsewhere / public or private sector

Reflecting complex building services.

Example

Large Institutional Buildings
Residential Housing Blocks

Complex

YES NO

☒ ☐

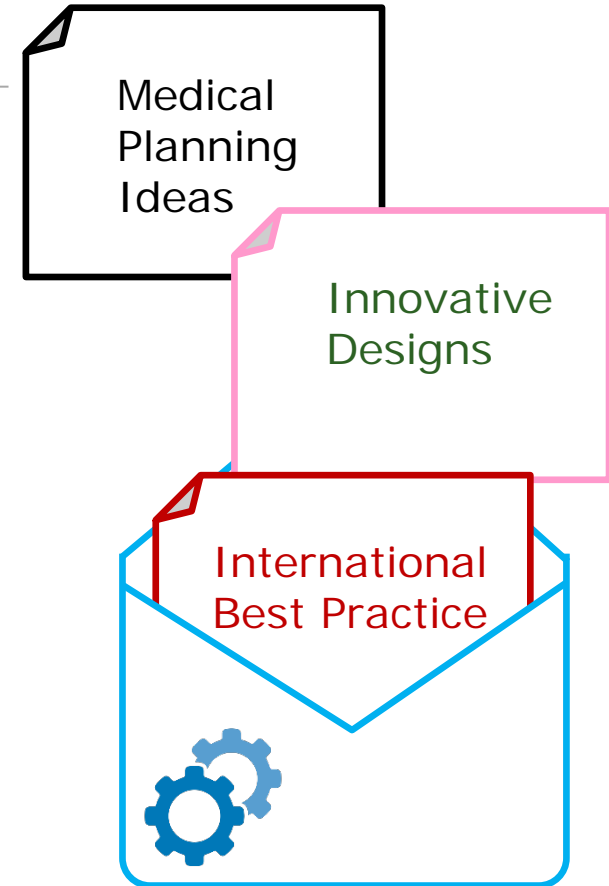
☐ ☒



Marking Scheme

70% Technical Proposal

- **Consultant's Experience**
Hong Kong, International
- **Response to the Brief**
Understanding of key objectives, identification of project constraints and innovative design
- **Approach to Cost Effectiveness and Sustainability**
Energy efficiency, green initiatives
- **Methodology and Program**
Efficient and effective planning, master program, risk management,
- **Staffing**
Staff experience, qualification and resourcing





Marking Scheme

70% Technical Proposal

Overall and sectional passing mark will be set

Those failing to pass Technical assessment will not be considered further



Scores

Agreements awarded to the conforming tender with the highest combined score calculated:

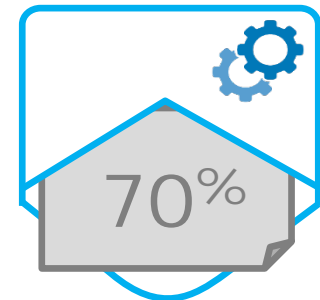
$$30 \times \frac{\text{The lowest tender fee}}{\text{The tender fee of the tenderer}}$$

+

$$70 \times \frac{\text{The tenderer's score}}{\text{The highest technical score}}$$



