

# From Clinical Services Plan to Master Development Plan

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## Clinical Services Plan

# From Clinical Services Plan to Master Development Plan

## Purpose of Clinical Services Plan

**Clinical Services Plan is the culmination of an intense, highly consultative process with clinical and executive staff**

- To map out the planned future services of the hospital
- To consider the design implications of the preferred strategies
- To inform the design process that will follow the adoption of the plan
- It is not a document about design or master planning

# From Clinical Services Plan to Master Development Plan

## Clinical Services Plan as a Framework

**Study and review the Services Plan in collaboration with Healthcare Planner as a framework to develop and complete the MDP.**

Example Key Points/Recommendations from the Clinical Services Plan:

- Patient-centered care model with zonal design
- Major emphasis on ambulatory service
- Flexible space utilization
- Customer friendly in the front of house but high tech and multi-functioning in the back of house

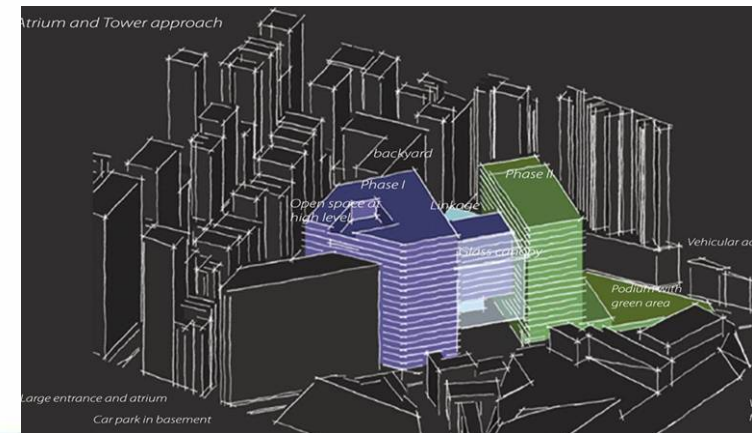
*(Kwong Wah Hospital Redevelopment as an example)*

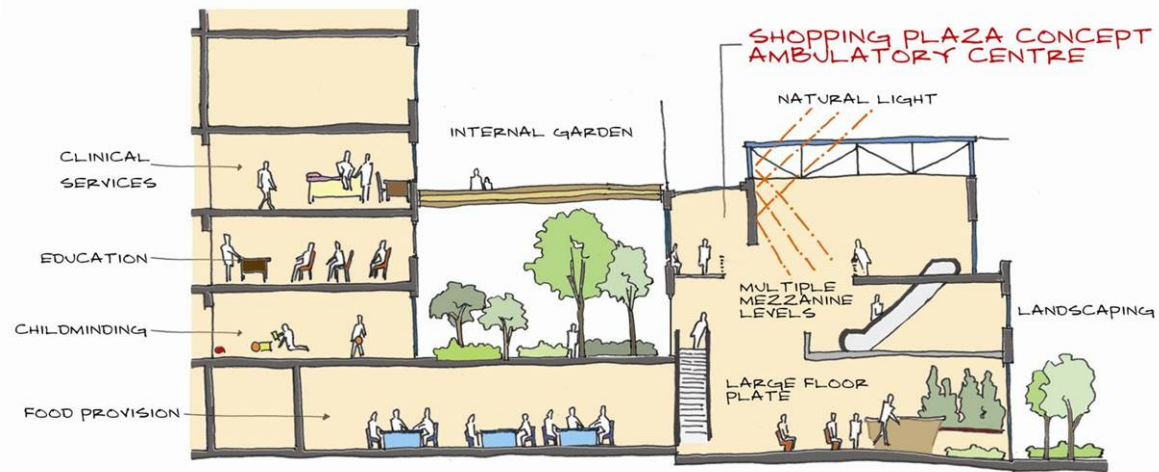
# From Clinical Services Plan to Master Development Plan

## Objective of MDP

For the purpose of identifying the best optimum option in terms of planning, functionality, efficiency, cost effectiveness and quality of services.

