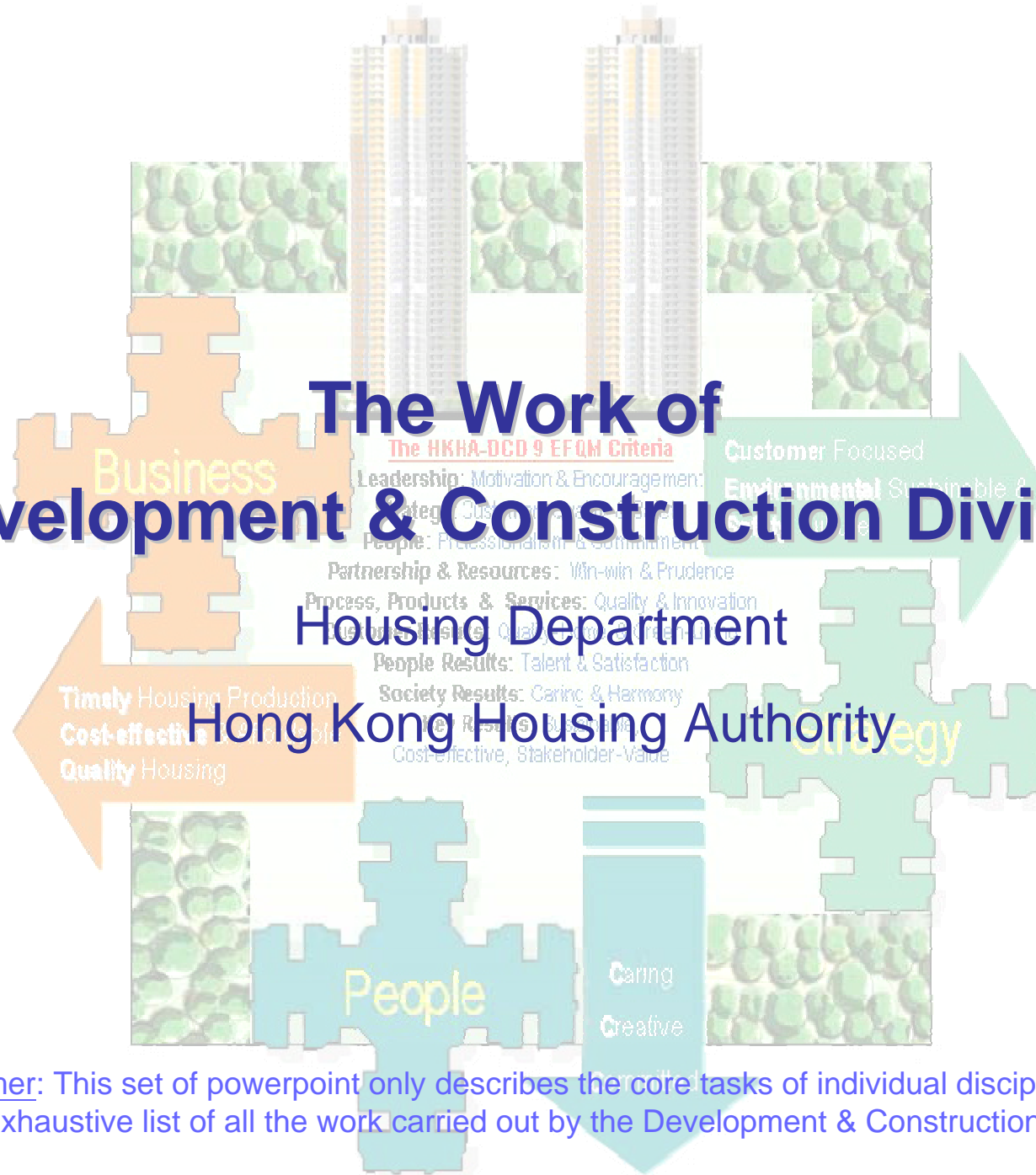


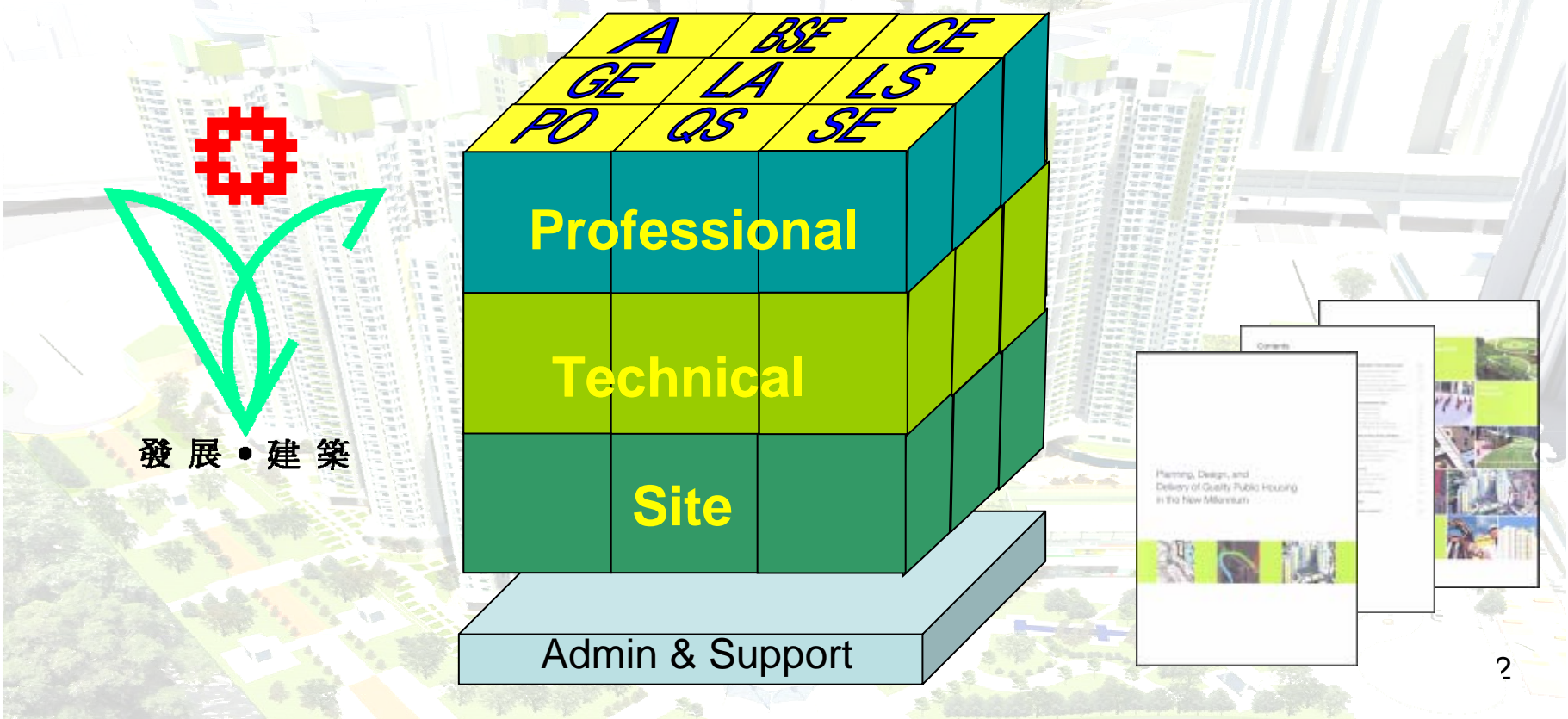
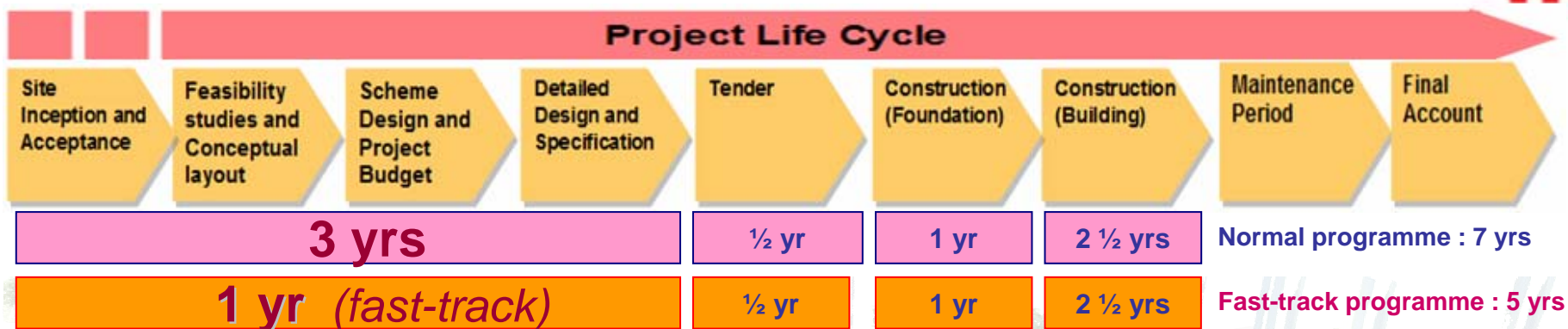
# The Work of Development & Construction Division



