

Environmental Impact Statement State Significant Development SSD 7542



Royal Prince Alfred Hospital

Application for a Multi Storey Staff Car Park

Submitted to Department of Planning and Environment

Submitted by Health Infrastructure on behalf of Health Administration Corporation

June 2016 ■ 16069

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Statement of Validity

Development Application Details

Applicant name	Health Infrastructure on behalf of Health Administration Corporation
Applicant address	Level 6, 77 Pacific Highway, North Sydney
Land to be developed	Part of Lot 101 in DP 1179349
Proposed development	Multi-storey Staff Car Park, as described in Section 3.0 of this Environmental Impact Statement

Prepared by

Name	Angus Halligan
Qualifications	BPlan
Address	Level 6, 77 Berry Street, North Sydney
In respect of	State Significant Development Application

Certification

I certify that I have prepared the content of this EIS and to the best of my knowledge:

- it is in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- it includes all available information that is relevant to the environmental assessment of the development to which the statement relates; and
- the information contained in the statement is neither false nor misleading.

Signature



Name Angus Halligan

Date 3/06/2016

Executive Summary

Purpose of the Report

This submission to the Department of Planning and Environment (DP&E) comprises an Environmental Impact Statement (EIS) for a State Significant Development Application (SSD Application) under Division 4.1 of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Development for the purposes of hospitals, medical centres and health research facilities with a capital investment value of more than \$30 million is declared to be State Significant Development (SSD) for the purposes of the EP&A Act. As the proposed development will have a capital investment value of approximately \$30,161,290 it is considered a SSD Application.

A request for the issue of the Secretary's Environmental Assessment Requirements (SEARs) was made on 3 March 2016 and the SEARs were issued on 29 March 2016. This submission is in accordance with the D&PE guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses those issues raised in the SEARs.

Overview of the Project

The SSD Application seeks approval for the construction of a multi-storey staff car park as part of the ongoing redevelopment of the Royal Prince Alfred Hospital (RPA Hospital). More specifically, this proposal seeks approval for the following:

- clearance of all vegetation;
- site preparation and excavation works;
- construction and use of a 9 storey car park comprising:
 - 996 car parking spaces, 10 of which are accessible spaces;
 - relevant security measures to restrict access to hospital staff.
- 24 hour operation 7 days per week, in accordance with the hours of operation for the RPA Hospital.
- access from the new extended Brodie Street, and egress onto Lucas Street and Church Street;
- car park signage (700mm x 1000mm) identifying number of available parking spaces; and
- associated landscaping works.

The Site

The Royal Prince Alfred Hospital is located in Camperdown, approximately 1.7km north west of the Redfern Railway Station. It is approximately 5km south west of the Sydney CBD and is within the City of Sydney Local Government Area.

The subject site is located within the hospital grounds on part of Lot 101 in DP 1179349, at 106-112 Church Street, Camperdown.

Planning Context

Section 6.0 of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant State Environmental Planning Policies. The site is zoned SP1 Special Activities (Health Facilities) under the provisions of the Sydney Local Environmental Plan 2012. The proposal is permissible with consent within the zone and will meet the relevant objectives of this zone.

Environmental Impacts and Mitigation Measures

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by Health Infrastructure to manage and minimise the potential impacts arising from the development.

Conclusion and Justification

The EIS addresses the SEARs, and the proposal provides for the significant improvement of key hospital services at the Royal Prince Alfred Hospital. The potential impacts of the development are either minor or are able to be managed. Given the planning merits of the proposal, the proposed development warrants approval by the Minister for Planning.

1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development (SSD) relating to a multi-story staff carpark as part of the Royal Prince Alfred Hospital site in Camperdown.

Pursuant to Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*, the development is considered to be State Significant Development (SSD 7542) on the basis that the development has a capital investment value of more than \$30 million for a hospital, medical centre or health research facilities. Car park is an ancillary use of a hospital.

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the Requirements of the Secretary for the Department of Planning and Environment for the preparation of the EIS, which are included at **Appendix A**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

The report includes the following information:

- An overview of the site and the proposed development.
- An outline of the key strategic and statutory planning framework.
- An assessment of the environmental issues associated with the proposal.
- An overview of consultation undertaken to date for the proposal with authorities and the public.

1.1 Overview of the Proposed Development

This project is being undertaken in response to the ongoing redevelopment of the Royal Prince Alfred Hospital (RPA Hospital) Precinct. It will provide for replacement of staff parking and aid in the support of recent and the ongoing growth of hospital facilities.

Accordingly, this proposal seeks approval for the redevelopment of the subject site comprising of the following key components;

- clearance of all vegetation;
- site preparation and excavation works;
- construction and use of a 9 storey car park comprising:
 - 996 car parking spaces, 10 of which are accessible spaces;
 - relevant security measures to restrict access to hospital staff.
- 24 hour operation 7 days per week, in accordance with the hours of operation for the RPA Hospital.
- access from the new extended Brodie Street, and egress onto Lucas Street and Church Street;
- car park signage (700mm x 1000mm) identifying number of available parking spaces; and
- associated landscaping works.

1.2 Background to the Development

The subject site is located within the grounds of the Royal Prince Alfred Hospital Campus, located on Missenden Road, Camperdown.

The RPA Hospital is one of Australia's leading hospitals, and provides an extensive range of diagnostic and treatment services. It has been operating on the site since 1882, and has undergone an extensive program of expansion works over the years to grow and care for Sydney and its residents.

The RPA Hospital is the subject of contemporary expansion works to address the health care demands of the local community and Greater Sydney. Accordingly, the primary driver of this application is to safeguard the ongoing operation of this hospital by addressing the existing shortage in staff parking.

1.3 Objectives of the Development

The objectives of the Project are to:

- Expand RPA Hospital Precinct car parking facilities to address the current shortfall of parking spaces and the projected increase in parking demand driven by population growth and service expansion;
- Address the reduction of designated staff car parking within the existing multi-storey car park located on the corner of Grose and Church Street;
- Support essential ancillary infrastructure at RPA that is critical to operations and essential to attracting the best talent and staff retention; and
- Deliver a building that is fit for purpose, responds to its streetscape setting, including heritage context, whilst balancing the challenges/constraints that RPA faces in terms of available land for development.

1.4 Analysis of Alternatives

1.4.1 Strategic Need for the Proposal

The key driver for the project is to deliver replacement and additional staff parking in the north west of the RPA Hospital site to meet current demands. As noted, there have been recent expansion works within the RPA hospital site with the intent of providing increased capacity and capability to meet expected population increases and address existing shortfalls.

Specifically, recent major works in the RPA Campus comprise of:

- MP 10_0036 that enabled the construction of the Chris O'Brien Lifehouse Centre to the south east of the subject site. The project delivered a ten storey c. 42,000sqm cancer medical facility with clinical services and research facilities, including a basement car park with 100 spaces (that are not for the exclusive use of staff). It was discussed in the application that "the limited on-site parking" would be supplemented by the existing car parks in and around the RPA precinct to accommodate staff servicing this development (EIS dated July 2010).
- MP 10_0166 that enabled the construction of the Marie Bashir Centre directly to the east of the subject site. This project delivered a seven storey hospital building with c. 13,000sqm of GFA and a basement car park with 38 spaces (that are not for the exclusive use of staff). It was discussed in the application that the reduction in available on site parking as a result of the development, could be accommodated by the existing parking across the RPA Campus and public transport networks (EIS dated August 2012).

Whilst these reductions in on-site parking coupled with an increased demand from the new facilities was deemed to be sufficient at the time, the cumulative impact of such works in addition to contemporary changes to the availability of staff parking has contributed to a deficiency within the RPA Campus.

The existing multi-storey car park located on the corner of Grose and Church Street previously contributed 1027 spaces with reduced rates for staff. However, a recent change under the terms of the lease to operate the car park has seen those spaces available to staff reduced to just 600 spaces with elevated parking fees. This has significantly restricted the availability of parking for staff within the RPA Campus, with the cumulative impacts of this having potentially negative consequences on the operation of the hospital.

This shortage has also been considered by GTA Consulting who have assessed the 2006 and 2011 'Journey to Work' data, which provides a picture of existing travel patterns to and from the RPAH Campus and the greater Camperdown Health Precinct. This data confirmed that whilst car travel as a mode of travel to or from work reduced between 2006 and 2011, car travel either as the driver or passenger still contributes to nearly 50% of all journeys. This is a relatively low figure for hospital use and is unlikely to materially change in the future. Accordingly, the private car is the predominant mode of travel for those people working in this area and such demand is expected to remain high.

In light of this, it is evident that in providing additional dedicated staff car parking, the proposal will assist in realising the vision of *A Plan for Growing Sydney* and ensuring there is adequate infrastructure to support the expanding operation of this critical piece of social infrastructure.

1.4.2 Alternative Options

Three options are available to Sydney Local Health District (SLHD) and Health Infrastructure in responding to the identified need for the redevelopment of its facilities.

Option 1 – The Proposal

Option 1 involves undertaking the proposed development as outlined in this SSD Application (refer to **Section 3** of this report). The proposal will allow the expansion of the RPA Hospital car parking facilities that responds to the strategic need identified above. The proposal will address the current shortfall in staff car parking spaces and address any future demand driven by population growth and service expansion.

Option 2- Do Nothing

Under the 'Do Nothing' scenario health services in this central Sydney location will remain under supported and will not allow for the efficient operation of the hospital or allow key services to be delivered in the future. Given the recent reduction in the provision of staff parking within the existing multi-storey staff car park located on the corner of Grose and Church Street, to do nothing would lead to increased levels of staff dissatisfaction. Not undertaking this work would not be an appropriate outcome for a project of this nature, which will facilitate much needed health infrastructure and contribute to the retention of key workers for RPA Hospital.

Option 3 – Alternative Designs

The design of the proposed above ground car park is specialised, and as such the proposed building envelope responds to the nature of the development and the highly constrained nature of the site within the RPAH campus. Further, there are no alternative locations for the proposed multi-storey staff car park within the Precinct as available land is finite. In effect, there are no other options.

1.5 Secretary's Requirements

In accordance with Section 89G of the EP&A Act, the Secretary of the Department of Planning and Environment issued the requirements for the preparation of an EIS on 29 March 2016. A copy of the SEARs has been included at **Appendix A**.

The SEARs require that the EIS include the documents listed in Schedule 1 of the EP&A Regulations and it must meet the requirements of Schedule 2 of the Regulation, in particular the form specifications in Clause 6 and the content specifications in Clause 7. Several stakeholders were identified with whom consultation must occur during the preparation of the EIS (see **Section 4.0**).

Table 1 provides a detailed summary of the individual matters listed in the SEARs and identifies where these requirements have been addressed in this report and the accompanying technical studies.

Table 1 – Secretary's Environmental Assessment Requirements (SSD – 7542)

Director-General's Environmental Assessment Requirement	Location in Report	
	Report	Appendix
General Requirements		
The EIS must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> .	-	-
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 4.0	Appendix B – T
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of potential cumulative impacts due to other development in the vicinity; and - measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Section 4.0	Appendix B – T
The EIS must be accompanied by a report from a qualified quantity surveyor providing: a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;	-	Submitted under separate cover
an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and	Section 4.17	-
certification that the information provided is accurate at the date of preparation.	Statement of Validity	-

Director-General's Environmental Assessment Requirement	Location in Report	
Key Issues		
Strategic Context	Report	Appendix
Address the statutory provisions contained in all relevant environmental planning instruments, including: - State Environmental Planning Policy (State & Regional Development) 2011; - State Environmental Planning Policy (Infrastructure) 2007 - State Environmental Planning Policy No. 33 – Hazardous and Offensive Development - State Environmental Planning Policy No. 55 – Remediation of Land; and - Sydney Local Environmental Plan 2012. Detail the nature and extent of any prohibitions that apply to the development.	Section 4.1	-
Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.	Section 4.0	Appendix B - T
Policies	Report	Appendix
Address the relevant planning provisions, goals and strategic planning objectives in the following: - NSW State Priorities; - A Plan for Growing Sydney - NSW Long Term Transport Master Plan 2012 ; and - Healthy Urban Development Checklist, NSW Health.	Section 4.1	-
Built Form and Urban Design	Report	Appendix
Address the height, bulk and scale and setbacks of the proposal in relation to the hospital campus and the surrounding locality, topography and streetscape.	Section 4.3, 4.5	Appendix B
Address design quality, with specific consideration of façade treatment in terms of materials, colours and screening.	Section 4.3	Appendix B
Demonstrate design excellence in accordance with the design excellence provisions of <i>Sydney Local Environmental Plan 2012</i>.	Section 4.2	Appendix L, M
Address <i>Crime Prevention Through Environmental Design</i> matters in relation to surveillance of the car park, access controls, security features, and existing and new pedestrian desire lines throughout the hospital	Section 4.13	Appendix Q
Environmental Amenity	Report	Appendix
Detail any amenity impacts on existing hospital buildings and surrounding development including solar access, acoustic impacts, visual privacy, loss of outlook and wind impacts. A satisfactory level of environmental amenity for surrounding land uses and any open space areas must be demonstrated.	Section 4.0	Appendix B-T
Address the visibility of the car park structure from surrounding buildings (with consideration given to providing a green roof to provide visual interest and improve environmental performance).	Section 4.0	Appendix B-T
Social Impact	Report	Appendix
Address the relocation of the existing staff child care centre.	Section 4.17	-
Transport and Accessibility	Report	Appendix
Include a transport and accessibility assessment which details, but is not limited to, the following: - details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network located adjacent to the proposed development; - provision of current staff and visitor car parking on the subject site;	Section 4.4	Appendix F