+





Procurement of Contractors for Main Contracts



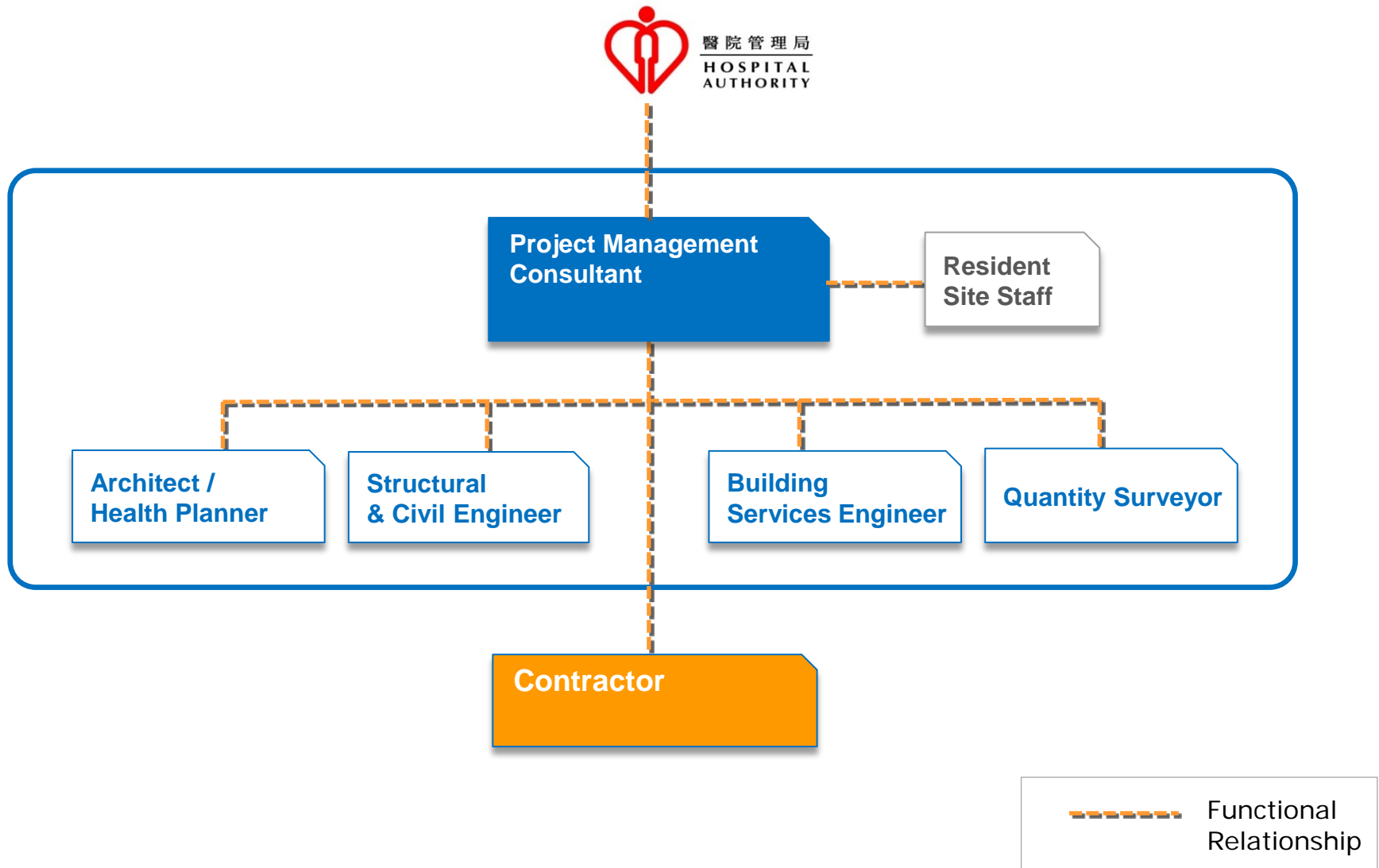
Contractual Relationship



Contractual
Relationship



Functional Relationship





Tender Invitation

Main Contractor

- Selective Tendering
- Normally Confirmed Group C of Category of Buildings on the List of Approved Contractors for Public Works published by DEVB
- Joint Venture permitted
(must have leader with major share holding)



Contractors Tenderer Assessment

Formula Approach with Screening Criteria

- **60%** Price
- **40%** Past Performance



Screening Criteria

Proven record of **COMPLETING ONE**

- Major hospital project (at a certain value) in Hong Kong or elsewhere / public or private sector

OR

- Building project of similar complexity and scale (at a certain contract value) with 20% value in building service in HK or elsewhere

AND

- The tenderer or his proposed specialist sub contractors possess all licenses, permits and other authorization required to perform the specialist works in accordance with all applicable laws and regulations



Marking Scheme – Formula Approach

- **40%** Past Performance

Performance Score:

Both performance and safety rating retained by:

DEVB (the latest score), *and*

HA (the latest available score under the same category will be considered on equal basis)

- **60%** Price (Lump Sum based on Bill of Quantities)

$$60 \times \frac{\text{the lowest Tender Price among those conforming Tenders}}{\text{the Tender Price of the Tenderer}} + 40 \times \frac{\text{the Tenderer's performance score}}{\text{the highest performance score among those conforming Tenders}}$$