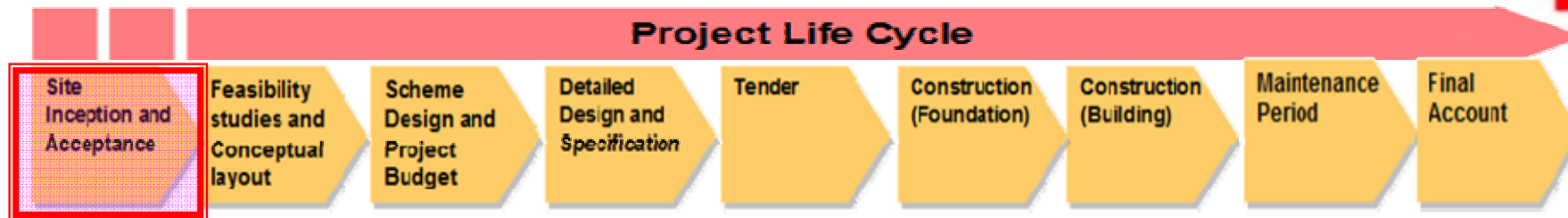
Disclaimer: This set of powerpoint only describes the core tasks of individual disciplines. It is not an exhaustive list of all the work carried out by the Development & Construction Division.

# The Work of Development & Construction Division

## - Introduction



# The Work of Development & Construction Division



**Planning**

- Site search
- Planning requirements
- Site layout study
- Site acceptance

**Architectural**

- Site potential studies & design
- Preliminary cost estimates

**Building Services**

- Preliminary BS study

**Civil Engineering**

- Engineering study on infrastructure
- Preliminary assessments (traffic, air quality, noise, drainage, etc.)

## 1. Site Inception & Acceptance

- Identify sites for public housing development
- Include the earmarked sites into the public housing programmes



**Geotechnical Engineering**

- Ground assessment for site development potential
- Geotechnical constraints assessment
- Geotechnical study.

**Landscape Architectural**

- Preliminary tree survey & assessment

**Land Surveying**

- Topographic survey & land status check

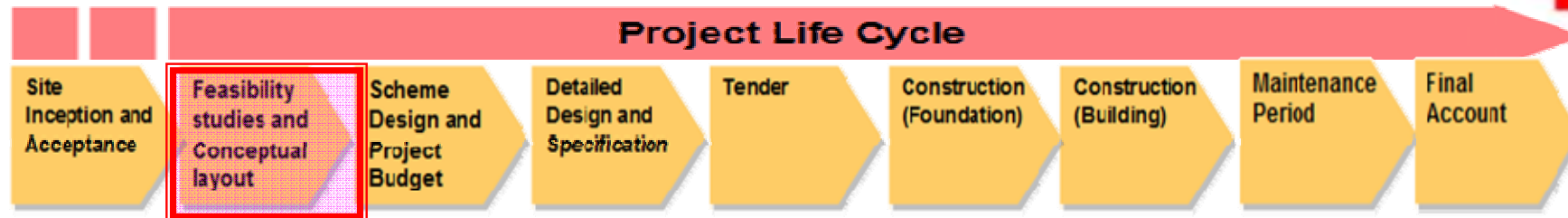
**Quantity Surveying**

- Preliminary cost estimates

**Structural Engineering**

- Site constraints & structural viability studies

# The Work of Development & Construction Division



**Planning**

- Development parameters
- Technical assessments (VIA, HIA, EA, LUS, P&E etc)
- DIPCON approval on planning briefs
- Rezoning (if required) or planning applications.
- Public consultation

**Architectural**

- Project Manager & Design Team Leader
- Development parameters, programme, project construction cost ceiling
- Design options
- Public consultations

**Building Services**

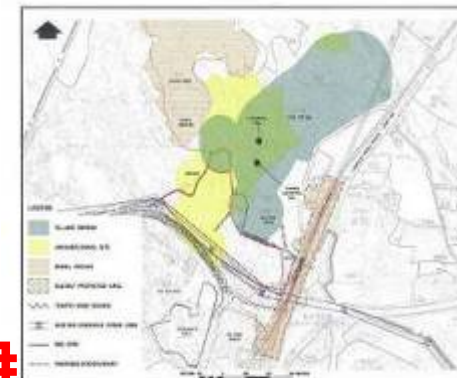
- Technical studies and assessments
- Public utilities coordination