Director-General's Environmental Assessment Requirement	Location in Report	
▪ current daily and hourly movements and duration of stay at the existing car park including on a typical weekday and weekend; ▪ an assessment of the existing and future transport needs associated with the hospital, including a clear understanding of the travel task for all modes at different times of the day (peak, off peak) and week; ▪ an estimate of the total daily and peak hour vehicle trips generated by the proposal, including details of assumptions made to determine/justify the amount of spaces sought to service the hospital, including estimated trip generation, car modal split, duration of stay etc.; ▪ an assessment of the existing and future performance of key intersections providing access to the site and any upgrades (road/intersections) required as a result of the development; ▪ an assessment of safety and convenient access for pedestrians between the proposed car park and the hospital services; ▪ the impact on public transport services and infrastructure (existing and planned) and walking cycling access and facilities; ▪ the proposed access arrangements and measures to mitigate any associated impacts on road safety, walking and cycling, public transport services and traffic flows; ▪ include a pricing policy for use of the car park to align public transport and active transport targets with private vehicle targets, with consideration given to formulating a Green Travel Plan for the hospital addressing ways in which sustainable and active transport modes will be encouraged; and ▪ traffic, transport and road safety impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking (including the temporary loss of parking on the site) and public transport impacts. Detailed information should be provided on existing bus services and bus stops and measures to avoid impacts during the construction period. A draft Construction Traffic Management Plan should be included to demonstrate the proposed management and mitigation of the impacts. This Plan should also provide details of vehicle routes, number of construction vehicle movements, hours of operation, construction program, work zone location, access arrangements and traffic control measures for all construction activities. Relevant Policies and Guidelines: ▪ Guide to Traffic Generating Developments (Roads and Maritime Services) ▪ EIS Guidelines – Road and Related Facilities (DoPI) ▪ NSW Planning Guidelines for Walking and Cycling ▪ Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development		
Ecologically Sustainable Development (ESD)	Report	Appendix
▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development.	Section 4.14	-
▪ Include a description of the measures that would be implemented to minimise consumption of resources and energy.	Section 4.14	-

Director-General's Environmental Assessment Requirement	Location in Report	
Heritage	Report	Appendix
Include a Heritage Impact Statement that addresses the significance of, and provides an assessment of the impact on the heritage significance of any heritage items on the site and in the vicinity, and/or conservation areas and/or potentially archaeologically significant areas, in accordance with the guidelines in the NSW Heritage Manual	Section 4.6	Appendix N
Noise and Vibration	Report	Appendix
Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land	Section 4.10	Appendix O
Relevant Policies and Guidelines:		
▪ NSW Industrial Noise Policy (EPA)		
▪ Interim Construction Noise Guideline (DECC)		
▪ Assessing Vibration: A Technical Guideline 2006		
Contamination	Report	Appendix
Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.	Section 4.9	Appendix K & S
Relevant Policies and Guidelines:		
▪ Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)		
Drainage	Report	Appendix
Detail drainage associated with the proposal, including stormwater and drainage infrastructure.	Section 4.7	Appendix G
Water Sources	Report	Appendix
Assess impacts on groundwater, including groundwater quality, quantity and connectivity.	Section 4.7	Appendix G
Relevant Policies and Guidelines:		
▪ NSW Aquifer Interference Policy (NOW, 2012)		
▪ NSW State Rivers and Estuary Policy (1993)		
▪ NSW Guidelines for Controlled Activities on Waterfront Land (DPI, 2012)		
Flooding	Report	Appendix
Assess any flood risk on site and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Section 4.7	Appendix G
Waste	Report	Appendix
Identify, quantify and classify the likely waste streams to be generated during construction and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 4.15	Appendix J
Plans and Documents	Report	Appendix
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.	-	Appendix B
In addition, the EIS must include the following:		
▪ Architectural drawings (dimensioned and including RLs);		
▪ A physical 3D model and 3D CAD model;		Under separate cover
▪ Site survey plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries;		Appendix C
▪ Site analysis plan;		Appendix B

Director-General's Environmental Assessment Requirement	Location in Report	
▪ Stormwater concept plan;		Appendix G
▪ Sediment and erosion control plan;		Appendix G
▪ Shadow diagrams;		Appendix B
▪ View analysis / photomontages;		Appendix B
▪ Landscape plan (identifying any trees to be removed and trees to be retained or transplanted);		Appendix H
▪ Draft Public Domain Plan;		Appendix H
▪ Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan;		Appendix I
▪ Geotechnical and structural report;		Appendix E, G
▪ Arborist report;		Appendix D
▪ Acid sulphate soils management plan (if required); and		N/A
▪ Schedule of materials and finishes.		Appendix B
Consultation	Report	Appendix
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.	Section 3.11	-
In particular you must consult with:		
▪ City of Sydney Council;		
▪ Transport for NSW; and		
▪ Roads and Maritime Services.		
The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.		

2.0 Site Analysis

2.1 Site Location and Context

The subject site is located within the grounds of the RPA Hospital Campus, on Missenden Road, Camperdown.

RPA Hospital is one of Australia's leading hospitals, and provides an extensive range of diagnostic and treatment services. The grounds of RPA Hospital are vast covering an area of around 12ha. **Figure 1** below shows the site's broader context.

The site of the proposed development is more specifically located to the north west of the RPAH Campus, which is bounded by Missenden Road to the east, Church Street to the west, Lucas Street to the north, and Brodie Street to the south.

The RPA Hospital and University of Sydney form part of a significant specialised centre within Sydney for education, research and health. More broadly, RPA Hospital is located within the Inner West region of Sydney, some 4km south-west of Sydney CBD and within the City of Sydney Local Government Area.

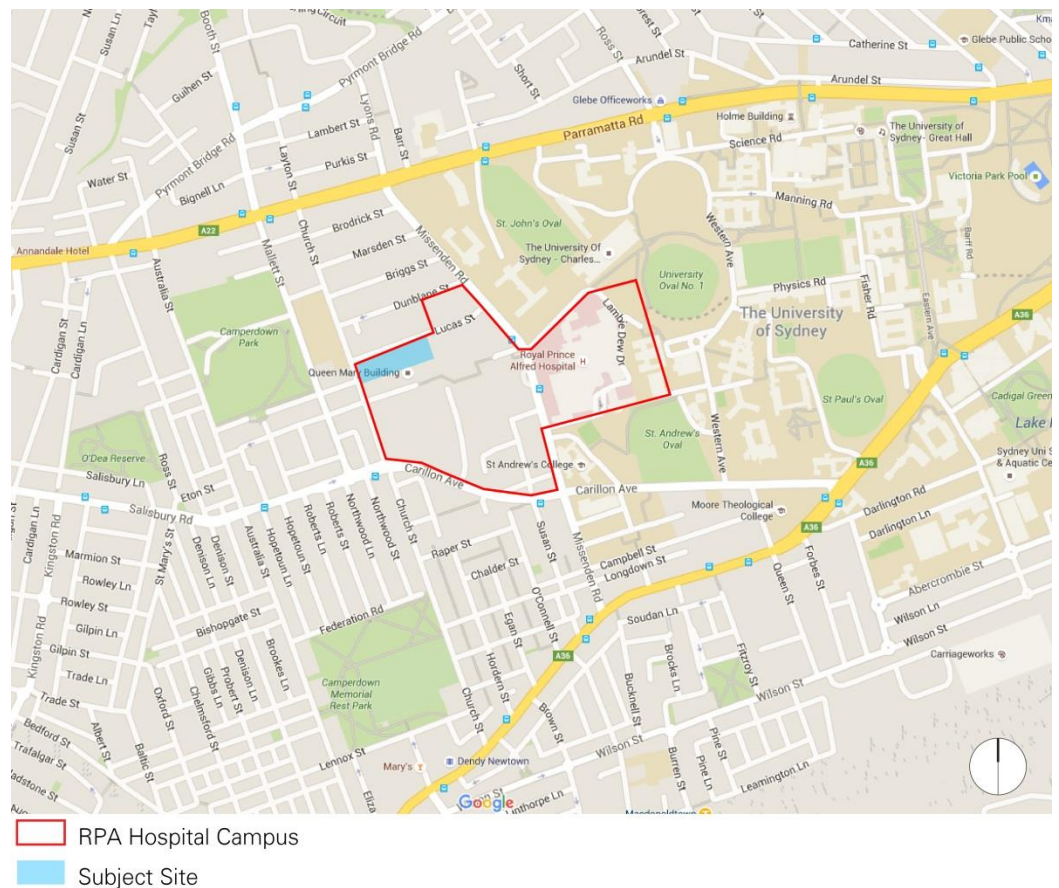


Figure 1 – Context of the site

2.2 The Site

2.2.1 Land Ownership

The land is owned by the Health Administration Corporation. It is located on part of Lot 101 in DP 1179349, at 106-112 Church Street, Camperdown.

There is an existing water main and associated easement of variable width on the southern boundary of the site. This easement is in favour of Sydney Water.

The subject site is bounded by Lucas Street to the north, an internal hospital road to the east, the Queen Mary student accommodation building to the south, and Church Street to the west. Refer to the Site Survey at **Appendix C** and **Figure 2** below.

2.2.2 Existing Development

The aerial photo at **Figure 2**, together with the Site Survey, illustrates the existing distribution of buildings and uses on the site and its surrounds.



Figure 2 – Aerial photograph of the site

This subject site is presently occupied by a variety of different structures and uses, as described below. However, as is discussed in **Section 3.3** of this EIS, the demolition of these structures on site has been undertaken, or is planned to be undertaken, by the proponent, in conjunction with SLHD, as part of the ongoing redevelopment of the RPA Hospital campus. Accordingly, these structures will be demolished subject to separate approval.

In the east of the subject site is an unoccupied single storey brick building that was formerly used as a site office during the construction of the Marie Bashir Centre. This office is accessible from the Lucas Street frontage and within the hospital site from an adjoining at-grade car park. It is locally known within the RPA Hospital as 'Building 31'. Refer to **Figures 3** and **4** below.



Figure 3 – Former site office as viewed from Lucas Street



Figure 4 – Site office looking west including the existing car park entrance

This site office is adjoined by an at-grade car park for the use of hospital staff. This car park is bordered by a number of mature trees and is raised above the ground level height of Lucas Street. This car park is accessed from Brodie Street and the existing internal hospital road adjoining the site to the east. There is a boom gate preventing unauthorised personnel from using the available parking spaces. Refer to **Figures 5 to 7** below.



Figure 5 – The car park looking south east with the adjoining site office



Figure 6 – The change in levels between the car park and Lucas Street



Figure 7 – View of the car park looking north west

This car park borders the single storey brick Lucas Street Child Care Centre and associated outdoor recreation space. This child care centre is also elevated above the ground level of Lucas Street and is accessed via the same internal access road as the at-grade car park. Refer to **Figures 8** and **9** below.



Figure 8 – The Lucas Street Child Care Centre looking north – ‘The Edna Roper Building’



Figure 9 – The change in levels between the child care centre and Lucas Street

To the west of the child care centre is a fenced off, disused section of the site. There is a dilapidated two storey brick building with a tall parapet fronting the corner of Church and Lucas Street. This building is in line with the ground level of Lucas Street. To the rear of this building (where it adjoins the Queen Mary Building) are unmanaged weeds, turf, and an abandoned swimming pool. Refer to **Figures 10** to **11** below.



Figure 10 – Disused building as viewed from Church Street looking north east



Figure 11 – Unmanaged landscaped area at the rear

Heritage

The subject site is not identified as being of heritage significance or as being within a heritage conservation area under the *Sydney Local Environment Plan 2012* (SLEP). However, 'Building 51' presently in the north west corner of the site (shown in **Figure 10** above) is listed on the NSW Department of Health's Preliminary Section 170 Heritage and Conservation Register.

Site Access

The subject site is served by a number of regional roads in the vicinity including Parramatta Road, King Street and City Road providing links to Missenden Road and Carillon Avenue. Vehicle access to the site is currently provided from either Brodie Street, which is a one way in street accessed off Missenden Road, or from Lucas Street (also a one-way street from west-east) and via the internal hospital access road, which connects to the existing at-grade car park on site.

Good pedestrian linkages are available within the RPA Hospital site and along both sides of Lucas Street and Church Street via segregated paved pathways.

The site is also well served by bus and rail transport. Bus transport operates along the Missenden Road, Carillion Avenue and Salisbury Road at 15-20min intervals during peak and off peak periods. The RPA campus is also within a 10-15min walk to both Macdonaldtown and Newtown railway stations which are located on both the T1 and T2 train lines.

Topography

As shown on the Site Survey (refer to **Appendix C**), the site is generally level east to west and falls approximately one metre from south to north. This change in elevation generally occurs at the allotment boundary where the site has been elevated by the use of a retaining wall to the Lucas Street road reserve. This is illustrated in **Figure 9** above and **Figure 12** below.

Vegetation

The site is highly modified and has been cleared of all significant natural vegetation. There is limited informal planting restricted to the overgrown grass courtyard in the west and the raised garden beds delineating the level car park. Stuart Noble Arboricultural have accordingly identified twelve (12) mature trees on the subject site in their Arboricultural Impact Assessment Report at **Appendix D**.

2.3 Surrounding Development

Being located on the periphery of the North Western Precinct of the RPA Hospital Campus, the subject site is surrounded by a variety of different uses external to the health campus. Noteworthy development within the vicinity of the site is described below and illustrated in the subsequent Figures.

To the East

To the east of the site is the Marie Bashir Centre (as approved under MP 10_0166). This building is approximately 7-9 storeys in height with sections that overhang Brodie Street. This building has a basement car park with 38 spaces for general use that is accessed from a driveway on Lucas Street. This site is owned by the Health Administration Corporation.



Figure 12 – The Marie Bashir Centre viewed from Lucas Street looking east



Figure 13 – The Marie Bashir Centre overhang over the internal access road



Figure 14 – Car park entry to the Marie Bashir Centre on Lucas Street

To the South

To the south of the site is the Queen Mary Building that is presently owned and operated by the University of Sydney as student housing. This building is an elongated “E” in plan and consists of 11 storeys above basement and ground floor level, with the main entrance at Grose Street. It is listed on the NSW Department of Health’s Preliminary Section 170 Heritage and Conservation Register.

This site was formerly owned by the Health Administration Corporation. It operated as accommodation for nurses between the 1950’s and 2002, after which it largely remained vacant until being refurbished for student accommodation purposes in 2011 (City of Sydney Council DA 2011/1107).

The adaptive re-use of the Queen Mary Building as student accommodation comprises of 720 single and 41 double bedrooms (802 beds); 2 retail tenancies at Grose Street, car parking for 30 vehicles and significant bicycle storage.

It is constructed from red brick and has balconies on a portion of the north and south facades and wrap-around balconies on the eastern and western facades. The building is setback approximately 4m from the boundary of the allotment. Refer to **Figures 15 to 17**.

The compatibility of the Queen Mary Building for the purposes of student accommodation within the wider context of the RPA Hospital Precinct has been found to be broadly compatible with the surrounding land uses. The compatibility of the student accommodation use took into consideration the future growth and development of the Hospital Precinct and was deemed to be a compatible land use.