**Master Development Plan (MDP) formulates a guiding framework for the project.**





# Master Development Plan (MDP)

# From Clinical Services Plan to Master Development Plan

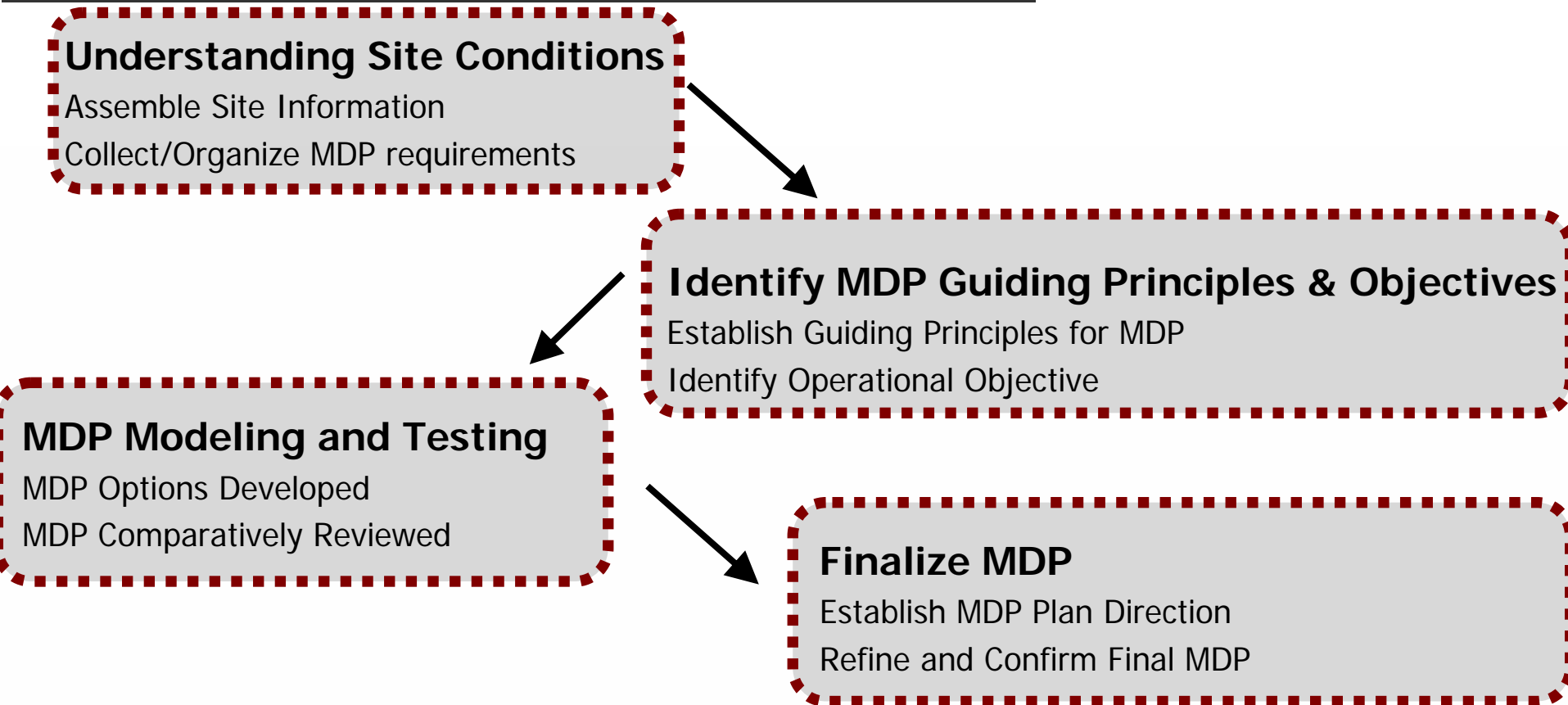
## MDP includes the following:

- Description of study methodology and design approach
- Review and response on the Project Definition Statement and Service Plan
- Findings and results on desktop study and analysis
- Options study and analysis and problem identification
- Proposed master plans, options and design solutions
- Proposed decanting arrangement
- Proposed phasing arrangement
- Programme for viable options
- Cost estimates and analysis for viable options



