

Fig 1.01 - Initial Staging Plan

1.0 Introduction

1.1 Report Structure and Purpose

On 6 April, 2006, the Minister for Planning formed the opinion that the Liverpool Hospital redevelopment was a major project under the terms of the State Environmental Planning Policy - Major Projects.

In response to the Department of Planning's Director General Environmental Assessment Requirements dated 18 May 2006 a Concept Plan and Environmental Assessment (August 2006) together with a subsequent Preferred Project Report (December 2006) was approved by the Minister on 2 February 2007.

The approval required that prior to the lodgement of any subsequent project or development application the proponent was to develop and implement a Staging Program to outline the progressive implementation of the concept approval.

Accordingly a Staging Plan was prepared and lodged with the Department of Planning in February 2008 addressing the relevant matters defined in the Concept Plan approval including:

- Provision of uses, services and facilities.
- Gross floor area.
- Car parking.
- Likely assessment and approval procedures.
- Likely timing of each of the stages.

In the Project Application for Stage 2.1 Clinical Services Building lodged with the Department of Planning in July 2008 the initial staging plan was supplemented with a detailed Staging Program.

This Project Application is consistent with the submitted Staging Program and with the approved Concept Plan. The scope of works covered by this Project Application for Infrastructure and Ancillary Works includes:

- Roadworks
 - Modification and extension of Hart Street from Lachlan Street to the Hume Highway.
 - Construction of a new north link from the northern boundary of West Campus to Lachlan Street.
 - Construction of new road works providing access to the ambulatory entry to the new Clinical Services Building as well as access via a ramp to the basement car park contained within the new Clinical Services Building.
 - Upgrading and enhancement of road works in the East Campus to serve the new Engineering Services Building, access to new car parking areas and access to the multi storey car park.
- Car Parking
 - Extension of existing at grade car parking areas located within the West Campus.
 - Provision of additional car parking areas associated with the new Clinical Services Building.
 - Enhancement and upgrading of existing surface car parking areas located within the East Campus.
 - Construction of a new multi storey car park located immediately adjacent to the Railway Reserve in East Campus.
- Railway Crossings
 - Construction of a vehicular access bridge linking East and West Campus.
 - Construction of a pedestrian bridge the multi storey car park with the new Clinical Services Building.
- Landscaping

The documentation of landscape works associated with the new road works both within the East and West Campuses as well as the new road links providing access between the Hume Highway and the Hospital.
- Child Care Facilities
 - The construction of an expanded Child Care Centre (88 child capacity) located within East Campus.
- Engineering Services Building
 - The construction of a new Engineering Services Building.