Figure 15 – Queen Mary Building as viewed from Church Street



Figure 16 – Queen Mary Building viewed from Lucas Street



Figure 17 – Existing setback and treatment to Queen Mary Building

To the West

Along the western boundary of the site is Church Street. On the opposite side of this street there are a number of different uses and built forms including:

- a blank street wall for a corner town house dwelling that is orientated to Fowler Street;
- an attached modern extension to the rear of this town house with limited high level windows fronting the street; and
- a two storey commercial/retail premises with a contemporary extension up to 3 storeys above this used for the Brain and Mind Research Institute, which forms part of the Mallett Street Campus for the University of Sydney.

Refer to **Figures 18 to 19** below.



Figure 18 – Town houses on the west side of Church Street



Figure 19 – Commercial/retail tenancies and the Brain and Mind Research Institute on the west side of Church Street

The subject site is not identified as an item of environmental heritage under the Sydney LEP 2012 nor is the site located within the boundaries of any Heritage Conservation Area as listed under the Sydney LEP 2012 however the subject site is located within the vicinity of local heritage items to the west along Church Street and Fowler Street, Camperdown.

To the North

Along the northern boundary of the site is Lucas Street. On the opposite side of this street is the Consulate General of the People's Republic of China. The Consulate has a c. 2-2.5m concrete fence fronting the street and what appear to be office buildings directly opposite the site. Refer to **Figure 21** and **22** below.



Figure 20 – Consulate from the eastern end of Lucas Street



Figure 21 – Consulate from the western end of Lucas Street

3.0 Description of Proposed Development

The proposed development is in accordance with the Architectural Drawings prepared by Cardno and Fitzpatrick +Partners at **Appendix B**.

3.1 Development Principles

The building and design principles or project outcomes adopted for the redevelopment of the subject site comprise:

- facilitating better access for hospital staff who are critical to the operation of RPA Hospital, and through this counteracting operational impacts on the delivery of health services and patient care;
- utilising available land more efficiently and effectively for campus parking needs to create a more flexible and responsive campus into the future;
- delivering a high level of design that represents the best outcome from both a functional and aesthetic perspective; and
- responding to the nature of the development and the highly constrained nature of the site within the RPA Hospital campus.

3.2 Overview of the Proposed Works

This project is being undertaken in response to the ongoing redevelopment of the Royal Prince Alfred Hospital (RPA Hospital) Precinct. It will provide a significant increase in the availability parking exclusively for hospital staff, to support recent and the ongoing growth of hospital facilities.

This proposal seeks approval for the redevelopment of the subject site comprising of the following key components;

- clearance of all vegetation;
- site preparation and excavation works;
- construction and use of a 9 storey car park comprising:
 - 996 car parking spaces, 10 of which are accessible spaces;
 - relevant security measures to restrict access to hospital staff.
- 24 hour operation 7 days per week, in accordance with the hours of operation for the RPA Hospital.
- access from the new extended Brodie Street, and egress onto Lucas Street and Church Street;
- car park signage (700mm x 1000mm) identifying number of available parking spaces; and
- associated landscaping works.

Photomontages of the proposed development are provided at **Figures 22 and 23** below.



Figure 22 – Photomontage of the proposal from Church Street
Source: Pixalate



Figure 23 – Photomontage of the proposal from Lucas Street
Source: Pixalate

3.3 Site Works

As part of the ongoing redevelopment of the RPA Hospital, the landowner has undertaken, or is planning to undertake, works on site and in the vicinity of the site. These include the demolition of redundant infrastructure such as the existing vacant buildings on the site. These works do not form part of the scope of this assessment.

Other works that form part of this application include:

Bulk Earthworks

Bulk earthworks are required to grade the site and provide the necessary building platform and at-grade vehicle driveway crossings for the proposed structure. These earthworks comprise of excavating the site to depths of:

- 0.3m below the Church Street frontage;
- 0.3m-1m below the Lucas Street footpath, following the removal of the existing retaining walls; and
- maximum 2.5m generally across the centre of the allotment.

The proposed internal road along the southern boundary of the allotment, known as Brodie Street, will be constructed close to the existing ground surface level.

If required, exported material will be disposed of to an appropriately licenced facility, with regard to the classification of the material under the EPA's *Waste Classification Guidelines*.

Batter works are also proposed to occur within the site boundary to the centre of the site (to accommodate the proposed split level) and other forms of retention along the eastern edge of the site, whereby the proposed lowest level will be 1m below the Lucas Street footpath but battering will not extend into the footpath. This battering and retention system will enable the grading of the site without impacting the existing levels of adjoining land and the adjoining properties.

Refer to the Geotechnical Investigation prepared by JK Geotechnics at **Appendix E**.

Tree Removal

The impacts of construction of the new multi-storey staff car park will require the removal of 12 trees to be undertaken.

Remediation

Site remediation will be undertaken in accordance with the recommendations of the Stage 2 Environmental Site Assessment and Remediation Action Plan.

3.4 Built Form

Building Height

The proposed multi-storey staff car park has been designed with a regular built form fit for purpose to meet the functional needs of staff car park.

The proposed multi-storey staff carpark contains 9 storeys with a maximum RL of 54.4 (inclusive of lift overrun), with the roof level stepping in height between RL 50.45 and RL 51.78. This split-level height has been developed with a desire to maximise the potential number of car parking spaces on site in order to accommodate for the existing shortfall, whilst still providing a suitable building in the local context.

The bulk and scale of the proposed structure will provide a more logical transition in height from the adjoining and adjacent large scale buildings to the south and east and improved solar access at the upper levels.

Setbacks

To the south, running along the internal road (Brodie Street), is a 13-level student accommodation block, the Queen Mary Building (QMB). This building has strong horizontal banding comprised predominantly of brick with concrete and glazed highlights. Key living areas are located along QMB's northern boundary. Due to this and the proposal's proximity, careful consideration of the proposal has occurred to minimise its impact on privacy, light spill, air quality and acoustic pollution.

With reference to the existing form of adjacent buildings, including the Marie Bashir Centre, and to enable the efficient operation of a car park on site, the proposed development has adopted a consistent street wall with no upper level setbacks. The proposed building will be setback 0m to the Lucas Street frontage to facilitate the necessary vehicle access and egress; 0m to the eastern street frontage to reinforce existing building lines whilst still enabling the pedestrian footpath along this boundary; variable c.3m-12m from Church Street for the car parking entrance/exits and ramp and c.20m for the car parking building; and between c.5m -7m setback to the south to enable the extended Brodie Street (near the Church Street end) along this boundary and support building separation.

External Materials and Finishes

The proposal will be constructed from brickwork as a base, and curved perforated aluminium panels with a powder coated finish in graduating colours for each storey. These materials and finishes have been selected to complement the form, function and aesthetics of the structure on the site, whilst also providing a consistent pallet with the modern built form of the Marie Bashir Centre to the east, and the brick Queen Mary building to the south. The proposed materials are included in the Architectural Drawings prepared by Fitzpatrick + Partners, a copy of which is provided at **Appendix B**.

3.5 Operation

Approval is sought for the 24 hour / 7 days a week operation of the proposed car park. These operational hours are consistent with those of the RPA Hospital that the proposed development will support.

The proposed car park is for the exclusive use of hospital staff and will not be for public or visitor use. To ensure this is achieved in the operation of the car park, a boom gate and swipe card reader will be incorporated at the intersection between Brodie Street and the internal hospital road, where the existing boom gate is located (as shown in **Figure 17** of this report).

As a staff car park, fees will be charged in accordance with standard practice. The majority of public hospitals across metropolitan Sydney charge staff for parking. NSW Health therefore has an established policy which is adhered to by the Local Health District. This policy outlines staff parking rates for public hospitals in Sydney. Staff parking permits are issued at the award rate, which is consistent across most public hospitals in Sydney. The policy, titled *Sydney Hospital Car Parking Fees Policy: Campuses which are subject to car parking development*, is available on NSW Health's website.

The proposal includes car park signage (700mm x 1000mm) at Brodie Street to identify the number of available parking spaces.

3.6 Landscaping and Public Domain

The proposed landscaping concept for the development has been prepared by Sturt Noble Associates accompanies this EIS at **Appendix H**. This landscaping concept envisages the following for the site:

- the standard concrete footpath along the perimeter of the structure will be ornamented through semi-circular exposed aggregate concrete paving and terrabond porous paving;
- native climbing plants will be installed as a green design feature on the northern façade;
- native species of layered shrub planting will be planted within the western setback to soften the appearance of the structure and screen the development at ground level; and
- a feature mature angophora tree will be planted in the north western corner of the site to create a landscaped street presence and integrate the development with the existing street tree planting in the area.

3.7 Vehicular Access and Parking

Road Works

The proposal includes the extension of the internal road, Brodie Street, to facilitate vehicle access to the new multi-storey staff car park along with two additional crossovers at Church and Lucas Streets to allow for vehicle egress. As detailed in the Architectural Plans and Traffic Impact Assessment at **Appendix B** and **F** respectively, the proposed development includes new vehicle access and egress driveways and a mixture of standard, small car, and accessible vehicle parking.

Parking

The proposed multi-storey staff car park will provide 996 spaces, including 10 accessible spaces and 31 small car spaces, across 9 split levels.

Access Arrangements

As demonstrated within **Figure 24** below, Access is provided via the extension to internal Brodie Street along the southern boundary of the allotment. Brodie Street will operate as a single lane one-way street incorporating a boom gate at the intersection with the internal hospital road that ensures access is only available for hospital staff. Vehicle egress will be provided via a single exit lane onto Church Street and Lucas Street, to ensure an even distribution of vehicles leaving the site.



Figure 24 – Proposed Access Arrangements
Source: Cardno

3.8 Water Cycle Management Works

Stormwater concept plans have been prepared by Cardno and included at **Appendix G** as part of the Civil and Structural Design Report. The plan proposes to construct an 80m³ on-site detention tank beneath Level 0b, and will be discharged to the existing Council stormwater pit at the intersection of Lucas and Church Street after passing through a sediment sump pit within the site boundary. Furthermore, the existing pit on Brodie Street will be reconstructed as part of the proposed works and a fire hydrant pump room will also be provided on site.

3.9 Construction Management

A Construction and Environmental Management Plan (CEMP) has been prepared by Health Infrastructure and submitted at **Appendix I**, in accordance with relevant applicable Australian Standards and Occupational Health and Safety requirements and addresses the following matters:

- site access controls, public safety, amenity and security;
- operating hours;
- construction traffic management;
- noise disruption processes;
- noise, vibration, dust, and odour management;
- hazardous materials management;
- workplace health and safety;
- service disconnections; and
- site emergency contacts.

Mitigation measures and management plans, where necessary, have also been included in the CEMP to ensure that the construction works do not cause any adverse environmental impacts upon the surrounding community and measures follow best practice principles.

The contractor will be responsible for preparing a detailed CEMP in accordance with the required standards prior to the commencement of works on the site.

3.10 Waste Management

A Construction Waste Management Plan has been prepared by Health Infrastructure and is submitted with this application at **Appendix J**.

The Construction Waste Management Plan has been prepared to ensure that the waste generated on site during construction will be minimised and provides details on how the generated waste will be recovered and recycled, where practical.

The Plan identifies how generated waste will be monitored, which types of waste will be collected for recycling or for re-use on site, how recycling will occur and who will be responsible for the various aspects of the waste management process.

The contractor will be responsible for preparing a detailed Construction Waste Management Plan in accordance with the required standards prior to the commencement of works on the site.

3.11 Consultation

A schedule of consultations held, and intended future consultations, has been provided below. Health Infrastructure will undertake further consultation with the relevant environmental agencies during the assessment of the EIS.

Those issues raised during consultation undertaken have been detailed in **Table 2** below.

Table 2 – Comments arisen through preliminary consultation

Topic	Comments	EIS Section
City of Sydney Council	Health Infrastructure met with the City of Sydney on 17 February 2016 to discuss the proposed multi-storey staff car park. The proposal was identified as staff parking only. The following comments were provided by Council: ▪ Overshadowing: Queen Mary Building is recognised as Student Accommodation rather than a Residential Apartment Building. Whilst it was recognised that overshadowing of the lower storeys it was noted that the QMB Student Accommodation was well serviced with alternative communal habitable spaces and a roof top common area. ▪ Council identified frustrations at the 'piecemeal approach' to the development of the site and are concerned that there has not been a more holistic approach to traffic/parking management. ▪ Council commented that a Travel Plan should be submitted with the application that addresses the current travel to and from work of staff and how they would be encouraged to use public transport when they were not on night shifts. ▪ Need to look at the traffic implications on the wider precinct probably analysing intersections further afield than those immediate to the location. ▪ SEARS from Westconnex had just been lodged and that the eastern portal is likely to be located in the vicinity of Missenden Road and that not could have a significant impact on traffic in the area and circulation patterns.	Refer to Section 4.4 and Appendix F.

Topic	Comments	EIS Section
Roads and Maritime Services	Consultation with Roads and Maritime (RMS) was undertaken in May 2016, where it was agreed that the proposal did not provide direct impact on RMS assets. Agreement was similarly achieved with respect to the extent of traffic surveys completed, noting that further assessment (if any) would only be necessary as part of the Public Exhibition process post-submission.	Refer to Section 4.4 and Appendix F.
Transport for NSW	Health Infrastructure and GTA offered to meet and brief TfNSW staff on the proposal. This offer was not accepted and TfNSW identified that they would formally review the proposal during the public exhibition of the SSDA. Health Infrastructure identified that the offer to meet with RMS stood.	Refer to Section 4.4 and Appendix F.

Further to this, the proposed development will be placed on public exhibition for 30 days in accordance with Clause 83 of the EP&A Regulations. During the public exhibition period Council, State agencies and the public will have an opportunity to make submissions on the detailed project application.

4.0 Assessment of Environmental Impacts

This section contains our assessment of the environmental effects of the proposed development as described in the preceding chapters of this report.

Under Section 79C(1) of the EP&A Act, in determining a development application the consent authority must take into account a range of matters relevant to the development including the provisions of environmental planning instruments, impacts on the built and natural environment, the social and economic impacts of the development, the suitability of the site, and whether the public interest would be served by the development.

It assesses and responds to the environmental impacts of the proposed SSD Application and addresses those matters for consideration set out in the SEARs (see **Section 1.4**).