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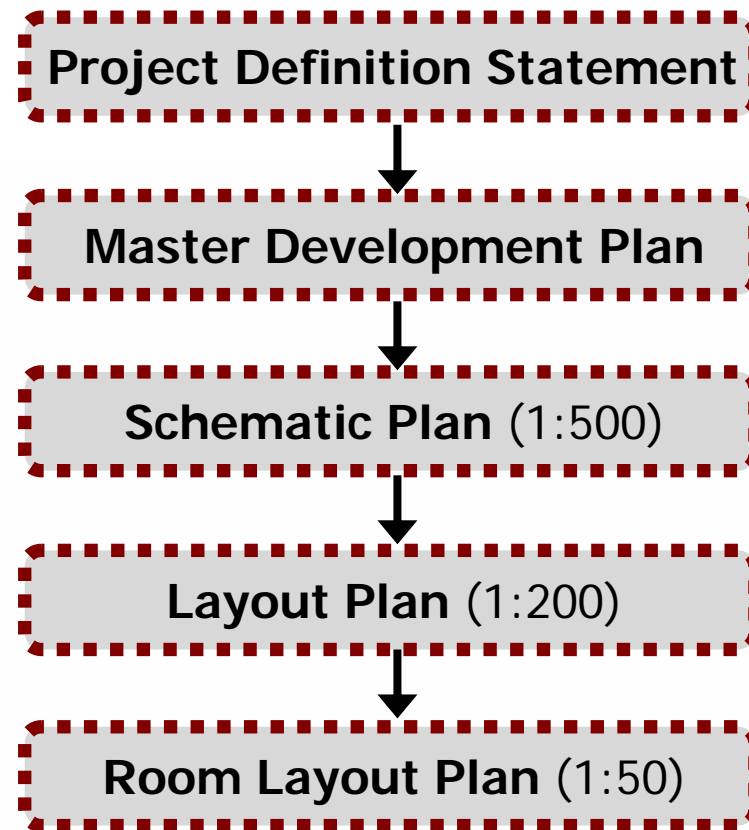
## Process of MDP





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## Design and Planning Process