## 2. Feasibility Studies & Conceptual Layout (1/2)

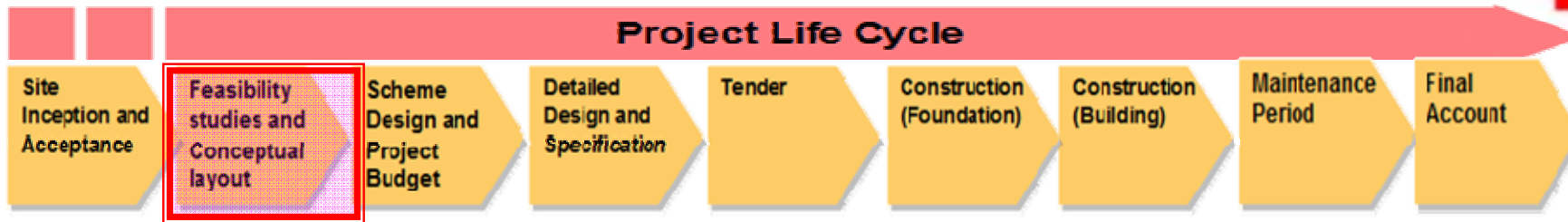
- Seek approval of planning brief
- Obtain approval from Town Planning Board (if required)
- Obtain Housing Authority approval on development parameters, cost ceiling & programme
- Apply a Simplified Temporary Land Allocation (STLA) from LandsD for conducting the Ground Investigation works
- Public consultation

**Civil Engineering**

- Civil engineering studies & assessment reports for traffic , drainage, environmental, odour, sewerage, etc.
- Pubic consultation



# The Work of Development & Construction Division



## 2. Feasibility Studies & Conceptual Layout (2/2)

**Geotechnical Engineering**

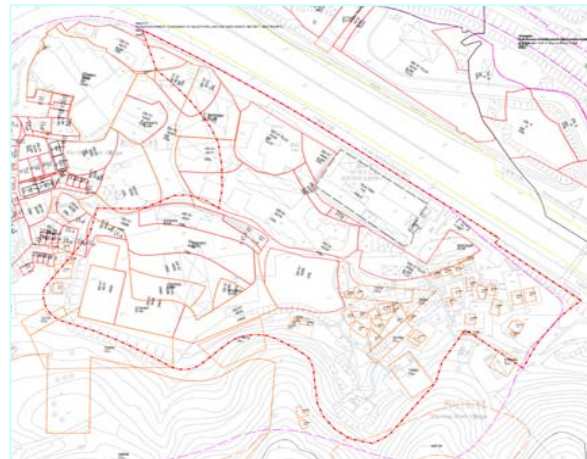
- Ground Investigation (G.I.) & geotechnical study
- Natural terrain hazard study
- Foundation assessment
- G.I. tender & award
- STLA application for G.I.

**Landscape Architectural**

- Tree felling/ transplant proposals

**Land Surveying**

- GIS services, detailed topographic & land boundary surveys
- Land boundary matters



**Quantity Surveying**

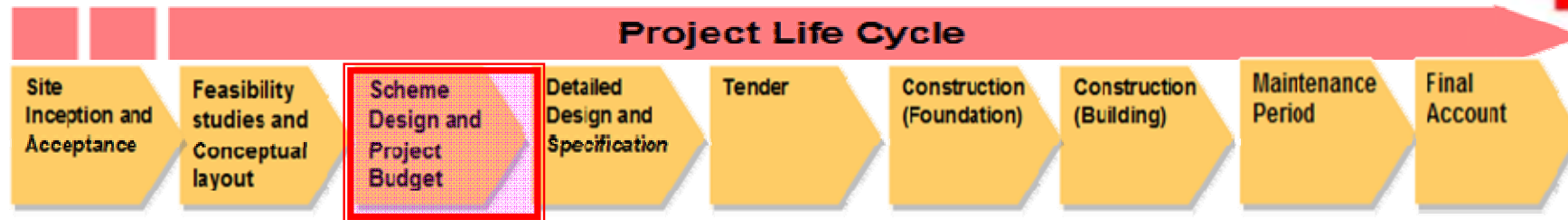
- Project Construction Cost Ceiling
- Cost implications of alternative design options

**Structural Engineering**

- Structural feasibility study
- Foundation options



# The Work of Development & Construction Division



**Architectural**

- Project Manager & Design Team Leader
- Scheme design & project budget
- Compliance check against cost ceiling
- Development programme & works procurement package
- Funding confirmation for entrusted works

**Building Services**

- BS input for scheme design
- BS installation budget
- Preliminary utilities service design

**Civil Engineering**

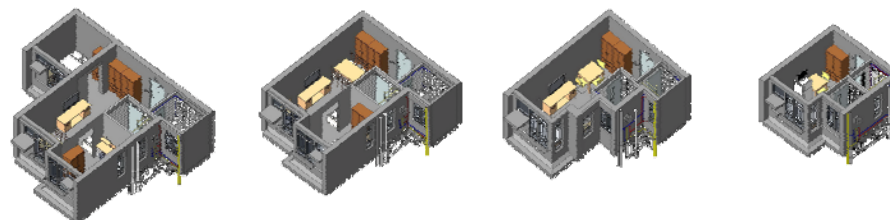
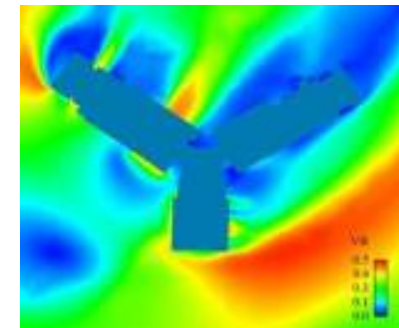
- Underground utilities investigation
- Proposed improvement works to adjacent infrastructure
- Project budget for CE works
- Head 711 Capital Works Reserve
- Fund entrusted infrastructural projects

## 3. Scheme Design & Project Budget (1/2)

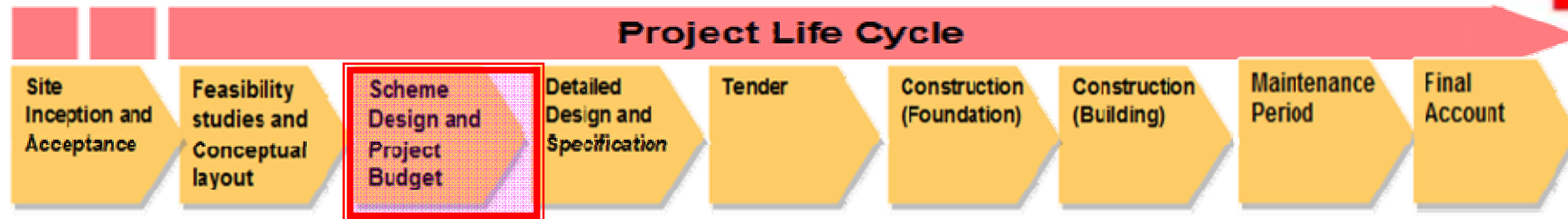
- Seek approval on Scheme Design & Project Budget
- Confirm availability of funding from client department for entrusted works.