4.1 Compliance with Relevant EPIs, Policies, and Guidelines

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARs are addressed in **Table 3** below. The relevant mitigation measures have been included in **Section 5** of this report.

Table 3 – Summary of consistency with key strategic and statutory plans and policies

Instrument / Strategy	Comments																		
State Legislation																			
EP&A Act	The proposed development is consistent with the objectives of the EP&A Act, in particular: - it promotes the social welfare of the community; - it supports the provision and coordination of community services and facilities; - it allows for the orderly and economic development of land; and - it incorporates the principles of ecologically sustainable development, to the best of its abilities. The proposed development is consistent with Division 4.1 of the EP&A Act, particularly for the following reasons: - the development supports and promotes medical services for the social welfare of the community; and - the development has been evaluated and assessed against the relevant heads of consideration under Section 79C.																		
EP&A Regulation	The EIS has addressed the specification criteria within Clause 6 of Schedule 1. Similarly, the EIS has addressed the principles of ecologically sustainable development (refer to Section 4.14). Clause 7(1)(d)(v) of Schedule 2 is addressed below: <table border="1"> <thead> <tr> <th>Act</th><th>Approval Required</th></tr> </thead> <tbody> <tr> <td colspan="2">Legislation that does not apply to State Significant Development</td></tr> <tr> <td><i>Coastal Protection Act 1979</i></td><td>N/A</td></tr> <tr> <td><i>Fisheries Management Act 1994</i></td><td>N/A</td></tr> <tr> <td><i>Heritage Act 1977</i></td><td>N/A</td></tr> <tr> <td><i>National Parks and Wildlife Act 1974</i></td><td>N/A</td></tr> <tr> <td><i>Native Vegetation Act 2003</i></td><td>N/A</td></tr> <tr> <td><i>Rural Fires Act 1997</i></td><td>N/A</td></tr> <tr> <td><i>Water Management Act 2000</i></td><td>N/A</td></tr> </tbody> </table>	Act	Approval Required	Legislation that does not apply to State Significant Development		<i>Coastal Protection Act 1979</i>	N/A	<i>Fisheries Management Act 1994</i>	N/A	<i>Heritage Act 1977</i>	N/A	<i>National Parks and Wildlife Act 1974</i>	N/A	<i>Native Vegetation Act 2003</i>	N/A	<i>Rural Fires Act 1997</i>	N/A	<i>Water Management Act 2000</i>	N/A
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<i>Water Management Act 2000</i>	N/A																		

Instrument / Strategy	Comments														
	Legislation that must be applied consistently <table border="1"> <tr> <td><i>Fisheries Management Act 1994</i></td><td>No</td></tr> <tr> <td><i>Mine Subsidence Compensation Act 1961</i></td><td>No</td></tr> <tr> <td><i>Mining Act 1992</i></td><td>No</td></tr> <tr> <td><i>Petroleum (Onshore) Act 1991</i></td><td>No</td></tr> <tr> <td><i>Protection of the Environment Operations Act 1997</i></td><td>No</td></tr> <tr> <td><i>Roads Act 1993</i></td><td>No</td></tr> <tr> <td><i>Pipelines Act 1967</i></td><td>No</td></tr> </table>	<i>Fisheries Management Act 1994</i>	No	<i>Mine Subsidence Compensation Act 1961</i>	No	<i>Mining Act 1992</i>	No	<i>Petroleum (Onshore) Act 1991</i>	No	<i>Protection of the Environment Operations Act 1997</i>	No	<i>Roads Act 1993</i>	No	<i>Pipelines Act 1967</i>	No
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<i>Protection of the Environment Operations Act 1997</i>	No														
<i>Roads Act 1993</i>	No														
<i>Pipelines Act 1967</i>	No														
SEPP (State & Regional Development) 2011	<i>State Environmental Planning Policy (State and Regional Development) 2011</i> (SRD SEPP) was adopted on 1 October 2011 and identifies State Significant Development (SSD) in accordance with Section 89C of the EP&A Act. Pursuant to clause 8 and Schedule 1 of the SRD SEPP, the development is considered to be SSD because it has a capital investment value of more than \$30 million for the purpose of ancillary uses to a hospital. The quantity surveyors cost plan submitted under a separate cover confirms the Capital Investment Value of the proposed car park is over \$30 million, which therefore satisfies the requirements of SSD.														
SEPP (Infrastructure) 2007	The aim of this SEPP is to facilitate the effective delivery of infrastructure across the State, including providing for consultation with the relevant authorities about certain development during the assessment process. The relevant matter for consideration under this SEPP is the referral requirements for Traffic General Development (Schedule 3). Areas used exclusively for parking of 200 or more motor vehicles with access to any road is required to be referred to the Roads and Maritime Services (RMS). Refer to Section 3.11 of this report regarding ongoing consultation with RMS.														
SEPP 55 (Remediation of Land)	Clause 7 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated, and if the land is contaminated, it is satisfied that the land is/can be suitable for the proposed development. A Phase 2 assessment has been prepared for the site by Environmental Site Investigations and is included as Appendix K. This assessment has been summarised in Section 4.9 of this Report. In summary, the Plan considers that the site can be made suitable for the proposed development and future uses, and outlines a strategy to ensure that the requirements of SEPP 55 are appropriately addressed.														
SEPP 33 (Hazardous and Offensive Development)	State Environmental Planning Policy No.33 – Hazardous and Offensive Development (SEPP 33) requires specific matters to be considered for proposals that are 'potentially hazardous' or 'potentially offensive' as defined in the policy. 'Potentially hazardous industry' is defined as: <i>A development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:</i> (a) to human health, life or property, or (b) to the biophysical environment, and includes a hazardous industry and a hazardous storage establishment. 'Potentially offensive industry' is defined as: <i>A development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.</i>														

Instrument / Strategy	Comments
	The proposed car park is not defined as potentially hazardous industry or potentially offensive industry under the above definition as is therefore not subject to the provisions of SEPP 33.
Strategic Plans	
NSW State Priorities	The NSW State Priorities were determined by Premier Mike Baird as significant overarching goals for the state, to provide high quality public services and infrastructure, while protecting those most vulnerable in our society. The proposal is considered to be in-keeping with these priorities by supporting the provision of improved government services in ensuring those key workers are able to efficiently access the RPA Hospital site 24/7 and in-turn meet the needs of patients.
A Plan for Growing Sydney	The site is identified as part of the Broadway and Camperdown Education and Health Precinct identified to "support health-related land uses and infrastructure around Royal Prince Alfred Hospital". It is in close proximity of the Sydney CBD and as such is in a vulnerable location to feel the effects of a rapidly growing and aging population. The proposal will contribute to achieving the four goals identified in the Plan through: ▪ Goal 1: <i>A competitive economy with world-class services and transport:</i> in providing the proposed development to support the RPA Hospital, this proposal can safeguard the future expansion of health facilities within the Campus and in close proximity of Sydney University. ▪ Goal 2: <i>A city of housing choice, with homes that meet our needs and lifestyles:</i> providing better access to the hospital on land that is not, and cannot, be used for residential purposes is thus not competing with housing supply opportunities. ▪ Goal 3: <i>A great place to live with communities that are strong, healthy and well connected:</i> The proposed development will facilitate better access to the RPA hospital site for staff and thereby create accessible jobs. ▪ Goal 4: <i>A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources:</i> as identified in the below sections of this report, the proposed development will protect and manage the subject site so as to protect and conserve the environmental values of the site and adjoining land. The Central Subregion This SDD Application is consistent with the Strategy in that it: ▪ Supports the CBD as the premier location for employment; ▪ Comprises of health related infrastructure that will safeguard the ongoing expansion and operation of the RPA Hospital; and ▪ Improve opportunities and access to jobs.
NSW Long Term Transport Masterplan 2012	This master plan sets the framework for the NSW Government to deliver an integrated transport system and identifies those needs to be addressed in order to support the State's economic and social performance over the next 20 years. The proposed development is consistent with this document as: ▪ it utilises existing opportunities to increase commuter parking and thereby minimise conflicts from parking overspill into the local community; ▪ it assists with accommodating increased demand for travel from Sydney's forecast population increase; ▪ it provides travel options for the hospital staff; and ▪ it successfully adopts a customer focus by acknowledging and addressing the existing and future requirements of hospital staff.
Healthy Urban Development Checklist, NSW Health	The proposed development will support improved functionality and capability for the RPA Hospital Campus and its associated services. It is considered to be consistent with the intent of the Healthy Urban Development Checklist by facilitating access to employment opportunities, contributing to critical social infrastructure in the locality and region, and redeveloping an underutilised site that is not, and cannot, be used for residential purposes is thus not competing with housing supply opportunities.

Instrument / Strategy	Comments	
Local Planning Instruments and Controls		
Sydney Local Environmental Plan 2012	Clause 2.1 – Zone	The site is zoned SP1 Special Activities (Health Services Facility). The objectives of the zone are to provide special land uses to facilitate development for a specific intended use. Under the LEP, development for the purposes shown on the Land Zoning Map (Health Services Facilities) and any development that is ordinarily incidental or ancillary to that purpose, is permissible with consent. Accordingly, the proposed development is permissible.
	Clause 4.3 – Height of Buildings	There is no maximum height control on the site.
	Clause 4.4 – Floor Space Ratio	There is no maximum FSR control on the site.
	Clause 5.10 – Heritage Conservation	This Clause sets out requirements in relation to heritage conservation, including the preparation of heritage impact statements and conservation management plans. The subject site is not identified as a heritage item and is not located in a heritage conservation area. It does, however, face a number of local heritage items on the other side of Church Street. A Statement of Heritage Impact has been prepared by Heritage 21 and is submitted with this report at Appendix N in support of the SSD Application.
	Clause 6.21 – Design Excellence	This clause requires development on the site to exhibit design excellence. Design excellence has been addressed in detailed within Section 4.2 of this report.
	Clause 7.18 – Car parks	This clause includes specific provisions pertaining to development for the purposes of a car park. These matters have been addressed in Section 4.1.1 below.
	Clause 7.20 – Development requiring or authorising preparation of a development control plan	The Department has waived the site specific development control requirements given the need for this critical infrastructure and its role within the RPA Hospital Precinct. Refer to Appendix L and M and Section 4.2 below.
Sydney Development Control Plan 2012	It is noted that Development Control Plans are not are not a matter for consideration in the assessment of SSD DAs by virtue of Clause 11 of SEPP SRD, which states that “<i>Development control plans ...do not apply to...state significant development</i>”. Notwithstanding this, an assessment of the proposed development against the relevant provisions of Sydney Development Control Plan 2012 is provided in Section 4.1.2 below.	

4.1.1 Sydney Local Environment Plan

The SLEP, in Clause 7.18, has specific requirements in relation to development specifically for the purposes of a car park.

Development consent must not be granted to development for the purposes of a car park unless the consent authority is satisfied that:

- (a) the development will not encourage persons to travel in private vehicles between 7am and 9.30am or between 3.30pm and 7pm on weekdays, and*
- (b) there will be restrictions on the hours of opening and the amount of time a vehicle can remain within the car park, and*
- (c) the development will not adversely impact on the congestion of roads, in particular the movement of public transport on those roads, and*
- (d) if not located in Central Sydney, the development will primarily serve retail premises, information and education facilities, entertainment facilities, recreation facilities (outdoor) or recreation facilities (major) on land shown as category F on the Public Transport Accessibility Level Map, and*
- (e) if located in Central Sydney on land on which there is not an existing car park, the development will directly serve nearby retail premises, information and education facilities, entertainment facilities, recreation facilities (outdoor) or recreation facilities (major) that, in the opinion of the consent authority, will not be adequately serviced by public transport or public car parking.*

The following should be noted in relation to the above restrictions:

- The development of a multi-storey staff car park on the site has been proposed with the expressed intention of providing hospital staff with sufficient parking to accommodate their journey to work. GTA Consulting (**Appendix F**) have been provided with the shift times of staff by RPA Hospital, and have confirmed the following peak periods: the primary AM peak period is between 7am to 7:30am; the secondary AM peak period is between 1pm to 3pm; the primary PM peak period is between 3:30pm to 6:00pm; and the secondary PM peak period is between 9:30pm to 11:00pm. Accordingly, in order for the development to appropriately accommodate these key workers, as it is intended to do, it must enable vehicles to access the site between 7am and 9.30am and between 3.30pm and 7pm any day of the week. This is essential to the efficient and ongoing operation of the RPAH.
- Approval is sought for the proposed car park to operate 24/7, in accordance with the operation hours of the hospital to which it services. As stated above, in order for the development to appropriately accommodate these key workers, as it is intended to do, it must be allowed to operate with consistent hours for the hospital at which staff will be working.
- The proposed development will not adversely contribute to the operation of the surrounding road network, or public transport movements, as addressed in **Section 4.4** below.
- The proposed development is located outside of Central Sydney and will service the RPA Hospital. Whilst neither the hospital or site are identified as being 'Category F' on the Public Transport Accessibility Level Map in the SLEP, the health services facility that it supports is considered to be compatible with the nominated uses in this clause requiring additional parking facilities to ensure the efficient operation of the facility.

4.1.2 Sydney Development Control Plan

As outlined in **Table 3** above, DCPs are not a relevant matter for consideration in the assessment of a SSD Application. Further, in recognition of their unique requirements and needs, there are no DCP provisions applying to hospital developments in the Sydney LGA or specific built form provisions for the site. However, the Sydney DCP does provide general guidelines for the Camperdown Locality.

The Locality Statement for Camperdown comprises of the following:

Camperdown is to continue its transformation from industrial uses to a vibrant high density mixed-use neighbourhood. Missenden Road is encouraged to support the centre emerging near Parramatta Road and further retail activity along Missenden Road. East-west links are encouraged through the hospital site and University to create a route between Camperdown Park and Victoria Park.

The proposed development will infill an existing superblock whilst maintaining the existing east/west connector road and pedestrian pathway through the RPA Hospital site. It will also provide a more formalised connection between Church Street and this east/west connector along the southern boundary of the site.

The provisions of the Sydney DCP pertaining to car parking either seek to “discourage commuter car parking”, which is the primary consideration of this application, or pertain to car parking as part of commercial or residential development. Accordingly, the provisions under Section 3.11 cannot reasonably be applied to the development.