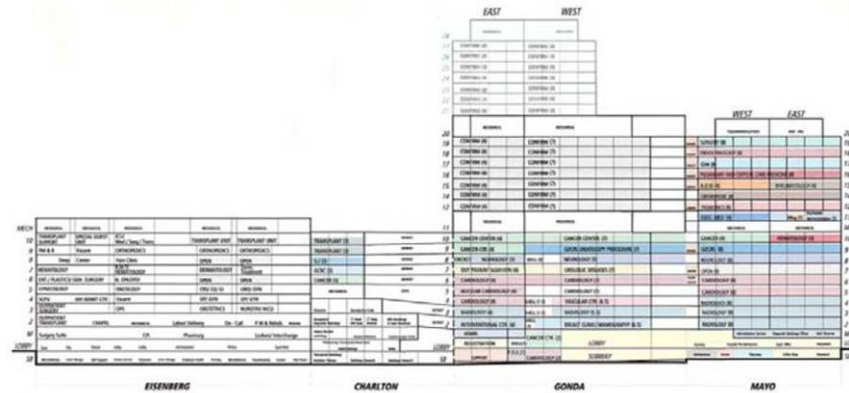


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## Desktop Study



Gonda Building, Mayo Clinic Rochester



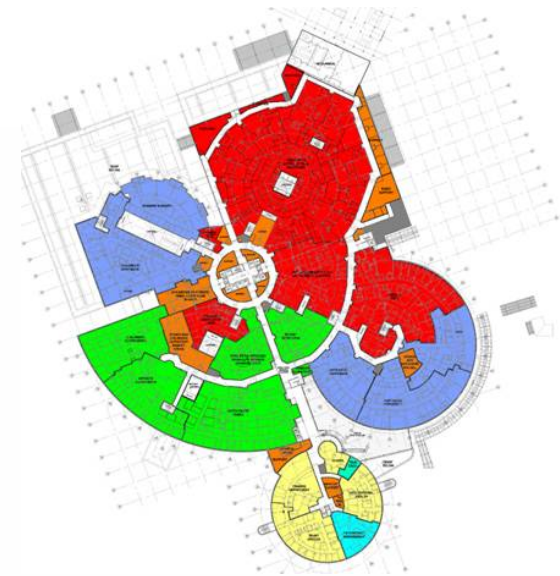
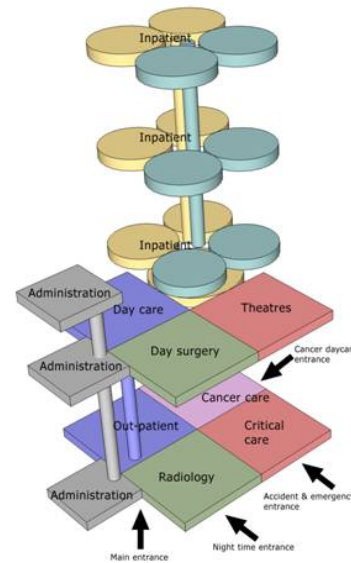
Example for Key Design Concept – High Flexibility

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## Desktop Study



Queen's Hospital, Romford, Essex, United Kingdom



Example for Key Design Concept - Zonal Approach

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## Desktop Study



Example for Key Design Concept –  
New Technology and Life-enhancing Treatments

St Vincent's Hospital, Sydney, Australia

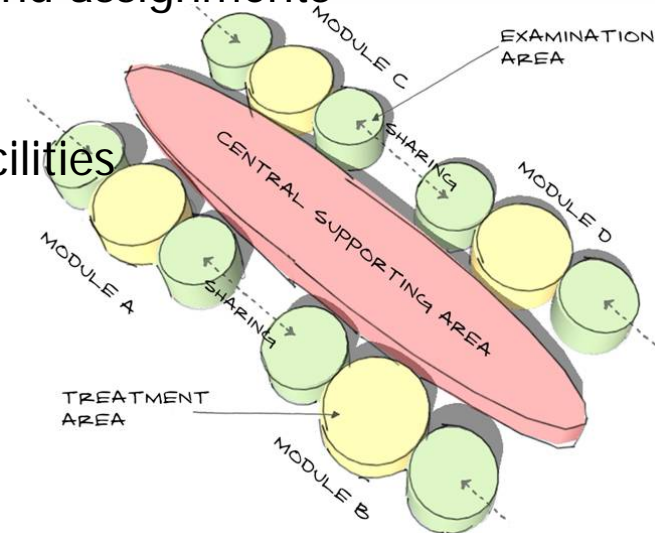


# From Clinical Services Plan to Master Development Plan

## Key MDP Element in Hospital Planning

From the examples studied, some key design concerns are summarized as follows:

- Infrastructure for advanced technological systems
- One-stop-shopping environment in line with the Clinical Services Plan
- Modular design for flexibility of room quantities and assignments
- Segregation of circulations of different kinds
- Friendly environment with natural lighting
- Shared supportive facilities for efficient use of facilities





## Integration with Hospital Services Planning

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## Integration with Hospital Services Planning

Communication also contributes to rational and efficient planning for integrating hospital services and design.

- Forums with end-users on general requirements
- Meetings with administration & management staff for operational requirements



Communication with End Users



Site Surveys to the Hospital



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## Integration with Hospital Services Planning

### End-Users Participation

- Inclusive & Participatory
- Involvement of Different Departments
- Partnership
- Information-giving
- Open & Transparent
- Understanding & Discussion
- Response to Comments
- Consideration /
- Follow up Comments
- Integrated with the Decision-marking Mechanism





**Hospital Trend**

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## Hospital Trend

### Universal Room Design

- Activity Adaptable Nursing Models
- Modular Building Design
- Service-Adaptable Building Infrastructure

### Evidence-based Design Approach

- Healthy Health Care Environments



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## Hospital Trend

### **Information Technology (I.T.) + Wireless Networks**

- Digital Imaging + Health Records
- Diagnostic Modeling Programs
- Smart and Dynamic Scheduling (Patient + Staff)