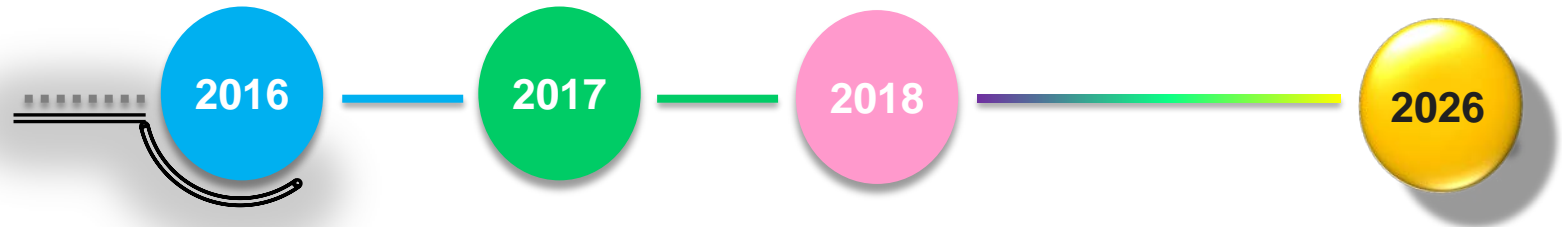


Tentative Tender Invitation Dates



Tentative Tender Invitation Dates

Timeline



Planned for 2016

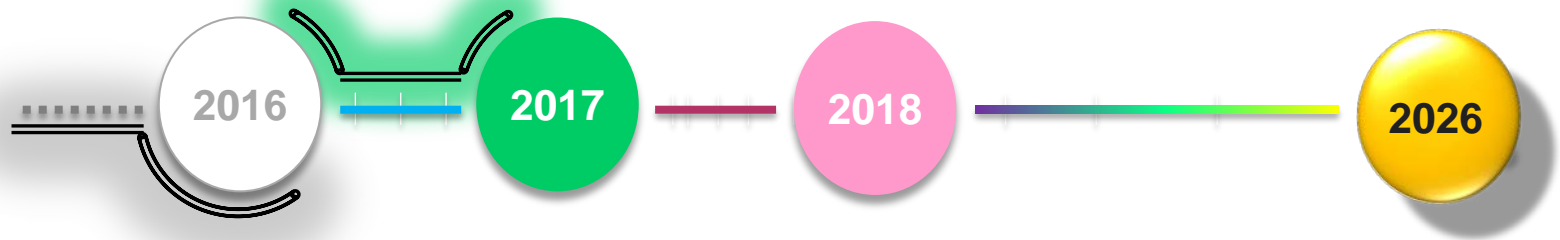
Consultancy

- **New Acute Hospital (Kai Tak)**
Consultancy Agreements &
Preparatory Works



Tentative Tender Invitation Dates

Timeline



Planned for 2017

Consultancy

- Prince of Wales Hospital (Stage 1, Phase 2)
Consultancy Agreements & Preparatory Works

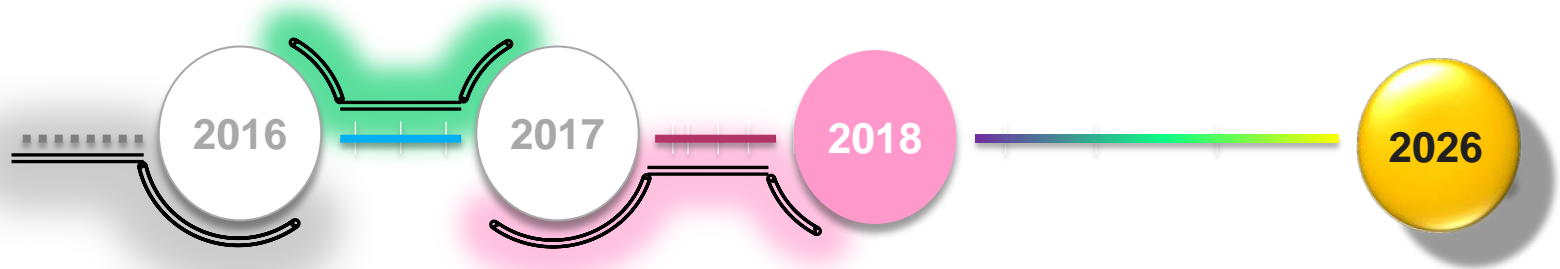
Works

- Queen Mary Hospital
Design & Build Main Contract
- Tuen Mun Hospital Operating Block
Main Works
- New Acute Hospital (Kai Tak)
Foundation Works