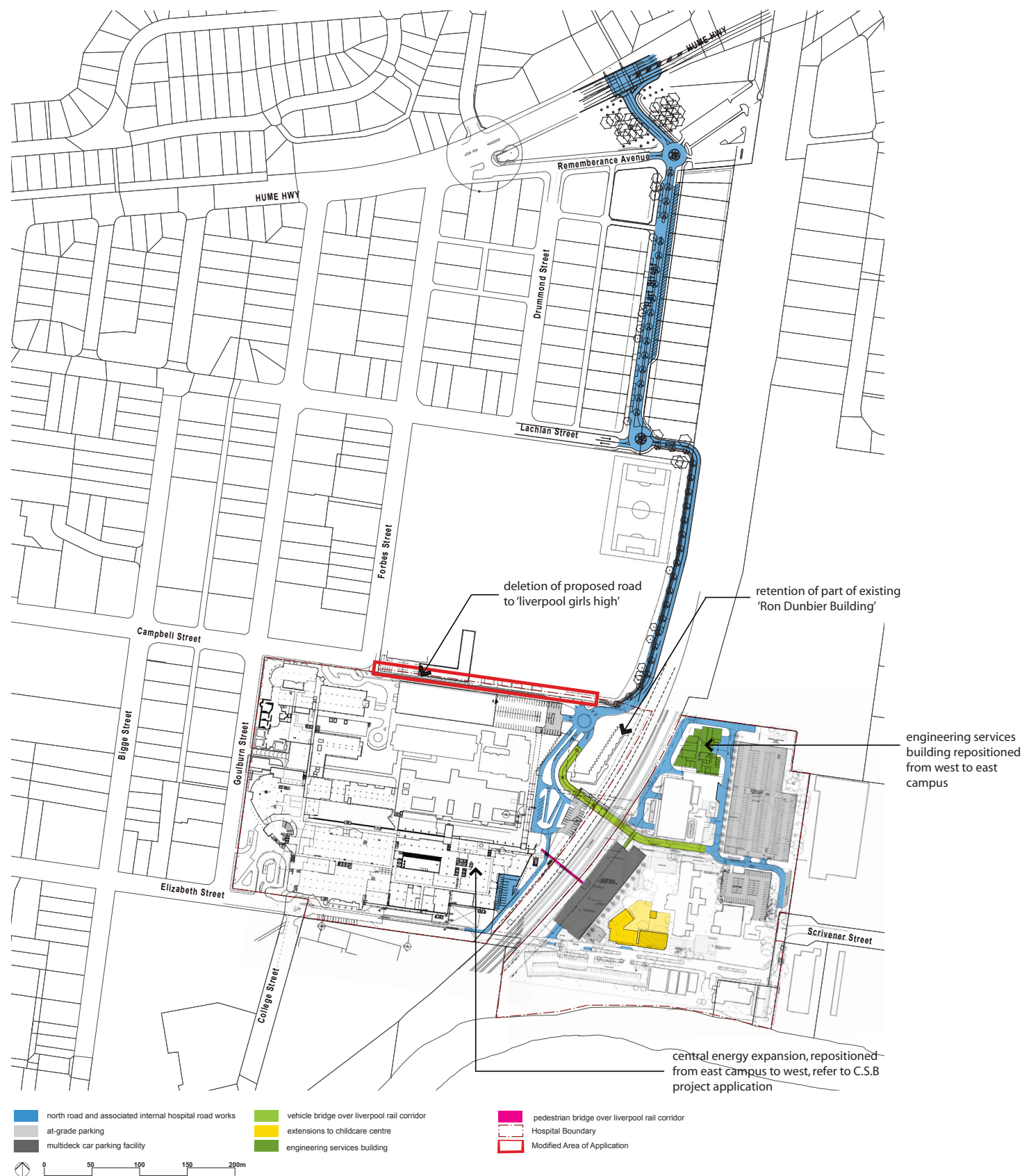


Fig 1.02 - Infrastructure and Ancillary Works - Changes to Concept Plan

Subsequent Project Applications will address the balance of works identified in the Staging Program and the approved Concept Plan. Such works include the expansion and refurbishment of the Cancer Care facilities, changes to the Women’s Health, Aged Care and Mental Health facilities.

During the design development phase, two changes to the approved Concept Plan were identified.

The first change involved the relocation of the proposed expansion of the Central Energy Plant from East Campus to the new Clinical Services Building. This change is incorporated in the Stage 2.1 Project Application lodged with the Department of Planning in July 2008. The area identified in the Concept Plan for the Central Energy expansion is now taken up by an expanded single level Engineering Services Building in lieu of the two storey building approved under the Concept Plan.

The second change involved the deletion of a proposed additional road lane along the northern boundary of West Campus. The detailed studies indicated that there were a number of difficulties associated with the introduction of the additional lane within the Liverpool Girls’ High School grounds and as a consequence the proposed works will not be pursued.

The Project Application and Environmental Assessment report is structured as follows:

- Introduction This section provides an overview of the project and relevant background information including the proposed development controls.
- Site Context This section provides details of the Hospital context together with a social, economic and environmental review.
- The Concept This section provides a brief overview of the Concept Plan.
- The Project This section provides a brief overview of the redevelopment proposals.
- Environmental Assessment This section responds to the Director General’s Requirements.
- Draft Statement of Commitments This section contains a review of the commitments identified in the Preferred Project Report (Concept Plan) together with additional draft commitments where appropriate.
- Conclusion This summarises the key issues and provides a recommendation to approve the proposals outlined within the report.

1.2 Background to the Liverpool Hospital Redevelopment Project

This Project Application and Environmental Assessment of Stage 2 Infrastructure and Ancillary Works of the Liverpool Hospital stems from the following sequence of studies and approvals to date including

6 April 2006	Determination by the Minister that the Liverpool Hospital Redevelopment project is a development to which Part 3A applies.
18 May 2006	Director General Requirements issued.
August 2006	Lodgement of the Concept Plan and Environmental Assessment.
29 September 2006	Minister declares the proposal to be a Critical Infrastructure Project.
December 2006	Lodgement of the Preferred Project Report (Concept Plan).
2 February 2007	Concept Plan/Preferred Project Report approved by the Minister. The approval also provided for a series of early works including excavation and construction to ground level of works in the vicinity of the proposed new Clinical Services Building.
18 February 2008	Staging Program lodged with Department of Planning.
28 March 2008	Director General's Requirement issued for Stage 2 Infrastructure and Ancillary Works.
July 2008	Project Application for Stage 2.1 Clinical Services Building lodged with the Department of Planning.