### **Robotics + Medical Procedures (Surgery)**

- Minimal Invasive Procedure Development
- Automated Surgery and Tele-surgery
- Robotic Laboratory

### **Sustainable Design**

- Large floor plate for flexibility
- Provision of Greenery
- Use of natural light
- Efficient operation and circulation





# Examples from International Healthcare Planning Specialist Collaborators

## Kitimat Hospital and Health Center



## Prince George Regional Hospital

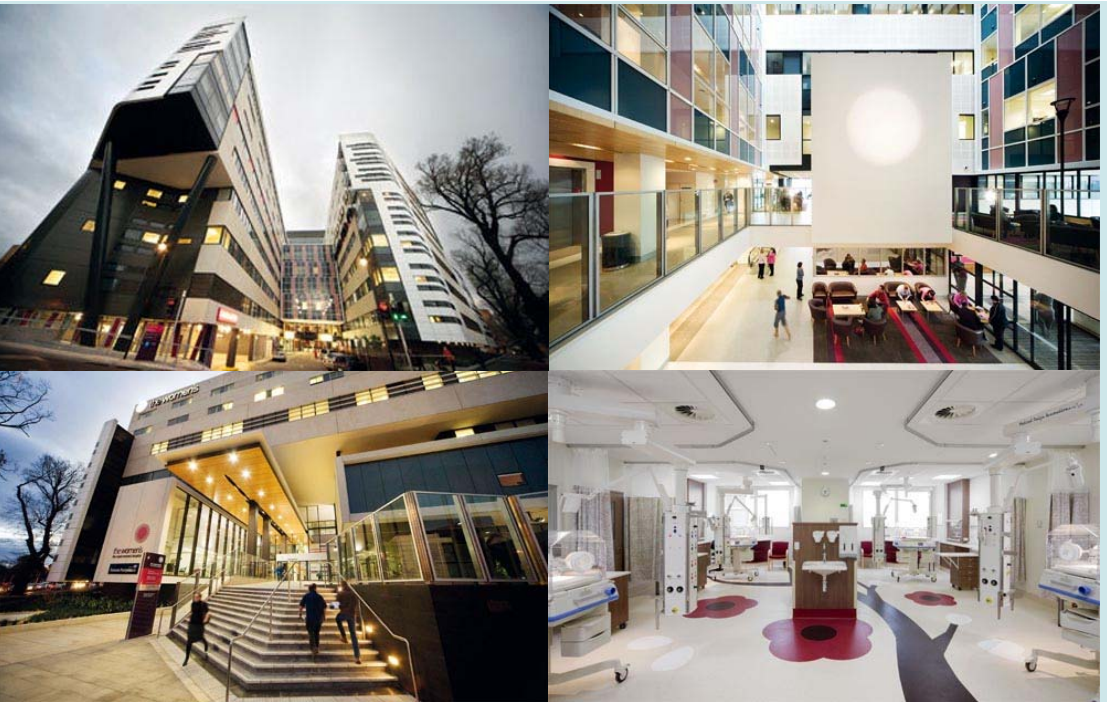


## East Kootenay Regional Hospital





# Examples from Overseas



The Royal Women's Hospital, Australia

Board Green Hospital, Liverpool





# Factors to Successful MDP Formulation



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## Factors to Successful MDP Formulation



Factors/ Concerns	Government Departments	
Traffic Arrangement/ Traffic Impact/ Car-parking	Transport Department	
Plot Ratio/ GFA/ Massing/ Visual Impact/ Improvement for the District	Planning Department/ Buildings Department	

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## Factors to Successful MDP Formulation



Factors/ Concerns	Government Departments	
Heritage Matter/ Historic Value of Buildings	Antiquities & Monuments Office	
Trees Matter	Lands Department	
Environmental Impact	Environmental Protection Department	
Community Support	District Office/ District Council	