Other considerations under the Sydney DCP relating to the detailed design of proposed development can be addressed through the relevant consultants’ reports and discussions in **Section 4** of this report below.

4.2 Design Excellence

Part 3 of the SEARs requires the proposed built form to demonstrate design excellence in accordance with Clauses 6.21 of the SLEP.

A Request for a Waiver was prepared by the Minister for Health and submitted to the Minister for Planning (refer to **Appendix L**). This waiver sought to preclude the development from the relevant clauses of the SLEP, for reasons of it being unreasonable and unnecessary to do so, as addressed below.

The Minister for Planning issued an acceptance of this request for a waiver, noting that the requirement to hold a design competition and prepare a development control plan would be unreasonable and unnecessary in the circumstances. Refer to **Appendix M**.

Clause 6.21 Design Excellence

Fitzpatrick + Partners architects have collaborated with Cardno Engineers in the design of the multi storey staff car park. Fitzpatrick + Partners are an award winning architectural practice who have demonstrated design excellence in their architectural designs since their establishment in 2002. Two recent examples include:

- 1 Shelly Street - Macquarie Bank Building at King Street Wharf; and
- 33 Bligh Street - Commercial Office Tower, Sydney CBD.

Both of these projects were won by Fitzpatrick + Partners in design excellence design competitions. Fitzpatrick + Partners have over recent years successfully delivered several car parks for Health Infrastructure including the Nepean Hospital Car Park at Penrith and the Wollongong Hospital Car Park.

Fitzpatrick + Partners design for the multi storey staff car park facade has been designed to address the design excellence provisions as described in Clause 6.21 of the Sydney LEP 2012 with particular reference to design, materials, detailing, bulk, scale, modulation, amenity to the public domain, heritage and landscaping.

The design excellence provisions at Clause 6.21 of the SLEP 2012 seeks to deliver the highest standard of architecture and urban design and applies to any development involving external alterations or the erection of a new structure, if it triggers certain criteria.

Clause 6.21(5) requires a competitive design process to be held if the proposed development is greater than 25 metres in height (amongst other triggers). Whether a proposal has achieved design excellence through this competitive design process is then determined by its adherence to the criteria in Clause 6.21(4).

Accordingly, in light of the proposed development achieving a height over 25m, the proposed development would trigger the requirement for a competitive design process. However, Clause 6.21(6) goes on to say that:

*(6) A competitive design process is not required under subclause (5) if the consent authority is satisfied that **such a process would be unreasonable or unnecessary in the circumstances or that the development...***

Owing to the unique circumstances and nature of the development, a design excellence process would be both unnecessary and unreasonable. Specifically, undertaking a competitive design process would be unreasonable in the circumstances with regard to the following:

- The proposed development represents an important piece of social infrastructure that will provide a significant public benefit by delivering critical staff car parking needed for the ongoing operation of the RPA Hospital. The time and expense associated with conducting a competitive design process, as set out in Council's Competitive Design Policy, would unnecessarily delay the delivery of this key piece of infrastructure and would also divert funds from the provision of this infrastructure. Accordingly, compliance with this control would place an unreasonable constraint on the delivery of this proposal and in turn reduce available funding available for the provision of essential health services.
- The nature and function of the building (being a dedicated aboveground car park) is one that does not lend itself to extensive alternative design solutions. The design of a car park is a specialised process, with limited capacity for a varied and diverse built form that still achieves the relevant standards and requirements for a safe operation.

Furthermore, undertaking a competitive design process would also be unnecessary in the circumstances with regard to the following:

- The land available for the redevelopment and expansion at the RPA Hospital Campus is limited. A site suitability exercise identified the subject site for redevelopment in order to provide an above ground car parking facility. This was owing to the already existing imperative to provide additional transport infrastructure for the hospital, which has only exacerbated since this time, and owing to the appropriateness of the site. The site is regular in shape and with two available street frontages to facilitate appropriate access and egress arrangements. Accordingly, the delivery of this project has always been foreshadowed and can best be accommodated on the chosen site. There are no alternative options, as discussed in **Section 1.3** of this report.

- Health Infrastructure engaged Fitzpatrick + Partners to lead the design of this essential piece of hospital infrastructure. This architectural firm has been responsible for the delivery of projects across all sectors of the built environment to the highest standards. Of particular note is their work and experience in designing multi-storey car parks for other hospitals across NSW, demonstrating an existing awareness of the specialised process in designing functional yet aesthetically pleasing transport infrastructure.
- The credential of Fitzpatrick + Partners are demonstrably equal to any other high calibre Australian architect that the proponent and City of Sydney Council would be seeking to attract if a competitive design process were to be undertaken. Accordingly, a high quality service and design process has already been achieved in the preparation of this application, which has explored a range of design options in order to achieve the best outcome from both a functional and aesthetic perspective. This process has also included ongoing consultation with both City of Sydney Council and the Department, as outlined in **Section 3.11**, which enabled comments to be addressed and incorporated in accordance with the practice of design competitions.
- Importantly, the proposal will see the construction of a new multi-storey staff car park on the RPA Hospital site with the sole purpose of improving access to the hospital by staff. Accordingly, this car park will play an integral role in the overall performance of the hospital and it is therefore considered to be in the public interest for this component of RPA Hospital transport infrastructure to be delivered in a timely and efficient manner. This will safeguard the ongoing operation of the site and in-turn benefit the local community.

Although the proposal has not undertaken a competitive design process as part of the design phase, the multi-storey staff car park does demonstrate design excellence in accordance with the criteria contained within Clause 6.21 and detailed in **Table 4** below.

Table 4 – Design Excellence Objectives.

Objective	Comment
<i>Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,</i>	As demonstrated in the Architectural Drawings and Architectural Design Statement (Appendix B), the design, material selection and detailing of the Project is high quality, and considerate of the context and proposed uses.
<i>Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,</i>	The form of the additional building elements has been carefully considered and designed by Cardno and Fitzpatrick + Partners to improve the quality and amenity of the subject site whilst meeting the design brief for the provision of staff car parking spaces.
<i>Whether the proposed development detrimentally impacts on view corridors,</i>	The impact of the proposal on public domain views within the locality will be negligible.
<i>How the proposed development addresses the following matters:</i>	
<i>The suitability of the land for development,</i>	The subject site is located within the RPA Hospital Precinct and is the last remaining undeveloped parcel of land suitable for accommodating additional staff car parking.
<i>The existing and proposed uses and use mix,</i>	The continued use of the site as a health precinct will be maintained by the proposal.
<i>Any heritage issues and streetscape constraints,</i>	The proposal has been designed to ensure the heritage significance of nearby heritage items is protected as demonstrated within the Statement of Heritage Impact included at Appendix N .

Objective	Comment
<i>The location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,</i>	The proposed 9 storey staff car park does not contain a tower element.
<i>The bulk, massing and modulation of buildings,</i>	The proposal has been designed built for purpose however the bulk, massing and setback are considered to be appropriate to the role of a multi-storey car park within the RPA Hospital Precinct.
<i>Street frontage heights,</i>	The differentiation of material and colour choices for the street level elements of the proposal have been designed to provide a human element to the public domain.
<i>Environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity,</i>	The proposal has been designed to minimise the environmental impacts on the locality. ESD, shadowing, solar access, visual impact, acoustic privacy, noise and wind and have all been carefully considered.
<i>The achievement of the principles of ecologically sustainable development,</i>	The proposal has been assessed with regard to ESD and the 4 principles of ecologically sustainable development. The proposal has been found to achieve the above principles.
<i>Pedestrian, cycle, vehicular and service access and circulation requirements, including the permeability of any pedestrian network</i>	The RPA Hospital Precinct and the proposed multi-storey staff car park have been designed for optimal pedestrian, cycle, vehicular and service access and circulation.
<i>The impact on, and any proposed improvements to, the public domain,</i>	The proposal will have limited impact on the public domain.
<i>Achieving appropriate interfaces at ground level between the building and the public domain,</i>	The proposal will enable activation, accessibility and connectivity for all users within the RPA Hospital Precinct.
<i>Excellence and integration of landscape design</i>	An integrated landscape plan has been prepared demonstrating the design approach to the proposal and the wider Precinct.

As demonstrated in **Table 4** above, the proposal is considered to achieve design excellence in accordance with the provisions of the SLEP 2012.

Clause 7.20 Development Requiring Preparation of a Development Control Plan

Clause 7.20(2)(b) requires the preparation of a DCP for land that will result in buildings greater than 25 metres in height. This would ordinarily apply to the building the subject of this application. It is considered that a waiver from this requirement is appropriate on the basis that it would be unreasonable or unnecessary to prepare a DCP, or undertake a two-stage DA process in these circumstances.

The reasons for this are generally consistent with those outlined above with respect to the competitive design process and relate to: the constrained nature of the site, the specialist nature and functional requirements of a car park design, the high quality design process implemented by an award-winning architecture firm, the absence of significant impacts on surrounding properties, and the need to provide this important piece of social infrastructure without being delayed by unreasonable and unnecessary additional processes.

4.3 Built Form

An Architectural Design Statement has been prepared by Fitzpatrick + Partners, and accompanies the Architectural Plans at **Appendix B**.

In assessing the appropriateness of the proposed built form, consideration has been given to the need to locate the proposed services on the RPA Hospital campus, the location of the new building within the campus and the appropriateness of the scale in relation to the site, and surrounding development.

Need to Locate the Proposed Services

It is vital that the hospital continues to redevelop and expand in order to keep pace with the rapidly growing demand in the immediate and Greater Sydney areas, and through this ensure that it remains operational even after 130+years of service. In view of this, there is an evident need to meet the demand of staff for effective and available transport infrastructure within the RPA Hospital site to ensure the future of the hospital.

Siting

This need is best addressed through the redevelopment of the proposed subject site, with the vision of providing the necessary infrastructure to accommodate for the RPAH staff into the future. However, it became evident that few sites were capable of accommodating the proposed use and enabling a fully integrated hospital campus. The subject site was identified for being an underutilised allotment ideally located to service the Precinct, regular in shape, and with two available street frontages to facilitate appropriate access and egress arrangements, as well as a frontage to the internal road network to take advantage of the relative permeability of the RPA Campus.

Building Scale

Within the constraints of the site and the code compliant spatial for a carpark, the proposal has been carefully articulated in response to the context and alignment of the dominant Queen Mary Building to the southern boundary and the surrounding tight streetscape. The proposal has been further modulated vertically to also respond to the articulation of the neighbouring buildings.

Detailed consideration has been given to the location and form of the proposed multi-storey staff car park, with regards to how it can meet the urban design requirements for the site. Accordingly, the following considerations have influenced the proposed built form on the site:

- The proposed car park is of a reduced height, scale and proportion than the adjacent Queen Mary building, and of a similar scale to the Marie Bashir Building. This provides for a more logical progression in height than the existing built form.
- The proposal has been setback from the western boundary to better align with the adjacent Queen Mary building, which will create a consistent building line and streetscape, and prevent the Queen Mary Building from losing its prominence when viewed from Church Street. This will also serve to reduce the sense of scale of the proposal from the domestic scaled context of Church St.
- To further increase separation from the adjacent Queen Mary Building, the proposal is stepped along the southern façade by 3 levels to reflect an existing stormwater easement. This step in the facade allows a greater sense of separation and provides additional pedestrian amenity with a sheltered walkway.

- To reduce impact on neighbouring QMB, the proposed form sits as close to the north boundary as possible. Multiple planning layout iterations were tested to maximise separation from QMB, however resulted in nonviable solutions due to inefficient parking layout. The proposed solution balances the greatest separation possible while still achieving efficient layout. Ideally, this separation would be increased further but is unfeasible due to the narrowness of the site.
- Aware of potential overshadowing concerns on the neighbouring residents along Church Street, a more generous setback has been provided along western boundary to lessen overshadowing and to reduce the sense of scale within the domestic scaled context of Church Street. The setback aligns with the edge of QMB to create a rhythmic order along Church Street.



Figure 25 – Proposed Multi-Storey Car Park
Source: Pixalate

Materials and Finishes

The materials described in **Section 3.6** of this report, and illustrated in **Appendix B**, have been carefully selected to complement the form, function and aesthetics of the structure on the site, whilst also providing a consistent pallet with the modern built form of the Marie Bashir Centre to the east, and the brick Queen Mary building to the south. The perforated metal façade will also require minimal maintenance thereby alleviating any potential practical safety and security issues, and will also reduce bulk through introducing a visual depth of field to the façade. They also encourage diffused natural surveillance and the natural ventilation of the car park, removing the need to mechanically ventilate this space.

The proposed brick material, that will be used selectively along the building's base, will serve to help solidify the proposal's connection to the existing site without affecting open area rates, and will visually integrate the development to the brick Queen Mary building behind. The concrete stair cores and curved vehicular entry ramps are used as highlights to add contrast and visual interest. The concrete relates to the Queen Mary building whilst providing an easily maintained façade.

The building façade solution has drawn reference from the surrounding contextual material of brick, a dominate material of the area. The main portion of the façade is modulated into horizontal bands of ‘bricks’, staggered to create a running-bond effect, sitting on a defined base. Each “brick” is approximately 12.5m wide and curved to add additional depth of field. The overall effect reads as a visually interesting façade, adding rhythm and play along the long lengths of Lucas and Brodie Street façades. This strong banding is well suited to its surrounding context, relating to both QMB behind as well as the George V Memorial Hospital for Mother and Babies on Missenden Road. The curved ramps and external railings are homage to the Mother and Babies RPA building on Missenden Road.

Further visual interest in the façade is added through graduating the brick bands by colour; dark at the bottom fading to whiter shades at the upper levels. The graduation of colour also helps the reduction of bulk as the eye is drawn to the darker colours at the bottom of the development.

4.4 Transport and Accessibility

An assessment of the traffic and parking implications of the proposal has been undertaken by GTA Consulting and accompany this report at **Appendix F**.

4.4.1 Operational

Demand

The key driver for the project is to deliver additional staff parking in the north west of the RPA Hospital site to meet current demands. As noted in **Section 1** of this report, there have been recent expansion works within the RPA hospital site with the intent of providing increased capacity and capability to meet expected population increases and address existing shortfalls. These recent major developments have reduced the available stock of parking on the site, which was deemed to be appropriate at the time given the limited on-site parking would be supplemented by the existing car parks in and around the RPA precinct.