**Geotechnical Engineering**

- Detailed G.I. & laboratory testing
- Geotechnical reports for General Building Plans (GBP) and Foundation Plans.
- Site formation design (slope)



# The Work of Development & Construction Division

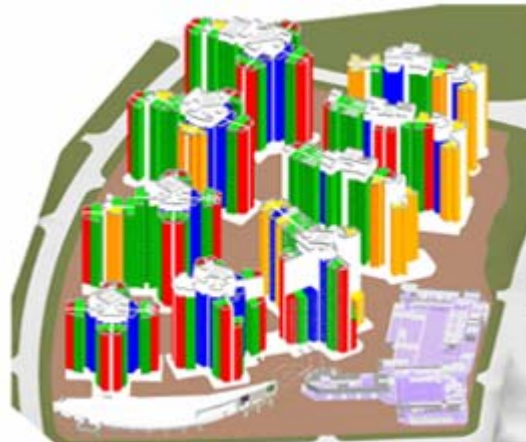


## 3. Scheme Design & Project Budget (2/2)

**Landscape Architectural**  
Schematic master landscape layout

**Land Surveying**  
Topographic, tree and cadastral surveys  
Support for CE works

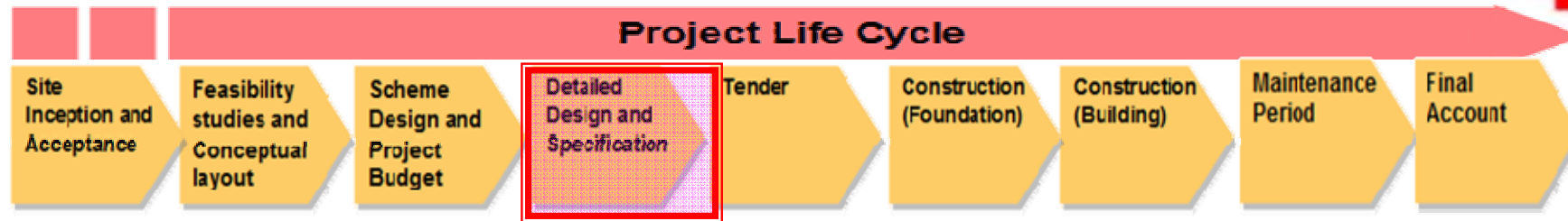
**Planning**  
Compliance check on planning issues



**Quantity Surveying**  
Project budget  
Cash flow forecast  
Compliance check against cost ceiling

**Structural Engineering**  
Scheme design development  
Structural input for project budget  
Development programme & works procurement package

# The Work of Development & Construction Division



**Architectural**

- Project Manager & Design Team Leader
- Detailed design & specification
- Statutory & technical submissions
- Community engagement
- Land allocation coordination

**Building Services**

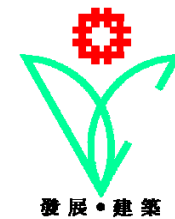
- Detailed BS design & specification
- Carbon emission estimation
- Submission to utility undertakers & government departments

**Civil Engineering**

- Detailed design & specification
- Final submission of EAS, TIA, SIA and DIA to Government departments
- Road gazette & public consultation
- Detailed design of supporting infrastructures

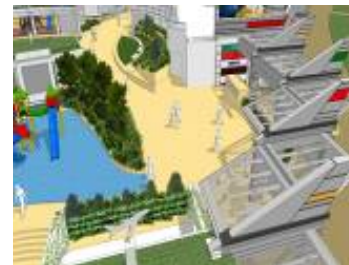
## 4. Detailed Design & Specification (1/2)

- Develop detailed design & specification
- Obtain land allocation from LandsD for construction works



**Geotechnical Engineering**

- Further GI and laboratory testing.
- Detailed design & specification
- Site formation plans to secure approval from GEO and ICU

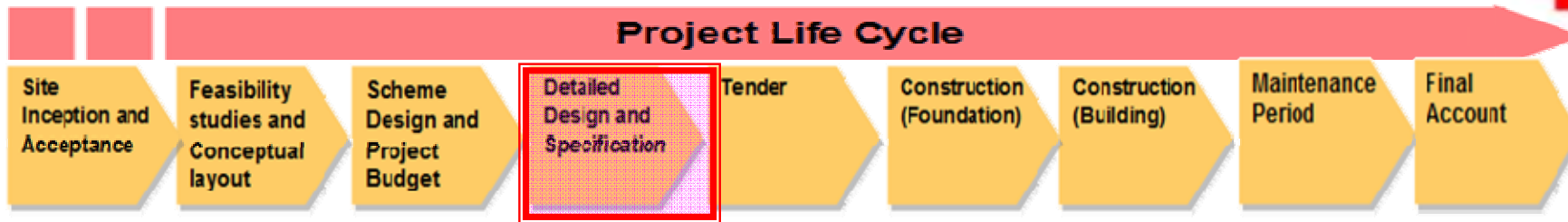


**Landscape Architectural**

- Tree removal application
- Master landscape layout
- Detailed design & specification for external works