The Staging Program identified three major phases of the project. Within Phase 1 there are two components, the main Hospital works and the Infrastructure and Ancillary Works.

The Project Application for the main Hospital was lodged with the Department of Planning in July, 2008

The works identified in this Project Application represent the Infrastructure and Ancillary Works including:

- Roadworks
- Car Parking
- Pedestrian and vehicular bridges across the rail corridor
- Landscaping
- Expansion of Child Care Facilities
- Construction of the Engineering Services Building.

The main Hospital works and a number of the ancillary and infrastructure works will be undertaken by the management contractor, Bovis Lend Lease.

The Staging Program also identifies a series of additional Hospital works which will be addressed in subsequent Project Applications including new Cancer Building and refurbishment of the existing Cancer Centre, the Alex Grimson Building and changes to the Women's Health, Aged Care and Mental Health Facilities.



Project Drivers

Population Growth

The population in the Sydney South West Area Health Service is expected to increase from 800,000 to 925,000 by 2016 and 1.25m by 2031. The resultant growth in demand for overnight and same day procedures from 2004/05 to 2016/17 is estimated at 2.8% per annum for acute overnight inpatient services and 4.6% for day patients. Ambulatory services are anticipated to grow in the order of 5% annually to meet the changing models of medical and surgical care.

Such a significant increase in demand for services cannot be met within the current structure of Liverpool Hospital. Not only do medical facilities need to grow to meet the requirements of the community but ancillary uses within the Hospital must be developed to provide a safe and efficient environment in which health services can be delivered and to meet the needs of a substantial increase in staff.

Facility configuration

The existing configuration of medical facilities and ancillary uses at Liverpool Hospital urgently requires reorganisation including the provision of new facilities, modifications to existing facilities and appropriate site circulation initiatives which optimise the efficiency of the campus.

Not only are many of the facilities inefficiently located but they are physically inadequate for the current and projected demand for overnight, same day acute, subacute and ambulatory services.

Ageing Population

Significant growth is anticipated in clinical specialties commonly associated with ageing - cardiology, respiratory, medicine, gastroenterology, non sub specialty medicine and orthopedics. As well acute capacity there will be flow on effects to areas such as critical care and sub acute services. Chronic disease services will also continue to increase.

New and emerging technologies

Diagnostic, procedural and treatment services and technology are developing rapidly. The result is improved rates of early detection, treatment and recovery options. Implementation of new technology requires the efficient response of the health care provider to ensure that the opportunities for advancement of medical care are maximised.

Services Planning Principles

The development of the proposed infrastructure and ancillary works reflects elements of the long term strategy for the delivery of appropriate Health Services for the Sydney South West Area Health Service.

1.3 Project Objectives

The development objectives for this Project Application include the enhancement of Liverpool Hospital facilities to:

- ‘Future-proof’ the campus ie to be able to expand when required and in ways that do not impose operational inefficiencies
- Support the target service delivery outcomes for this phase
- Provide expanded district level capacity for the local catchment population
- Improve the health outcomes for the whole community
- Provide enhanced access to the Hospital complex from the Hume Highway
- Provide pedestrian and vehicular bridges across the rail corridor separating East and West Campuses.
- Be environmentally sustainable
- Be affordable in both capital and recurrent terms including achieving sustainable facilities management outcomes
- Achieve government policy/planning objectives

1.4 The Site

Liverpool Hospital is located in the eastern sector of the Liverpool CBD in close proximity to Bigge Park, Liverpool TAFE and the Georges River. The Hospital campus is separated into an East and West Campus by the Great Southern Railway line. All clinical services are located on the 8ha western campus. The 7ha East Campus supports Hospital infrastructure, staff facilities and car parking.

This Project Application encompasses the construction of new facilities and the enhancement of existing facilities on both the East and West Campus together with the construction of a new road link linking the Hospital directly with the Hume Highway to the north. It also provides for vehicular and pedestrian connectivity across the rail corridor thus providing direct and secure links between the East and West Campuses.