Other Factor: GFA = NOFA x ~2.5  
CFA = NOFA x ~3

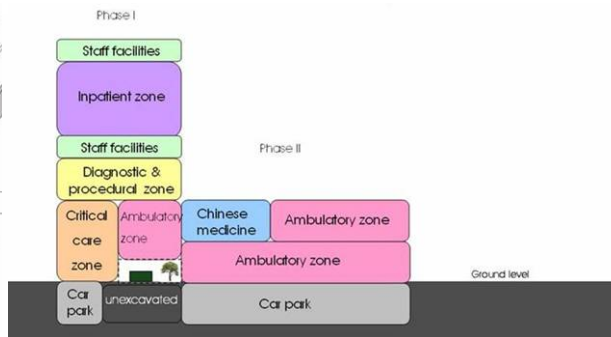
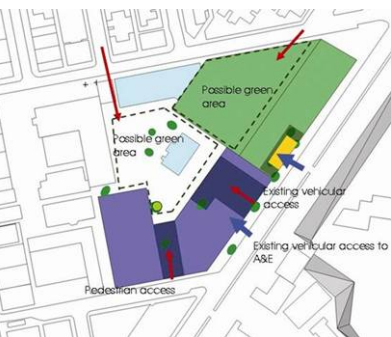


# Options Study

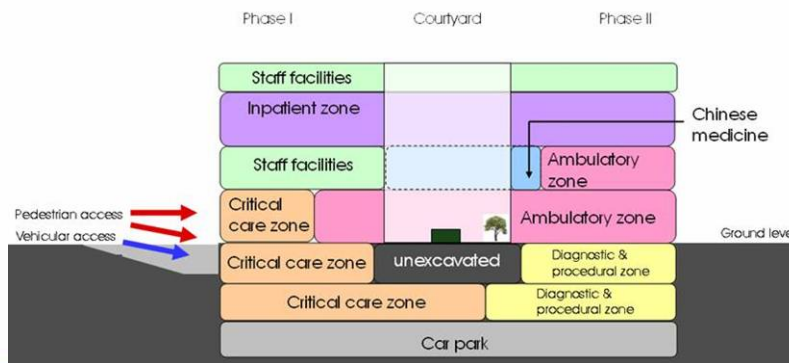
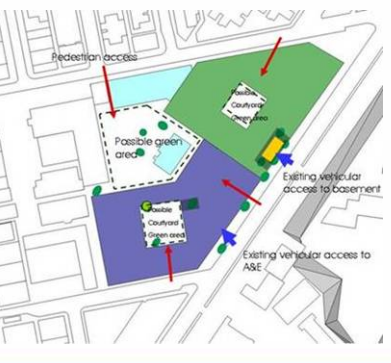
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## Options Study

To study optimum option in terms of planning, functionality efficiency and quality of services forming the basis for future design development.



Option Study 1

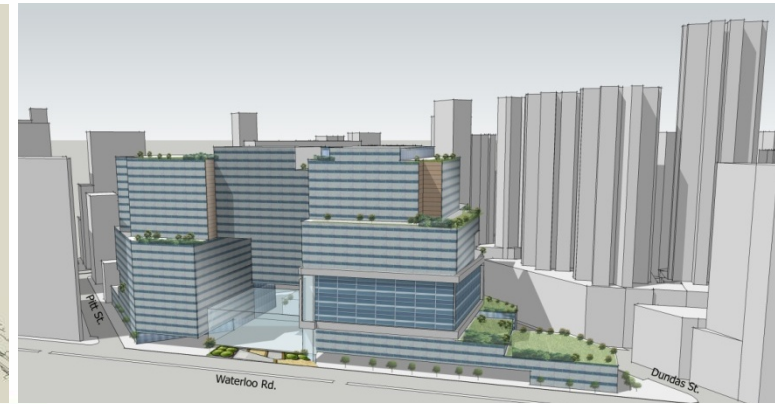
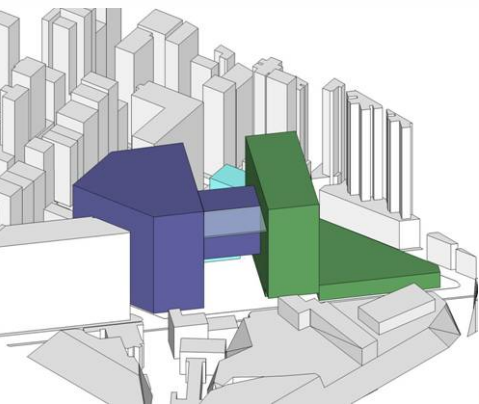


Option Study 2

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## Preferred Option Identification

Conduct options study to identify the preferred approach and development scheme.