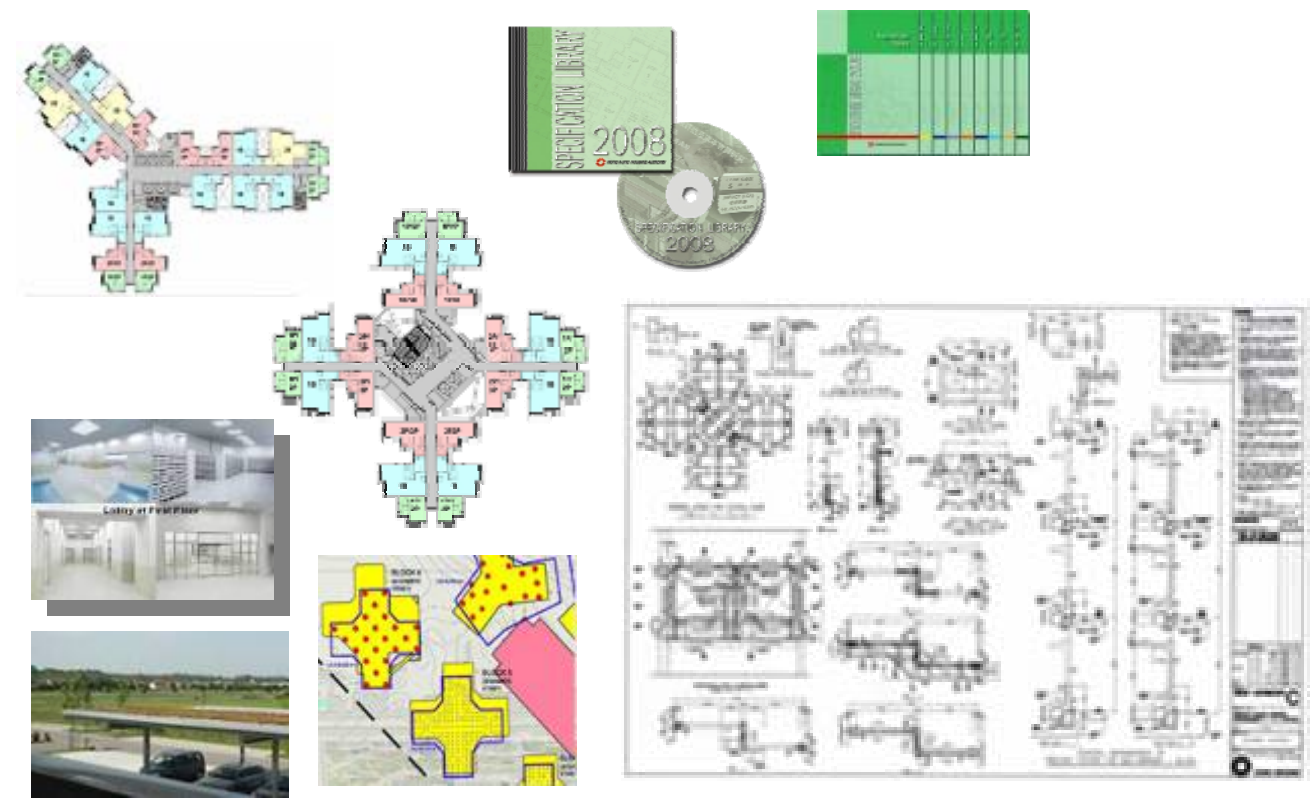


# The Work of Development & Construction Division



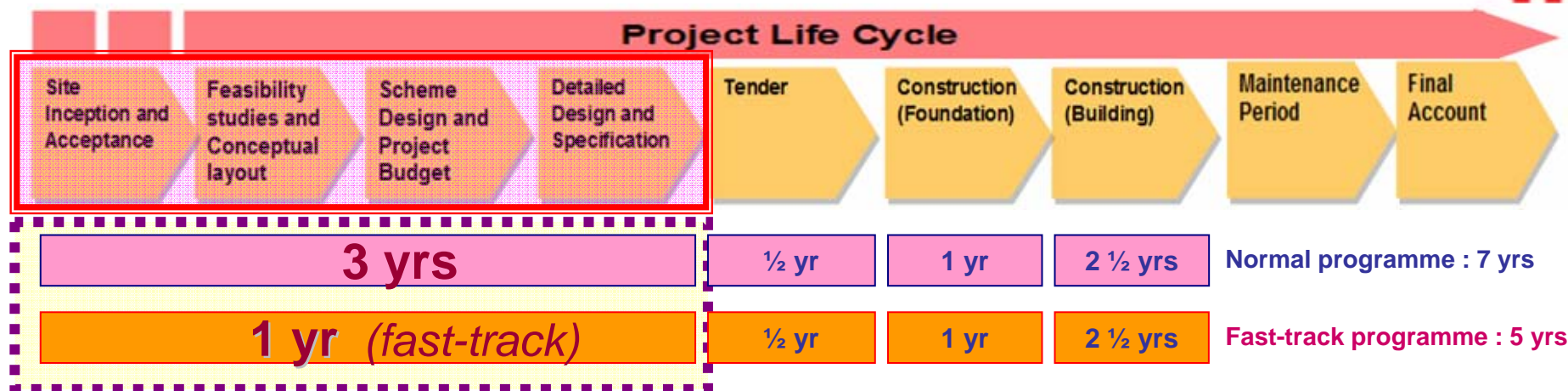
- Land Surveying**  
Specifications for CE, piling and building works contracts
- Planning**  
Input on planning matters
- Quantity Surveying**  
Detailed cost estimate  
Cost checking against approved project budget  
Contractual advice to specification
- Structural Engineering**  
Detailed design & specification  
Statutory & technical submissions

## 4. Detailed Design & Specification (2/2)

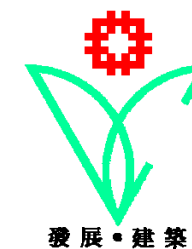




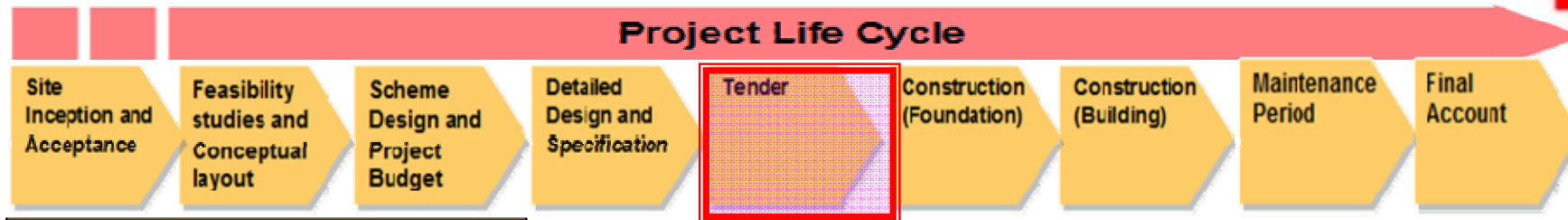
# The Work of Development & Construction Division



**W**e have fast-tracked the production of the first six new HOS projects to be completed by 2016/17 by compressing the feasibility, consultation, planning & design development stages, trebling the efforts to do the first three years' work in one year with parallel actions on all fronts.



# The Work of Development & Construction Division



**Architectural**

Project Manager, Design Team Leader & Contract Manager  
 Tender documents to comply with approved scheme design & project budget  
 Tender programme, evaluation & approval for building contract

**Structural Engineering**

Contract Manager for foundation & demolition contracts  
 Tender programme, evaluation & approval for foundation & demolition contracts  
 Input for building tender

**Civil Engineering**

Contract Manager for CE contracts  
 Tender drawings, project specification & tender approval for CE contract  
 Input for foundation & building tender

## 5. Tender

- Prepare tender documentation
- Recommend tendering procedures & contractual arrangements
- Invite, evaluate & recommend tender for award
- Revise project budget



**Geotechnical Engineering**

Contract Manger for G.I. term contracts  
 Input for foundation and building tenders.