1.5 Development for which Approval is sought

The Infrastructure and Ancillary Works for which approval is sought include the following:

- Roadworks
 - Modification of the existing Hart Street extending from Lachlan Street to Remembrance Drive including landscaped median and 45° angled parking.
 - Extension of Hart Street through Berryman Reserve and the construction of a new intersection with the Hume Highway.
 - New roundabout at the intersection of Hart Street and Remembrance Drive as well as at the intersection of Hart and Lachlan Street.
 - Retention and modification (as necessary) of the existing bicycle path located on either side of Hart Park.
 - New northern link road between the northern boundary of the Hospital and Lachlan Street. The new road is located within the Railway Reserve Lands immediately east of the boundary of the Liverpool Girls' and Boys' High Schools and includes the acquisition of a small parcel of land from the south eastern sector of the Liverpool Girls' High School to provide a connection to the northern boundary of West Campus.
 - Construction of new road works within the Hospital campus (both east and west) as well as upgrading of roads associated with the Engineering Services Building.
 - Provision of new road link to the ground floor level of the multi storey car park.
 - Provision of access to the Child Care Centre car park.
 - Closure of the Elizabeth Street rail crossing to the general public and the construction of appropriate access gates to the rail corridor in accordance with Railcorp requirements.

- Car Parking
 - New multi storey car park located adjacent to the rail corridor in East Campus.
 - Construction of additional at grade car parking facilities located within West campus to service both staff and visitor requirements.
 - Upgrading of existing at grade car parks located on the East Campus.
- Bridges
 - New vehicular bridge across the rail corridor including all necessary ramps and pavements to link East and West Campuses.
 - New pedestrian bridge link across the rail corridor providing access from East Campus via the multi storey car park directly to the new Clinical Services Building on West Campus.
- Landscape
 - Landscape works associated with the new road works and car park areas located on both the East and West Campus sites.
 - Landscaping works associated with the new northern link road.
 - Landscaping works associated with the modification and extension of Hart Street to the Hume Highway.
- Child Care
 - Expansion of the Child Care Facility located within the East Campus to provide for 88 children.
- Engineering Services Building
 - Construction of an Engineering Services Building to provide adequate facilities for the expanded Liverpool Hospital.