However, the cumulative impact of these developments coupled with recent changes to the availability of staff parking has contributed to a deficiency within the RPA Campus. The existing multi-storey car park located on the corner of Grose and Church Street previously contributed 1027 spaces with reduced rates for staff. However, a recent change under the terms of the lease to operate the car park has seen those spaces available to staff reduced to just 600 spaces with elevated parking fees. This has significantly restricted the availability of parking for staff within the RPA Campus, with the cumulative impacts of this having potentially negative consequences on the operation of the hospital.

This shortage has also been considered by GTA Consulting who have assessed the 2006 and 2011 ‘Journey to Work’ data, which provides a picture of existing travel patterns to and from the RPAH Campus and the greater Camperdown Health Precinct. This data confirmed that whilst car travel as a mode of travel to or from work reduced between 2006 and 2011, car travel either as the driver or passenger still contributes to nearly 50% of all journeys. This is a relatively low figure for hospital use and is unlikely to materially change in the future. Accordingly, the private car is the predominant mode of travel for those people working in this area and such demand is expected to remain high.

Furthermore, owing to the existing nature of RPAH staff working hours, being 24/7 shift work, the current provision of public transport to/from the site is not sufficient. Hospital staff are required to access to the site 24 hours a day to commence work at irregular hours, being often outside of standard business operating hours. Accordingly, alternative options to the existing public transport network need to be provided so that staff can efficiently and safely access the site and support the ongoing operation of the hospital.

Access

GTA Consulting confirms that the proposed car parking layout will operate satisfactorily and comply with the dimensional requirements for the relevant standards pertaining to a Class 1 car park under AS/NZS 2890.1:2004 and AS/NZS2890.6:2009, given that the car park will be used exclusively by the hospital staff. Furthermore, there is confirmed to be ample room along the internal road Brodie Street for vehicle queuing during the morning peak hours and room within the car parking levels for queuing during the afternoon peak hours.

Traffic Generation

The multi-storey staff car park provides additional parking for staff working at the RPA Hospital precinct. It could therefore be reasonably expected that the arrival patterns for vehicles accessing the car park would correlate with overall arrivals associated with RPA Hospital staff shifts.

The predominant peak staff arrival occurs prior to 7:30am, where those staff that start their shift at 7:00am or 7:30am would be arriving prior to commencement of work. At this point there is overlap between these staff and the night shift staff, whose shifts typically finish at or after 7:30am in order to allow for handover to the day shift staff. As such, many night shift staff vehicles would still be parked at the time when day shift staff arrivals are at their peak.

Analysis of the staff shift data indicates that the PM peak staff departure is expected to occur between approximately 4:00pm and 5:00pm. This period (and 15 minutes either side) see approximately 1,350 shifts end, which compares to the nearly 2,500 shifts that start during the AM peak hour, or some 55% of the number of staff arriving in the morning.

These peak periods have been used to estimate the anticipated traffic generation of the proposal during the peak AM and PM hours, as summarised in **Table 4** below.

Table 5 – Estimated traffic generation

Proposed Use	No. of Spaces	Trip Generation Vehicles / Hour					
		AM Peak (6.30am – 7.30am)			PM Peak (4.30pm – 5.30pm)		
		Arrivals	Departures	Total	Arrivals	Departure	Total
To/from car park	996	450	50	500	25	250	275

The site is expected to generate up to 500 and 275 vehicle movements during the AM and PM peak hours respectively. The traffic generated by the proposed multi-storey car park is not expected to adversely impact on surrounding local intersections in the area.

SIDRA modelling has been undertaken to assess these vehicle movements on the surrounding road network. The results of the analysis indicate that most intersections continue to operate within acceptable limits or similar to pre-development levels of service. The intersection of Parramatta Road and Mallett Street experiences a reasonable change in operation and is considered to remain within acceptable levels.

Sustainable Transport Measures

While it is acknowledged that the multi-storey car park is proposed to cater for and facilitate travel to the precinct by car, it is also intended to alleviate specific demand for parking further afield and address a recent and ongoing staff parking shortfall.

Accordingly, in conjunction with the proposed development, GTA Consulting have outlined a number of recommendations that can be implemented to reduce demand for parking:

- Investigate a potential car-pooling system that can be integrated with other nearby activity and employment generators, and promote the existing RPAH staff car-pooling system.
- Investigate providing staff with a GoGet membership, or similar car share scheme, as a viable alternative for private car use for personal or work related trips during the workday.
- Sharing and promoting information on the existing walking, cycling, and public transport network.
- Investigate limiting the incentives for staff to use private vehicles such as car packaging, parking included in salary, petrol reimbursement.

4.4.2 Construction

Throughout the construction phase of the development, vehicles are anticipated to access the site via Brodie Street and the intersection of Carillon Avenue and Grose Street. While use of other local streets should not be encouraged, use of other routes can be assessed as part of a detailed construction traffic management plan. It is noted that the overall proposed works on the site are not expected to significantly impact the operation of surrounding intersections, and will be restricted by standard construction hours.

GTA Consulting have also advised the following in relation to the operation of construction vehicles to/from the site:

- All vehicles transporting loose materials will be required to cover the load and secure large items.
- No tracked vehicles will be permitted on any paved roads.
- Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances.
- Vehicles operating to, from and within the site shall do so in a manner which does not create unreasonable or unnecessary noise or vibration.
- All subcontractors and suppliers must be inducted by the Principal Contractor to ensure that the procedures are met for all vehicles entering and exiting the construction sites.

As detailed in **Section 3.9** of this report, a detailed Construction and Environmental Management Plan (CEMP) will be prepared by the appointed contractor. This management plan will be prepared in accordance with relevant applicable Australian Standards and Occupational Health and Safety requirements. Refer to **Section 4.15** below.

4.5 Impact on Adjoining Properties

The surrounding locality of the site is not an overly sensitive location with significant public places, but rather is characterised by high-density compact development adjoining or adjacent to the site.

The subject site forms a part of the wider RPA Hospital Precinct and is recognised as a principal referral group A1 hospital with strong affiliations to the University of Sydney. It provides district acute services to the SLHD and its local inner west catchment, other metropolitan residents, rural, interstate and overseas patients. As such, the primary function of the locality is to meet the health services requirements of the wider community. The sensitive receivers in the context of the site are the dwellings on the western side of Church Street and the Queen Mary Building to the south of the site but these uses should be recognised within the context of the critical health care services.

With regards to the Queen Mary student Building, it is emphasised that the provisions of *State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings* (SEPP 65) do not apply.

Accordingly, whilst it is best practice to consider the internal amenity of this property, as has been addressed in this section of the report, no standard can be applied under the legislation.

4.5.1 Building Separation and Privacy

The proposed development has been designed to complement and reinforce existing building lines and to mitigate potential impacts on adjoining developments. The separation of the proposal from adjoining and adjacent development, as detailed on the architectural plans at **Appendix B**, is discussed further below.

The proposal adopts a zero boundary setback to the north and east. This setback has been implemented to enable appropriate vehicle egress on Lucas Street, to complement and reinforce the existing building line of the Marie Bashir Centre to the east, and to reference the existing treatment of this north eastern corner by Building 31 on the site. This setback also achieves sufficient building separation between the non-habitable structures to the north and east, which are not adversely affected by additional overshadowing or view loss as discussed in **Sections 4.5.2 and 4.5.3** below, and enables the proposals massing to be orientated away from sensitive receivers to the south and west of the site.

To the west, the proposal has been setback between c.3m-12m from Church Street for the car parking entrance/exits and ramp, and c.20m for the car park building. This setback accommodates for landscaping along this boundary that will soften the building from sensitive receivers to the west and appropriate integrating the development into the existing streetscape, whilst also enabling appropriate vehicle egress onto Church Street. The setback of the car parking structure from this boundary will also provide a consistent building line with the Queen Mary Building to the south.

To the south, the proposal is setback between c.5m-7m from the site boundary. To further increase separation from the adjacent Queen Mary Building, the proposal is stepped along the southern façade by 3 levels to reflect an existing stormwater easement.

This step in the facade allows a greater sense of separation and provides additional pedestrian amenity with a sheltered walkway. Whilst this does not achieve the optimal numeric boundary setback envisaged in the ADG's, the building to building line is separated up to c.7m-9m which is considered to be an appropriate outcome in light of the following:

- This setback is mostly consistent with the Apartment Design Guidelines optimal numeric building separation between habitable rooms for structures up to eight storeys in height. It is noted that the additional ninth storey envisaged for this proposal will not give rise to any markedly heightened environmental impacts than would an eight storey structure on the site.
- The original assessment of this student accommodation use (D/2011/1107) confirmed that any deficiency with the (then in force) *Residential Flat Design Code* (RFDC) was considered appropriate on the grounds that the student accommodation will only be operational 38 weeks, and that the constraints of the site and the building mean “*it is not reasonable to expect that the building be able to completely comply with the RFDC recommendations*”. In view of these constraints still operating on the site, this argument can be likewise applied to the present development.
- The carefully designed and selected façade cladding will ensure views are not available directly into, or from, the student accommodation dwellings to the south. The privacy of these residents can thereby be retained.
- The proposed building separation does not preclude the development from operation on the site, as the amenity of these residents to the south will not be unreasonably impacted as discussed in **Section 4.5.2** and **4.5.3** below.
- To reduce impact on neighbouring Queen Mary Building, the proposed form sits as close to the northern boundary as possible. Multiple planning layout iterations were tested to maximise separation from Queen Mary Building, however resulted in nonviable solutions due to inefficient parking layout (refer to **Figure 24** below). The proposed solution balances the greatest separation possible whilst still achieving an efficient layout.
- To further increase separation from the Queen Mary Building the proposal is stepped along the southern façade by 3 levels to reflect an existing storm water easement. This step in the facade allows a greater sense of separation and provides additional pedestrian amenity with a sheltered walkway.

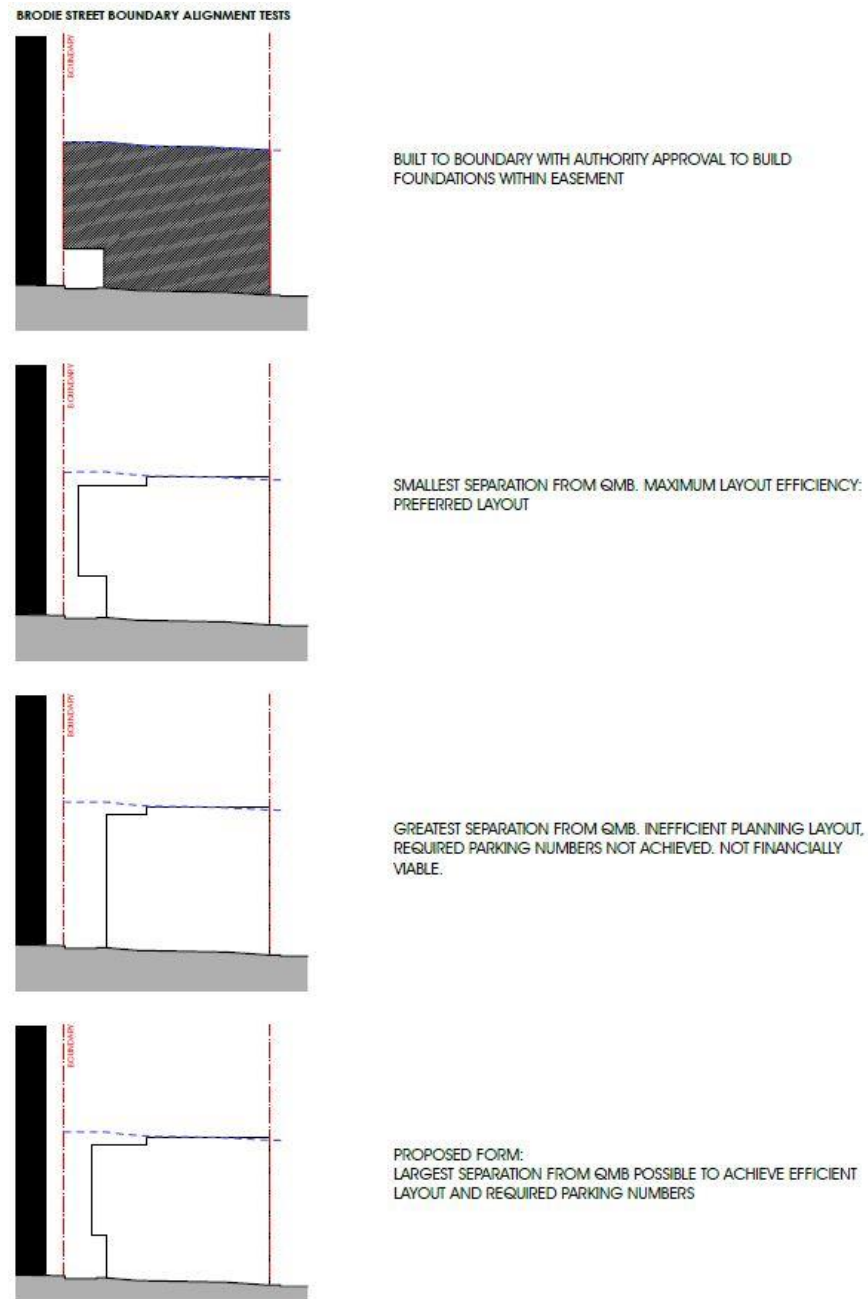


Figure 26 – Brodie Street Boundary Alignment Tests
 Source: Fitzpatrick + Partners

4.5.2 Overshadowing

Cardno have undertaken overshadowing modelling for the proposed building envelope and context of the site (refer to **Appendix B**). As addressed previously, the only sensitive receivers in the vicinity of the site are dwellings on the western side of Church Street and the Queen Mary Building to the south of the site. The assessment below considers the impacts of overshadowing at 21 June, being the winter solstice, as the worst possible outcome for the site when solar access is most limited.

Public Domain

Owing to the orientation of the site the majority of shadows are cast away from the surrounding public domain. Those limited shadows on the public domain generally occur at 9am to the west of the site on Church Street and some of the dwellings to the west of Church Street. These shadows are no longer present in any extent by 12pm (midday) through to 3pm. There is also a less significant sliver of shadow falling on the internal hospital site road to the west of the site at 3pm. This shadow is restricted to the afternoon and is not present between 9am to 12pm (midday). Accordingly, the proposed car park will not significantly limit the ability of the general public to enjoy these available public domain spaces.