**Landscape Architectural**

Input for foundation & building tenders

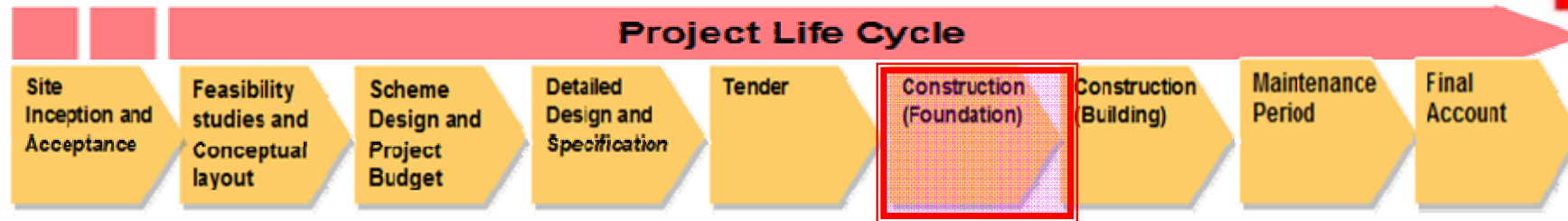
**Building Services**

Contract Manager for Refuse Handling System (RHS) Term Contract  
 Tender document and tender approval for RHS Term Contract  
 Pre-tender estimates for BS nominated sub-contracts  
 Tender document, tendering & approval for BS nominated sub-contracts  
 Input for building tender

**Quantity Surveying**

Advice on contractual arrangement.  
 Tender documents for demolition, foundation, building, NSC, soft landscape, and term contracts.  
 Tender document vetting  
 Pre-tender estimate, tender assessment  
 Revise project budget

# The Work of Development & Construction Division



**Structural Engineering**

- Contract Manger for foundation & demolition contracts
- Management of works quality, safety, budget & programme
- Statutory inspection & submissions
- Payment & completion certification

**Architectural**

- Project management
- Budget monitoring

**Civil Engineering**

- Contract Manager for CE contracts
- Management of advanced CE contracts to project completion
- Handover of completed works to other Government departments
- Contract management of Head 711 Capital Works Reserve Fund entrusted projects

## 6. Construction (Foundation)

- Manage contract & control expenditure / budget
- Manage contractors' performance
- Certify completion



**Geotechnical Engineering**

- Contract Manger for G.I. term contracts
- Pile founding confirmation
- Input to foundation & temporary works
- Statutory inspection (RGE)
- Rainstorm Precautionary Inspection & Emergency Geotechnical Inspections

**Landscape Architectural**

- Tree preservation & tree risk assessment

**Land Surveying**

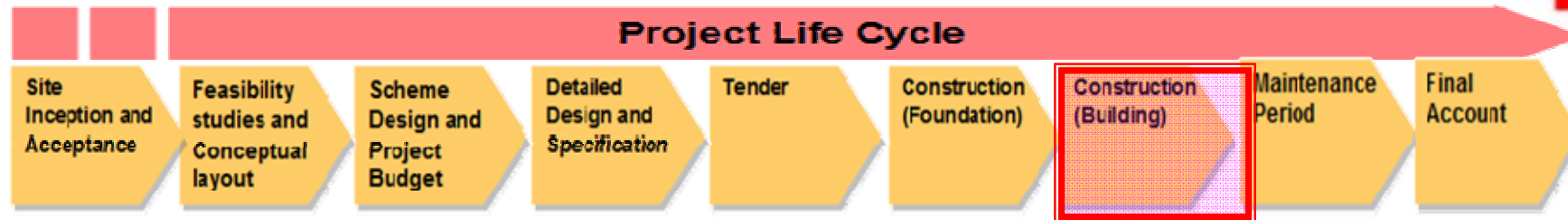
- Land & engineering survey support to slope, earthwork & foundation works

**Quantity Surveying**

- The Surveyor
- Interim certificates & financial statements
- Cost control, budget forecast & monitoring
- Contractual advice



# The Work of Development & Construction Division



**Architectural**

- Project Manager & Contract Manager
- Management of works quality, safety, budget & programme
- Statutory inspection & submissions
- Payment certification
- Public engagement
- Commission tests and obtain OP
- Handover to property management agents & Government department

**Building Services**

- Contractor Manager for Refuse Handling System Term Contract
- Nomination of BS Sub-contractors
- Progress monitoring & quality control
- Testing & commissioning
- Utilities connection
- Support to obtain OP

## 7. Construction (Building) (1/2)

- Manage contract & control expenditure / budget
- Manage contractors' performance
- Certify completion
- Commission tests and obtain Occupation Permit (OP)



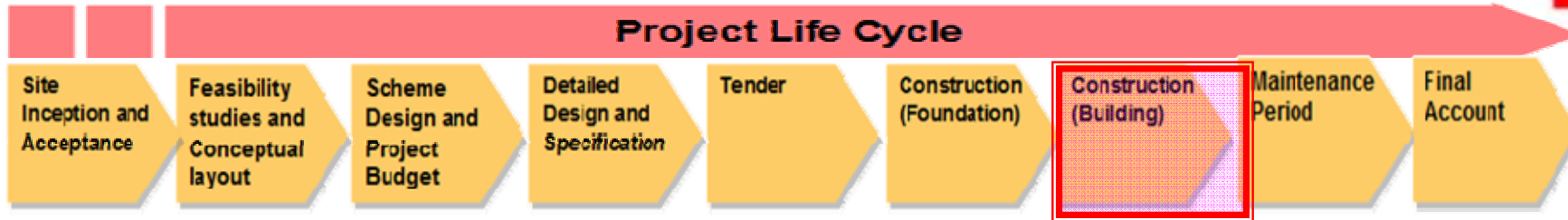
**Civil Engineering**

- Advice and support on CE works for issue of OP and handover works to Government departments

**Geotechnical Engineering**

- Input to slope works (including OP application)
- Statutory inspection
- Rainstorm Precautionary Inspection and Emergency Geotechnical Inspection

# The Work of Development & Construction Division



## 7. Construction (Building) (2/2)

**Landscape Architectural**  
 Tree preservation & tree risk assessment  
 Input for external works  
 Input to public engagement

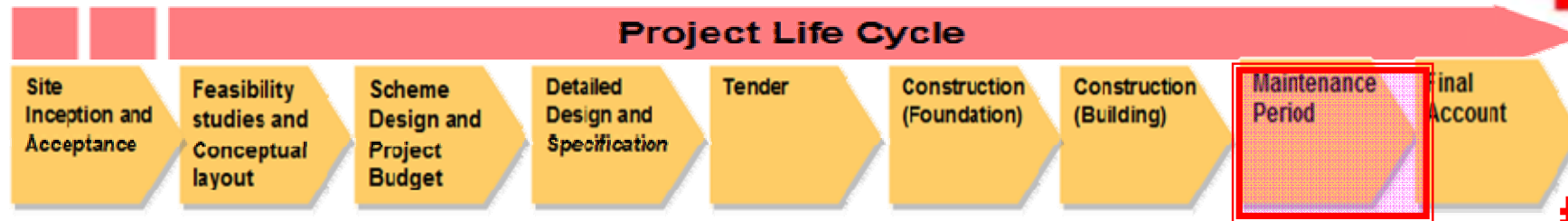
**Land Surveying**  
 Land and engineering survey support to building works

**Quantity Surveying**  
 The Surveyor  
 Interim certificates & financial statements  
 Cost control & budget forecast & monitoring  
 Contractual advice

**Structural Engineering**  
 Control on structural safety & works quality  
 Statutory inspection & submissions  
 Input to public engagement  
 Support to obtain OP



# The Work of Development & Construction Division



**Architectural**

- Project Manager & Contract Manager
- Defect rectification & outstanding works monitoring
- Claims processing
- Budget monitoring
- Resident survey & post completion review
- Public engagement
- Maintenance certification