Tentative Tender Invitation Dates

Timeline



Planned for 2018

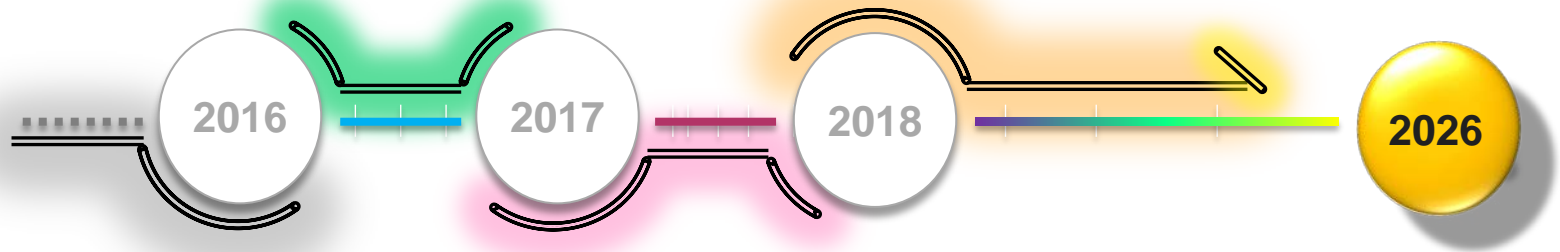
Works

- Kwong Wah Hospital (Phase 1)
Superstructure Works
- United Christian Hospital (Ambulatory
Block and Block S Extension)
Superstructure Works



Tentative Tender Invitation Dates

Timeline



Beyond 2018

Consultancy

- **Grantham Hospital**
Consultancy Agreements &
Preparatory Works
- **Our Lady of Maryknoll Hospital**
Consultancy Agreements &
Preparatory Works
- **North District Hospital**
Consultancy Agreements &
Preparatory Works

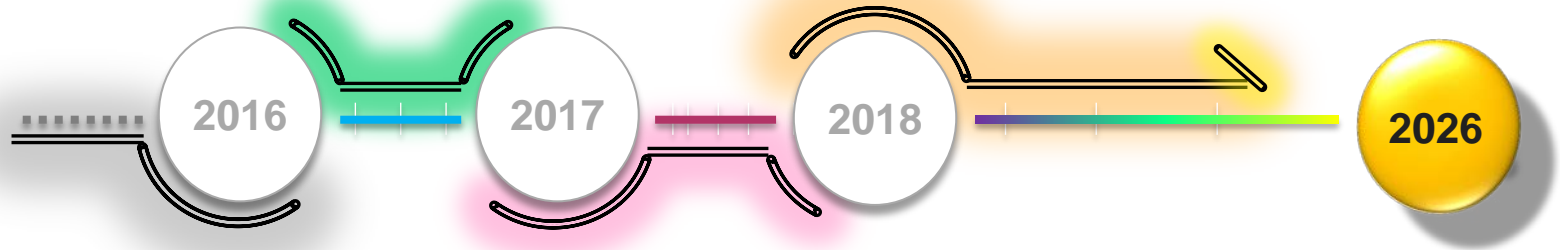
Works

- **Grantham Hospital (Phase 1)**
Demolition, site formation and
foundation works
- **Grantham Hospital (Phase 1)**
Superstructure works
- **Kwong Wah Hospital (Phase 2)**
Demolition, site formation,
foundations and superstructure
works
- **Lai King Building in Princess
Margaret Hospital**
Main works



Tentative Tender Invitation Dates

Timeline



Beyond 2018

Works...continued

- New Acute Hospital (Kai Tak)
Main works
- Our Lady of Maryknoll Hospital
Substructure works
- Our Lady of Maryknoll Hospital
Superstructure works
- North District Hospital
Main works
- Prince of Wales Hospital
(Stage 1, Phase 2)
Substructure works
- Prince of Wales Hospital
(Stage 1, Phase 2)
Superstructure works
- United Christian Hospital
(Blocks P & S)
Main works



Conclusion

- Hospital Authority Hospital 10-year Development Plan information available on:

<http://www.ha.org.hk>

- You can communicate with the Hospital Authority on the 10-Year Hospital Development Plan via email:

ha10yrhdp@ha.org.hk

- Further tender briefings will be arranged
- Today's presentation will be uploaded to HA Website
- Monitor the Hospital Authority's website for exact tender notices



Q & A

Please clearly declare in English your:

1. Name
2. Company
3. Question



Thank you &
good luck!