Student Accommodation

Whilst it is recognised that the proposal will result in a reduction of natural sunlight to the lower storeys of the Queen Mary Building, the proposed development will result in acceptable overshadowing impacts when viewed holistically.

The adaptive re-use of the Queen Mary Building (D/2011/1107) facilitated 761 bedrooms for use as student accommodation. As the time of the assessment of the QMB for use as student accommodation it was established that the building would achieve 58% of bedrooms receiving 2 hours of direct solar access.

As a result of the proposal, 107 bedrooms on the northern elevation will be directly impacted and will result in achieving less than 2 hours of direct sunlight between 9am and 3pm on the 21st of June. Where previously 441 bedrooms achieved 2 hours direct solar access, this figure is reduced to 334. The percentage of bedrooms achieving 2 hours of solar access will be reduced from 58% to 44%, a net reduction of 14%. This reduction in solar access needs to be considered in the context that student accommodation is not subject to same solar access provisions as a residential apartment building, SEPP 65 and the Apartment Design Guidelines are not statutory considerations and that only the bedrooms between ground and level 3 will achieve less than 2 hours at the northern elevation.

Any building of a modest height is likely to have some level of impact. It would be unreasonable to expect that no development would occur on the subject site.

The resulting reduction in solar access is considered appropriate on the grounds that the student accommodation will only be operational 38 weeks in the year in-line with the academic calendar, and that the constraints of the site and the building mean *"it is not reasonable to expect that the building be able to completely comply with the RFDC recommendations"* (D/2011/1107 assessment report p. 8). In view of these constraints still operating on the site, this argument can be likewise applied to the present development.

Furthermore, it is emphasised that this student accommodation development was designed to maximise solar access from all aspects of the building, in recognition of the potential redevelopment of adjoining sites including the subject site for this application. The student accommodation building has allocated the private open space for residents in the form of balconies to each side of the development. This is especially significant in the form of wrap-around balconies on the eastern and western façades of the development that loop around these aspects through to the southern side of the building. Accordingly, whilst these balconies are only provided to 20% of rooms, they enjoy multiple aspects and as such are capable of achieving the required amenity in the form of views and solar access away from the car parking site.

This is further enhanced by the works to upgrade the provision of communal open space on the site, as part of the original DA (D/2011/1107) for student housing. This is in the form of usable open space being provided on the ground floor, eleventh floor, and roof top terrace (**Figure 27**). It is noted that shadows do not fall over the eleventh floor or the roof top terrace areas of open space and as such will not affect these open space areas. Furthermore, given the small proportion of rooms that have been allocated private open space balconies, these areas of communal open space act as the primary outdoor and living spaces and are integral to the amenity enjoyed by the occupants. Accordingly, retaining the amenity of these spaces means the proposal is in-turn safeguarding the quality of life of residents.

It is emphasised that the subject site is being development for use ancillary to the RPA Hospital within an established Hospital Precinct and whilst the reduction in solar access to bedrooms at the northern elevation of student accommodation building is unfortunate it is considered to be acceptable on balance with the provision of staff car parking resulting from a direct need to service the demands of the RPA Hospital.



Figure 27 – Roof top terrace for Queen Mary Building

4.5.3 View Loss

The four step process outlined in the planning principle in *Tenacity Consulting v Warringah* has been used as the basis for assessing the proposals potential impact on view sharing, in accordance with best practice. The planning principles set out in *Tenacity Consulting v Warringah* require the consideration of:

a) What views are to be affected by the proposal?

Owing to the raised elevation of the subject site to Lucas Street and the existing full-height, solid construction, boundary fencing from the Chinese Consulate, there is not considered to be any significant view sharing between the two sites. This is likewise the case for development on the western side of Church Street which is presently screened by existing development on the site and separated by a c.15m wide road. Accordingly, the only sensitive receivers with potential view loss impacts are the Queen Mary student accommodation building to the south of the site and the Marie Bashir hospital building to the east of the site.

b) From what part of the property the views available from?

Views are currently available from the northern facing rooms of the Queen Mary student accommodation building and the western facing rooms of the Marie Bashir Centre, which are all experienced over and through the subject site.

c) What is the extent of the impact?

As detailed on the Architectural Plans and modelling, the proposed development will impact the outlook of the lower northern facing rooms of the Queen Mary student accommodation building, with the remaining upper levels having clear views over the subject site to the north.

The Marie Bashir Building has windows on the western façade up to five storeys in height that have been built with a 0m setback to the street frontage. The built form above this height has been stepped back by an additional c.4-5m.

d) What is the reasonableness of the proposal?

The siting and scale of the proposed development is appropriate and reasonable for the site and the character of the RPA Hospital Campus and is considered to be an appropriate design outcome for the site, as addressed in detail in **Section 4.0** of this report.

The extent of the proposed impact on views is also considered to be acceptable with consideration of the following:

- The existing views enjoyed by the two affected sites are only available over and through the subject site. Accordingly, it would unreasonable to expect these insignificant view corridors to be maintained through the subject site when no height control has been applied to the site under the SLEP, at the existing scale of the two storey development currently on the site. Therefore, any consideration of view loss must take into account the potential for the subject site to be redeveloped in accordance with the relevant controls.
- The views of the affected sites are not considered to be significant or sensitive and as such the proposed view loss will not greatly impact the ongoing operation of these sites. It is emphasised that the student accommodation building will;
 - a) Be used as student accommodation and as such not subject to standard usage patterns common to residential apartment accommodation; and

- b) Only be operational a maximum of 38 weeks of the year, whilst the Marie Bashir Centre is also only occupied periodically by staff and patients. Neither of these sites are home to permanent residents.
- The general use patterns of the Queen Mary Bashir building follows that residents will likely be elsewhere during the day time, attending lectures, tutorials, and extracurricular activities associated with the University of Sydney.

4.5.4 Light Spill

Light spill mitigation measures have been incorporated into the car park facade design to minimise the impact of car headlights on the adjacent Queen Mary building to the south.

These include the inclusion of solid aluminium panels behind the external skin at the critical points of potential light intrusion, being the top and bottom of the car park ramps on the typical floors.

With the incorporation of these measures in the final design the proposal will have limited impact in terms of light spill for adjoining sensitive land uses.

4.6 Heritage

A Statement of Heritage Impact (SoHI) has been prepared by Heritage21 and included at **Appendix N**.

This SoHI identifies the subject site within the visual catchment of a number of local heritage items. The proposals potential impact on such views has been deemed appropriate owing to the existing variable character of the area that is a mixture of historic and contemporary items, and the available views not being noteworthy, or significantly contributing to the general character of the area.

In addition to this, the proposed development will not significantly detract from the heritage significance of surrounding heritage listed items as:

- The proposed staff car park is of a reduced height, scale and proportion than the adjacent Queen Mary Building, and of a similar scale to the Marie Bashir Building.
- The staff car park is setback from the west and south that enables residential buildings located opposite the subject site to retain their residential scale and prevent the Queen Mary Building from losing its prominence when viewed from Church Street. Accordingly, the proposed development will not visually dominate the adjacent and surrounding heritage items, allowing them “to be viewed and appreciated with no limitations”.
- The materials and finishes adopted by the proposal are considered to be a fusion of the modern and traditional and as such create a respectful architectural design.

Heritage21 conclude that *“there are no aspects of the proposal which could be detrimental to the significance of the subject site and heritage items in the vicinity”*.

Furthermore, it is emphasised that whilst the SoHI identified ‘Building 51’ on the site as being listed on the NSW Department of Health’s Preliminary Section 170 Heritage and Conservation Register (refer to **Section 2.2** above), this structure is to be removed subject to separate approval.

4.7 Water Cycle Management

Cardno have designed a stormwater management system for the proposed development and have considered the potential impacts for stormwater quantity and quality management. The proposed stormwater management works have been summarised in **Section 3.5** above and detailed in **Appendix G**. Overall it can be concluded that the proposed water cycle management system will enable the development to satisfy Council's stormwater quality criteria.

4.7.1 Water Quantity

Cardno have determined that the new stormwater system designed for the project has the capacity to control the extra impervious area on site and the associated run off from the development.

Stormwater on site will be appropriately managed through the stormwater drains, and on site detention tank, before being discharged into the existing stormwater pit to the north west of the site and the reconstructed pit on Brodie Street.

Furthermore, whilst the proposed development is within the Johnston's Creek catchment, Cardno have confirmed that the subject site is clear of both the 1% AEP and PMP storm events.

4.7.2 Water Quality

Cardno have designed the following water quality management systems in order to meet Council's targets applicable for the site. These works comprise of:

- Pit insert baskets along the Brodie Street extension will collect gross pollutants prior to discharge to the on-site detention tank.
- Runoff from the multi-storey staff car park will be collected in grated inlets that limit the ingress of any large pollutants.
- A sediment sump is proposed in the OSD tank to collect any transported sediments prior to discharging water off site.
- Proprietary water quality treatment devices will be installed on car park Level 0a. The water quality treatment devices are likely to consist of a secondary treatment device, such as a Humes Jellyfish, or similar.

4.8 Geotechnical

A Geotechnical Investigation Report has been JK Geotechnics and is included at **Appendix E**, which details the subsurface conditions of the site and evaluates the proposed site works and development.

4.8.1 Subsurface Conditions

Site investigations undertaken by JK Geotechnics revealed the subsurface conditions of the site comprise of fill covering residual silty clay that grades into weather Ashfield Shale categorised as extremely weathered and of extremely low strength, which continued for several metres. However, despite this excavation of the site to the desired depths described in **Section 3.4** of this report will be achievable using conventional excavation and drilling equipment.

JK Geotechnics have also provided extensive recommendations concerning the construction of the proposed staff car park building with reference to the subsurface conditions, to thereby ensure a structurally sound development. These recommendations are included at the report at **Appendix E**, and are discussed in **Section 5.0** below.

4.8.2 Ground Water

Through site investigations it was revealed that groundwater was encountered at a depth of 4-5m. The use of water as a drilling fluid during rotary and core drilling operations precluded the measurement of groundwater levels below the depth of auger drilling in the bores. It is confirmed that groundwater seepage into the excavation is not expected and any overland flow seepage during construction can be appropriately managed by conventional sump and pump techniques.

4.9 Contamination

A Preliminary Stage 2 Site Investigation Report has been undertaken by Environmental Investigation Services and is attached at **Appendix K**. This report has been carried out in accordance with the *State Environmental Planning Policy No. 55 – Remediation of Land* (SEPP 55).

Site Contaminants

Based on the site inspection and testing, contaminants on the site were identified and localised to the fill used to achieve the existing levels of the site. This fill may have been imported from various sources and was found to contain elevated concentrations of B(a)P TEQ at one of the bore holes used. This contaminant has been identified as insoluble in the fill material.

Recommendations

To ensure all contamination is identified and remediated, a Remediation Action Plan (RAP) has also been prepared by Environmental Investigation Services and is attached at **Appendix S**. The RAP proposes four options for the remediation of the site being the on-site treatment of soil, the off-site treatment of soil, the disposal of material off site, and the consolidation and isolation of soil on-site.

The on-site treatment of contaminants is not considered to be viable owing to proposed excavation of the site to accommodate the lowest level of car parking. The off-site treatment of contaminants is also not a preferred option owing to the high expense associated with this method and the overall loss of fill materials from the site. The consolidation and isolation of contaminated soils on the site is viable given the majority of the site will be paved to limit exposure, but is not the preferred option owing to the ongoing maintenance works associated with this method.

Accordingly, the most suitable and preferred option is the removal of contaminated material to an appropriate facility off-site and the reinstatement of clean material, if needed. This method will appropriately remediate the site whilst also facilitating the excavation of the lowest level of the proposed multi-storey staff car park. Further validation sampling of the remediation area is required following the excavation and removal of impacted fill.

The proposal does not include bulk earthworks to the proposed internal road, Brodie Street, located along the southern boundary of the site. Accordingly, there are two alternative options for the remediation of this portion of the site being the removal of contaminated materials to be replaced with clean fill, or the capping of this area with the concrete or Asphaltic concrete or a geofabric marker layer followed by 300-500mm of clean fill. The capping of the site will require an Environmental Management Plan to be prepared for the ongoing management of contamination remaining on site.

Environmental Investigation Services have also devised a number of recommendations in the event of an unexpected find on the site, the management of remediation works on the site, and the importing of fill material to the site, and mitigating groundwater contamination, which will be implemented if applicable during the remediation of the site.

A Validation Report will also be prepared documenting the remediation works undertaken above. This report will outline the remediation work undertaken at the site and any deviations to the remediation strategy. The report will summarise the results of the validation assessment and will be prepared in accordance with the Guidelines for Consultants Reporting on Contaminated Sites 2011. The report will include:

- Details of the remediation works undertaken at the site;
- Sampling, analysis and quality plan (SAQP) adopted for the validation assessment;
- Details of the validation results including the analytical results assessed against the VAC;
- Details of material disposal analysis and review of contractor documentation;
- Details of material imported onto the site;
- Any deviation to the remediation strategy adopted for the study;
- Data Quality Assessment;
- Details of on-going monitoring and/or management requirements; and
- Discussion on the suitability of the site for the proposed landuse.

Accordingly, the site can be made suitable for the proposed development provided that the recommendations and procedures in the RAP are adopted.

4.10 Noise and Vibration

A Noise and Vibration Assessment has been undertaken by Acoustic Logic and included at **Appendix P**.

4.10.1 Nearest Noise Receivers

The nearest potentially affected noise receptors in the area surrounding the site comprise of:

- Low to medium density residences on the western side of Church Street;
- The Chinese Consulate on the northern side of Lucas Street;
- The Marie Bashir Centre on the eastern side of the internal hospital road; and
- The Queen Mary Building adjoining the site to the south.