**Structural Engineering**

- Contract Manager for foundation & demolition contracts
- Defect rectification & outstanding work monitoring
- Claims processing
- Maintenance certification for foundation & demolition contracts

## 8. Maintenance Period (1/2)

- Monitor completion of maintenance & outstanding works and issue Maintenance Certificate
- Process claims & control project budget
- Conduct Residents Survey & Post-Completion Review

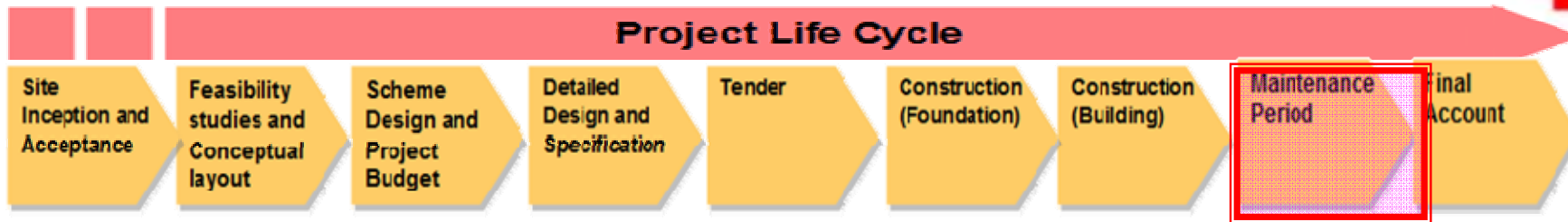


**Landscape Architectural**

- Contract Manager for soft landscape contracts
- Tree preservation & risk assessment
- Greening initiatives & monitoring
- Tender documentation & procurement for soft landscape contract
- Tree records for GIS input
- Input to public engagement



# The Work of Development & Construction Division



**Building Services**

- Defect rectification & outstanding work monitoring
- Maintenance certification
- Testing & commissioning reports
- Claims processing

**Civil Engineering**

- Contract Manager for CE contracts
- Outstanding work monitoring & claims processing under CE contract

## 8. Maintenance Period (2/2)

**Geotechnical Engineering**

- Defects rectification monitoring
- Engineer inspection for slope handover

**Land Surveying**

- GIS services, land, tree and engineering surveys

**Quantity Surveying**

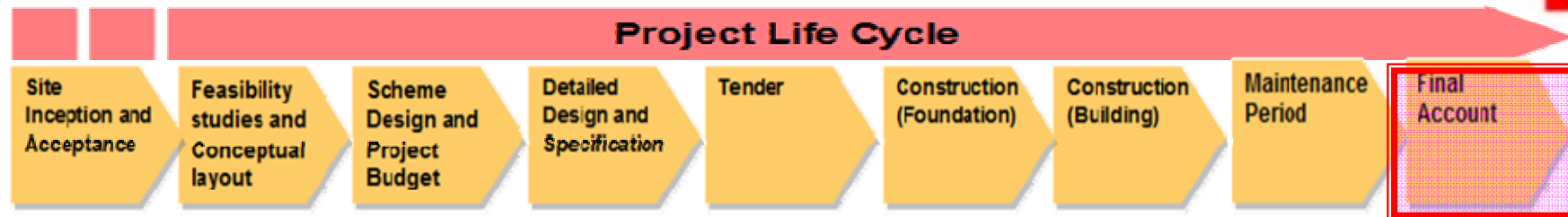
The Surveyor

- Re-measurement & variation assessments
- Financial statements & budget monitoring
- Payment certification & supplementary agreements
- Contractual & cost advice on defects





# The Work of Development & Construction Division



**Quantity Surveying**

The Surveyor  
 Final account settlement for various types of contract  
 Final account settlement for entrusted works  
 Supplementary agreement & settlement deed

**Architectural**

Project Manager & Contract Manager  
 Final account settlement for entrusted works & building contract  
 Input to supplementary agreement & settlement deed for building contract

**Building Services**

Input for final account settlement

- ## 9. Final Account
- Settle final accounts of various types of contracts
  - Settle accounts on Government-funded items



**Civil Engineering**

Contract Manager for CE contracts  
 Final account settlement for CE contract  
 Input for final account settlement for building contract

**Geotechnical Engineering**

Contract Manger for G.I. term contracts  
 Input for final account settlement

**Landscape Architectural**

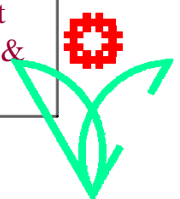
Contract Manager for Soft Landscape Contracts  
 Final account settlement for soft landscape contract

**Land Surveying**

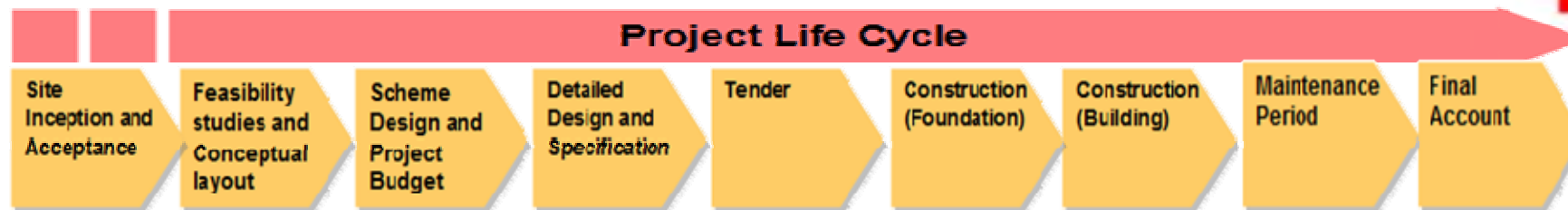
Input for final account settlement

**Structural Engineering**

Contract Manager for foundation & demolition contracts  
 Final account settlement for foundation & demolition contracts  
 Input for final account settlement for building contract  
 Input to supplementary agreement & settlement deed for foundation & demolition contracts



# The Work of Development & Construction Division



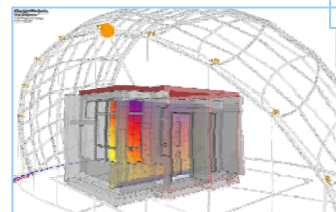
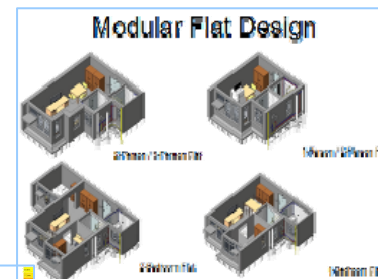
## A. Central & Supporting Functions (1/3)