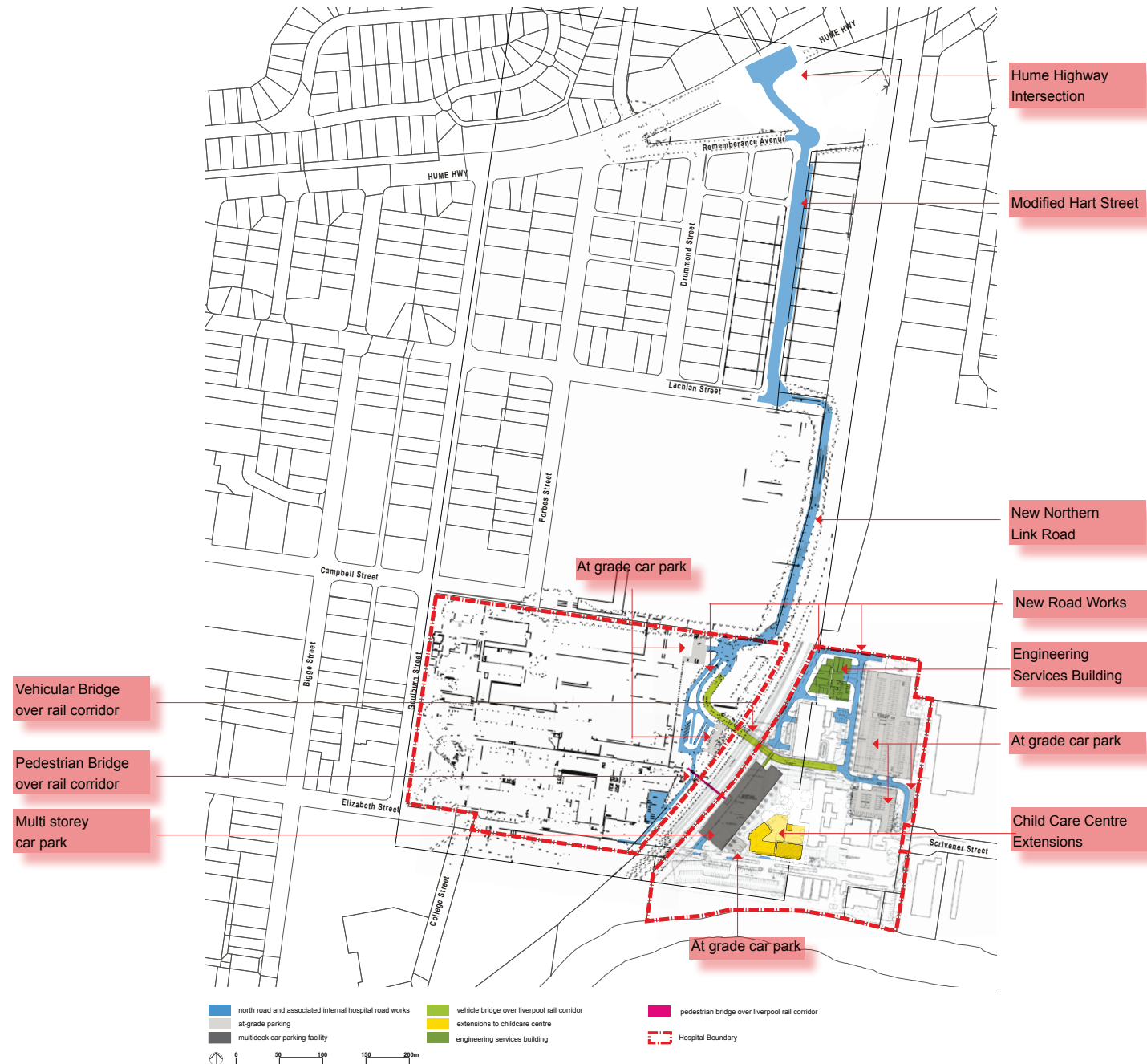


Fig 1.03 - Infrastructure and Ancillary Hospital Works

1.6 Consultation

An extensive process of consultation has taken place following the Concept Plan approval in February 2007. Consultation has taken place with RailCorp, Liverpool City Council, the Department of Education, public authorities and service agencies as well as consultations with User Groups and Special Reference Groups associated with both the Hospital and Sydney South West Area Health Service.

The Project Management Plan (Appendix Q) prepared by Bovis Lend Lease includes a Stakeholder Communications Plan which has been implemented as apart of the above consultative process.

1.7 The Proponents and Study Team

This Project Application and Environmental Assessment has been prepared on behalf of the NSW Health Infrastructure.

The consultant team for the project is shown in Table 1.01

Consultant	
Capital Insight Pty Ltd	<ul style="list-style-type: none">Project Director - ProcurementStaging
Bovis Lend Lease	<ul style="list-style-type: none">Managing ContractorStructural Design Brief - Engineering Services Building
LFA (Pacific) Pty Ltd	<ul style="list-style-type: none">Project ApplicationChild Care FacilityLandscaping
Rice Daubney	<ul style="list-style-type: none">Multi storey car parkEngineering Services BuildingPedestrian Bridge
Acoustic Logic Consultancy	<ul style="list-style-type: none">Acoustics and Vibration
Archaeological & Heritage Management Solutions Pty Ltd	<ul style="list-style-type: none">Draft Historical Archaeological Assessment, Research Design and Excavation Methodology
C & M Consulting Engineers	<ul style="list-style-type: none">Civil Engineering Brief - Engineering Services Building
Connell Wagner Pty Ltd	<ul style="list-style-type: none">Vehicular and Pedestrian Bridges
EIS (a division of Jeffery & Katauskas Pty Ltd)	<ul style="list-style-type: none">Environmental Services
EMS Solutions Pty Ltd	<ul style="list-style-type: none">Hazardous Materials Report
Jeffery & Katauskas Pty Ltd	<ul style="list-style-type: none">Geotechnical Engineering
Leighton Irwin Pty Ltd	<ul style="list-style-type: none">Multi Storey Car Park - Technical Specification
Otto Cserhalmi & Partners Pty Ltd Architects	<ul style="list-style-type: none">Heritage
Parking Consultants International	<ul style="list-style-type: none">Car Park Survey
Sinclair Knight Merz Pty Ltd	<ul style="list-style-type: none">Services/ESD
Taylor Thomson Whitting (NSW) Pty Ltd	<ul style="list-style-type: none">Road Works
Transport and Traffic Planning Associates	<ul style="list-style-type: none">Traffic

Table 1.01 - Study Team