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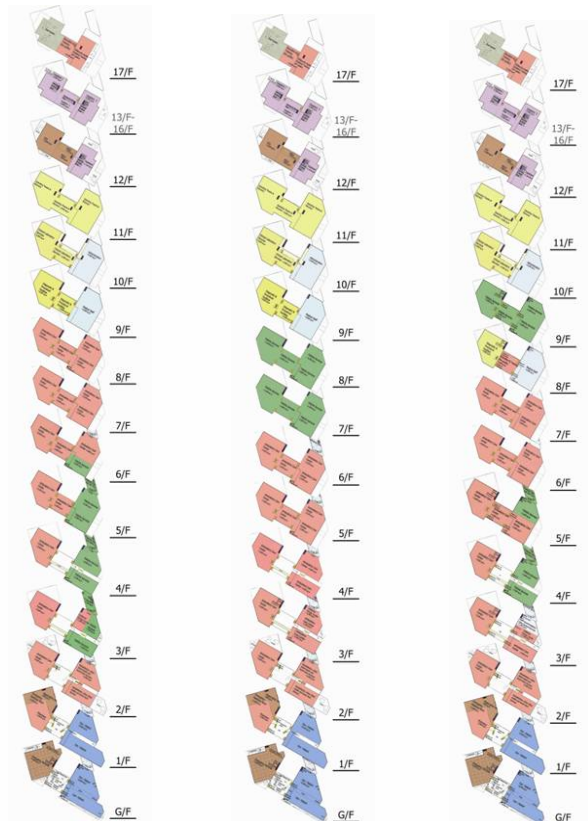
## Study for Vertical Relationships of Functions

Advise the vertical stacking of stratification of functions amongst buildings for the hospital compound.



Movement of people, traffic and pedestrian segregation for the hospital compound to be studied.

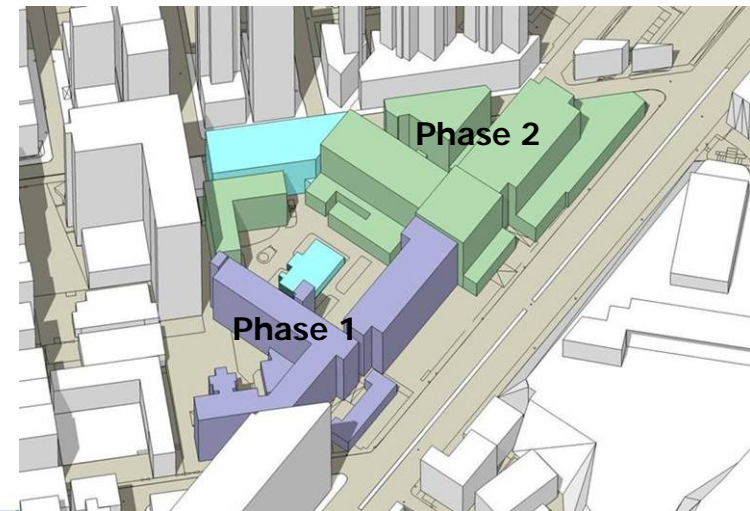
## Options Study



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## Phasing Study

A study of the phasing arrangement to maintain the hospital function operationally at all times.





# From Clinical Services Plan to Master Development Plan

## Visualize the New Model of Care

Modern shopping plaza concept



Customer friendly in the *front of house* but high tech and multi-functioning in the *back of house*

# From Clinical Services Plan to Master Development Plan

## Advantages of MDP

- Review the Project Definition Statement and the Services Plan to develop strategy for implementing the project
- Translation from Clinical Services Plan to Architectural Preliminary Design
- Identification of the constraints and opportunities of redevelopment
- Earlier communication with end-users
- Earlier liaison with other various government authorities to seek comment from various government authorities and incorporated into the MDP in order to provide a project brief for the future detail design.

**END**