### Central Function

- Public housing programme management / capital budget management

### Project Support

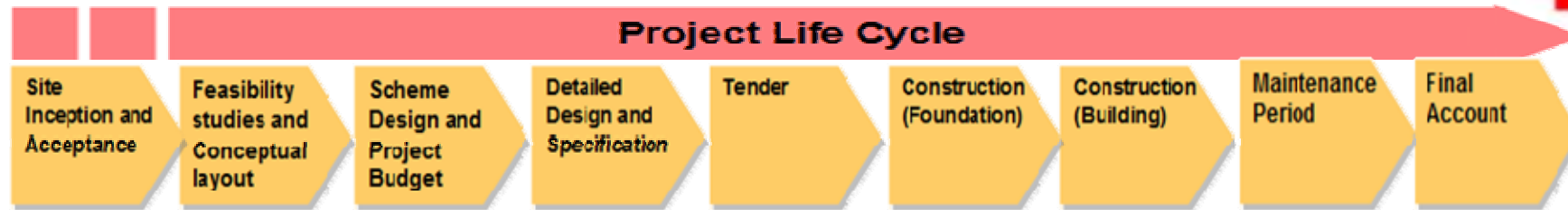
- Modular Flat Design
- Model Client Brief
- Specification & Special Condition of Contract
- Design Guides & Master Details
- Construction Cost Yardsticks
- Tender Price Index
- Research & Development
- Feedback
- Materials Testing
- Performance monitoring & policing of HA-appointed testing laboratories



### IT Support

- Comprehensive Business Process Review & Application of Information Technology (BIM, Drawing Management, e-Tender, ERP, GIS, HOMES, etc.)

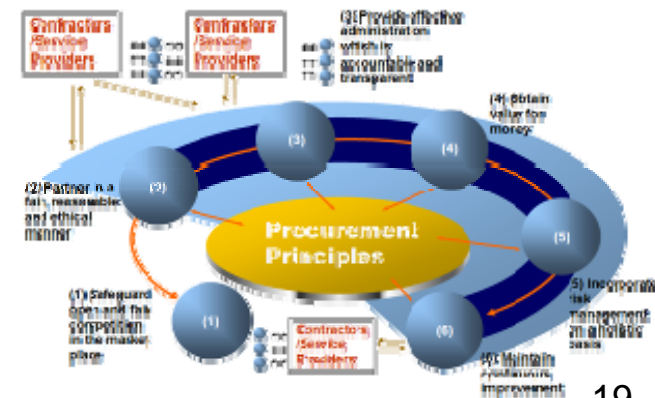
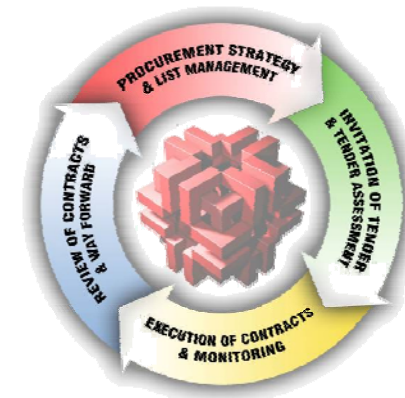
# The Work of Development & Construction Division



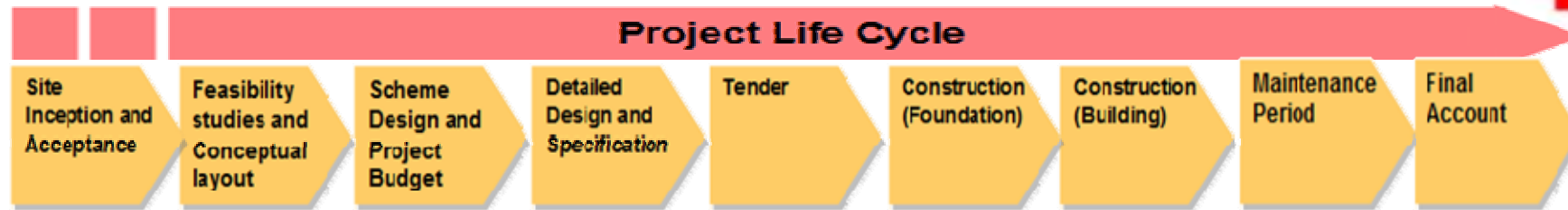
## A. Central & Supporting Functions (2/3)

### Procurement & Technical Secretary

- Procurement Strategy and List Management
- Tender Evaluation and Assessment for Works & Service Contracts
- Procurement of General Goods and Services
- Management of Performance & Workload of Contractors and Services Providers
- Administration of Workers' Wage Monitoring System



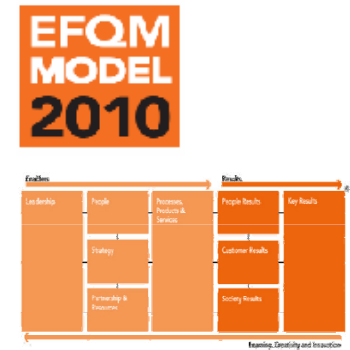
# The Work of Development & Construction Division



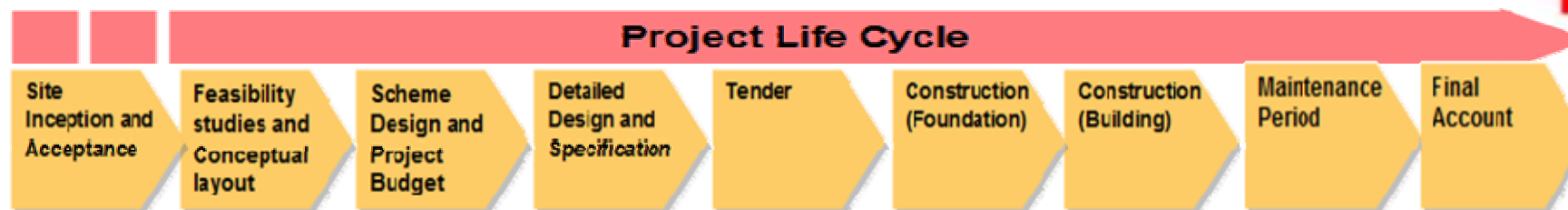
## A. Central & Supporting Functions (3/3)

### Safety & Health, Environmental & Quality Management

- Housing Authority Safety Auditing System (HASAS)
- Accident Statistics to Contractors Review Committee Secretaries
- Safety & Health Policy and Management
- Environmental Policy and Management (ISO 14001)
- Quality Management System (ISO 9001, EFQM)
- Social Responsibility Policy and Management (ISO 26000)



# The Work of Development & Construction Division



## B. Bureau Function

- Private housing data collection, monitoring, and statistic reporting
- Input on Works & Consultancy related issues to Architectural and Associated Consultants Selection Board (AACSB) and Works Policies Co-ordination Committee (WPCC), etc., of Development Bureau (DevB)
- Input to Labour & Welfare Bureau (LWB) on manpower issues
- Input to Committee on Housing Development (CHD) and Committee on Planning & Land Development (CPLD) on land supply
- Administer Head 711 Capital Works Reserve Fund project to support housing development & seek funding approval from LegCo