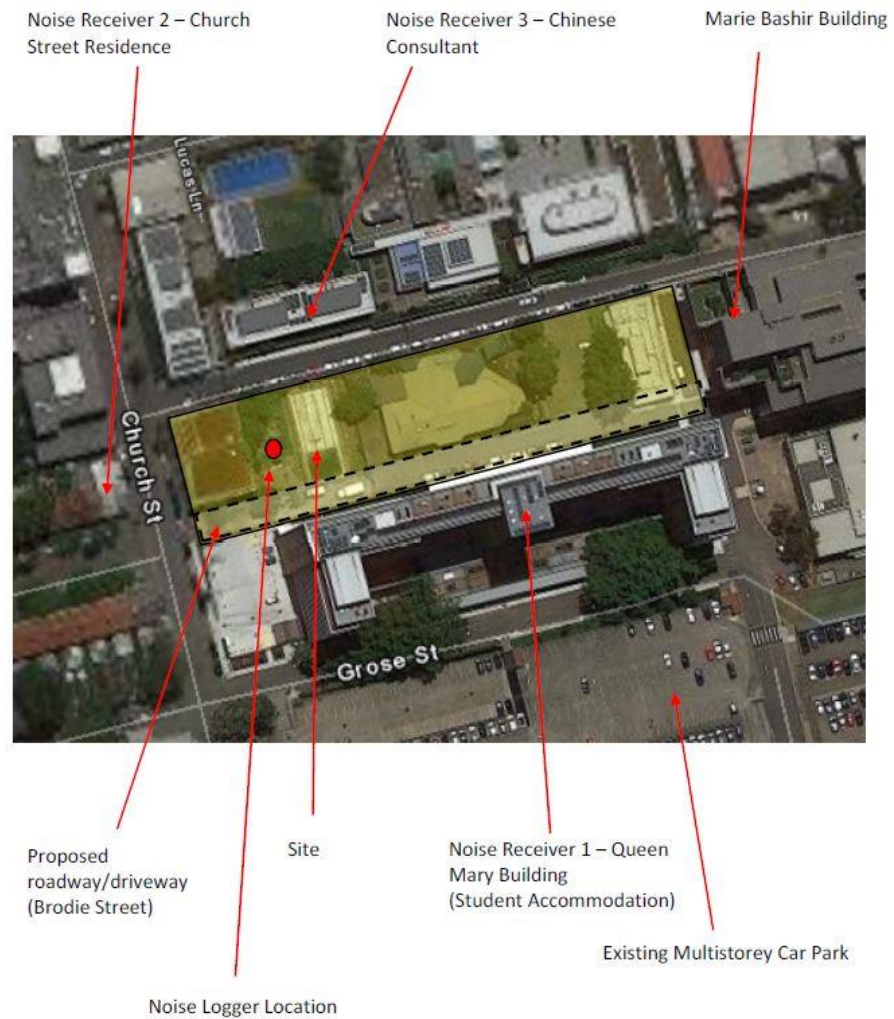


Figure 28 – Noise Receiver Locations

Source: *Acoustic Logic*

4.10.2 Noise Assessment

Noise emissions associated with the proposed multi-storey staff car park have been assessed with reference to relevant EPA and Council acoustic guidelines.

An analysis of typical operational noise (vehicle noise both within the car park in the surrounding road network) indicate that there is a possible risk of exceedance of typically adopted noise emission guidelines, particularly in the 6.30-7.30am peak period of use of the car park. Outside of this period, noise emissions are predicted to generally be compliant with noise emission goals.

Whilst there are periods when vehicle noise may exceed EPA Industrial Noise Policy guidelines, this occurs primarily in a clearly defined one hour peak period between 6.30am and 7.30am. Given that the noise from the site consists of cars using the entry driveway and circulating within the car park, the noise emitted would be similar in nature that that created by a local road, and therefore it is not unreasonable to consider the site with respect to emission guidelines for new local roads (the EPA Road Noise Policy), as opposed to the Industrial Noise Policy.

Accordingly, the following recommendations have been devised by Acoustic Logic:

- Polished concrete surface or similar must be avoided in the car park to prevent tyre squeal. Broom or float finished surface or other similar finishes should be adopted.
- Speed limit on Brodie Street and in the car park itself to be limited to 15km/h or lower to minimise noise generation. Below 15km/h, the primary noise source will be from the car engine, as opposed to tyre on road noise, and so provided that vehicle speeds are controlled, there will be little additional benefit in selecting road finishes to further reduce noise.
- Should speed humps be considered, they should either be constructed from concrete or plastic, and should be fixed/installed to avoid any impact noise generated when cars drive over them.
- Use of noise absorptive lining to the underside of the slab soffit over the entry/exit boom gate (and any covered queuing areas) areas should be installed (50mm thick Echosoft or similar material with NRC no less than 0.8).
- Acoustic review of any boom-gate or inter-com system at the car park entry should be conducted at detailed design stage.
- A detailed construction noise and vibration management plan should be undertaken following preparation of the construction program.
- Detailed acoustic review of all external plant items should be undertaken following equipment selection.

Whilst strict numeric compliance with the Industrial Noise Policy at the nearest noise receiver location (QMB) has not been achieved, the exceedance is limited to the morning peak period and needs to be recognised in the wider context of the RPA Hospital as a 24 hour a day functioning precinct with this exceedance during the 6.30am to 7.30am period being a result of shift change over for the commencement of the 7am shift.

When reviewing noise impact exceedances, the merits of the proposal should be given balanced consideration:

- There are limited periods when vehicle noise will exceed EPA Industrial Noise Policy guidelines. This is primarily in a clearly defined one-hour peak period between 6.30am and 7.30am.
- Given that the noise from the site consists of cars using the entry driveways and circulating within the car park, the noise emitted would be similar in nature to that created by a local road, and therefore it is not unreasonable to consider the site with respect to emission guidelines for new local roads (the EPA Road Noise Policy), as opposed to the Industrial Noise Policy.
- When considered in this regard, the noise emitted from the site is generally consistent with EPA Road Noise Policy guidelines:
 - There is some exceedance of the guidelines in the 6.30am -7.30am peak period of use of the car park, however being located within the RPA hospital precinct where majority of healthcare worker shifts start between 7am and 7.30am, there is merit in treating this 6.30-7.00am period as a “daytime” period, as opposed to the night time period, as this is reflective of the activity/use in the area (as is consistent with clause 2.5.5 of the Road Noise Policy with respect to “shoulder” periods between day and night).
 - Considered in this way, any remaining exceedances of criteria are less than 2-3dB(A), which is typically considered insignificant as it would be barely perceptibly louder than a compliant noise level.

Further noise mitigation is not feasible or practical as:

- Relocation of the car park entry to the eastern end of Brodie Street (away from the residential land use and avoiding queuing on Brodie Street) would cause queuing within the hospital precinct road network adjacent to the QMB and Marie Bashir Building in any case.
- Enclosure of Brodie Street is subject to an easement given there are hydraulic services below (making construction of a permanent enclosing structure not feasible).
- Given the noise generated on Brodie Street, there would be little perceptible improvement in enclosing the southern façade of the lower levels of the car park itself to reduce noise impacts on the Queen Mary Building (given the Brodie Street noise is a more significant impact).

Whilst there are noise impacts resulting from the proposal, they are considered to be acceptable in the context of the development of ancillary hospital infrastructure within a 24 hour a day functioning hospital precinct.

4.11 Wind Assessment

Wind tunnel testing has been undertaken by Cermak Peterka Petersen (CPP) to assess the future wind environment with the inclusion of the proposed development. The findings of the wind tunnel testing are outlined in the Wind Report prepared by CPP at **Appendix Q**.

CPP has assessed the wind environment surrounding the site against the relevant pedestrian comfort criteria. The areas identified as being potentially impacted, in need of detailed investigation, included the pedestrian walkway along Lucas Street, the pathway between the car park and the adjacent Queen Mary and Marie Bashir Centre, and the area between these taller buildings.

All of these locations assessed around the site passed the distress criterion, meaning that there will not be any adverse impacts on the wind environment. Wind conditions at the ground plane are expected to remain similar to the existing conditions, being acceptable for pedestrian walking and standing in particular areas. Owing to the narrow aspect of the building and the porosity of the façade, the development is not predicted to significantly alter the oner per annum gust wind speed and as such retains the acceptable conditions of the surrounding public access ways.

4.12 Tree Removal

Stuart Nobel Arboricultural has prepared an Arboricultural Impact Assessment Report pursuant to *The City of Sydney Tree Management Policy 2013*, included at **Appendix D**. This report has identified twelve (12) trees on the site and provided an assessment of the health and significance of this existing vegetation.

Their assessment has confirmed that the limited vegetation on the site is of low to very low significance and is showing signs of pests, dieback or deadwood. Accordingly, Stuart Nobel Arboricultural has recommended that all twelve (12) trees be removed on site, with respect to the following:

- All trees have been planted as ornamentals within the last 30 years and as such only three of the trees on site are of the 'mature' age class, with the majority classified as being 'young'.
- These trees do not form part of any heritage listing.

- These trees are not endemic to the site and are not identified as being threatened or vulnerable species, as part of any Endangered Ecological Community.
- These trees are not identified on the City of Sydney Register of Significant Trees.

Accordingly, these trees are not material to the setting or significance of the site as such can appropriately be removed and replaced in new planting to improve the overall aesthetic and function of the site, in line with the Landscape Plans at **Appendix H**.

Furthermore, owing to the central location of these trees on the site, it would be unfeasible to maintain this vegetation that is within the footprint of the following construction works:

- excavation works for the car park and road connections;
- excavation for all retaining walls and paved areas;
- excavation and trenching for underground services;
- laying paths, paving, and building slabs; and
- the interim construction of site sheds and storage of materials and waste.

The location of these trees in the context of the development plan has been provided at **Figure 29** below.

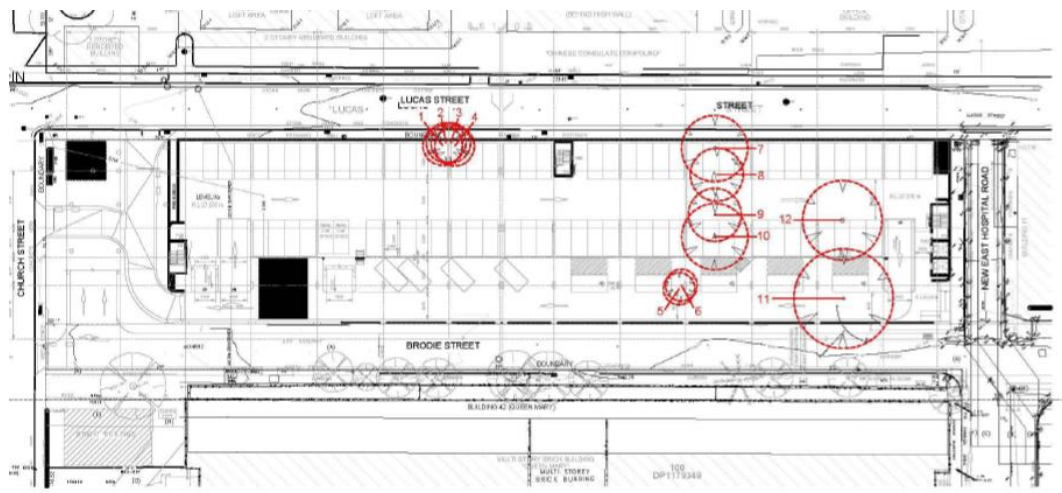


Figure 29 – Development plan and the location of existing trees
 Source: Stuart Nobel Arboricultural

4.13 Crime and Public Safety

Crime prevention through environmental design (CPTED) is a situational crime prevention strategy that focuses on the design, planning and structure of the environment. It aims to reduce opportunities from crime by employing design and place management principles that minimise the likelihood of essential crime ingredients. The aims of the CPTED strategy are to influence the design of the buildings and places by:

- increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended;
- reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- removing conditions that create confusion about required norms of behaviour.

With CPTED principles in mind, the proposed development satisfies the principles as it:

- provides the opportunity for natural and casual surveillance from within the development over Lucas Street, Church Street, and the internal hospital road to the east;
- provides the opportunity for increased activity within this precinct of the hospital which will promote community 'policing';
- provides dedicated off-street parking which reduces the opportunity for vehicle theft;
- provides the opportunity for increased lighting provision which will increase usage of surrounding streets, reducing fear and the threat of predatory crime; and
- provides a better quality environment than the mostly vacant existing situation which will enhance the image of the development site and demonstrates clear guardianship of the area.

In addition to the above, a CPTED review undertaken by a Certified NSW Police Risk Assessor is provided at **Appendix Q**. This CPTED review focuses on the proposed new car park and provides an overview of this car parks compliance with the relevant CPTED principles.

4.14 Environmentally Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

These ESD principles will be incorporated into the design, construction and ongoing operation phases of the development. Accordingly, the environmental performance of the development has also been assessed against clause 7(4) of Schedule 2 of the EP&A Regulations and is consistent with these five accepted principles, as described below.

Precautionary Principle

If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The proposal is supported by environmental studies and technical reports which conclude that there are no environmental constraints that would preclude the development of the site, subject to appropriate management during the design, construction and operational stages. It is considered that through adherence to the Mitigation Measures outlined in **Section 5.0** the proposal will not result in negative environmental impacts.

Integration Principle

The integration principle states that decision-making processes should effectively integrate both long-term and short-term economic, environmental and social considerations. The proposed use of the site and the design of the car park has been developed to integrate the short and long-term effects of economic, environmental and social considerations in the provision of much needed transport infrastructure to support and safeguard the ongoing operation of the hospital.

Intergenerational Equity

The principle of inter-generational equity holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal has been developed to directly benefit current and future generations in that it will facilitate hospital staff 24/7 transport and access to the hospital without causing significant impact to the environment.

Biological Diversity

Under the biodiversity principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.

The development site does not contain any threatened or vulnerable species, populations, communities or significant habitats. The construction and ongoing operation of the facility will be managed in accordance with the Mitigation Measures, ensuring no significant indirect impacts on the surrounding environment.

Valuation and Pricing of Environmental Resources

Under this principle, improved valuation, pricing and incentive mechanisms as well as environmental factors should be included in the valuation of assets and services.

The cost of infrastructure and other design measures to ensure an appropriate level of environmental performance has been incorporated into the cost of development. In addition, the level of waste will be appropriately managed during the construction and the operation of the development. These measures have also been incorporated into the cost of development.

4.15 Construction Impacts

The Construction and Environmental Management Plan and Construction Waste Management Plan have been prepared by Health Infrastructure and included at **Appendix I** and **J** respectively. These plans outline a number of key recommendations, including:

- Construction works will be carried out in accordance with approved working hours.
- A 2.4m 'A Class' fence will be constructed around the perimeter of the site, to prevent access to the site by unauthorised personnel and maintain site security.
- A detailed construction traffic management plan will be prepared by the appointed contractor prior to the commencement of works detailing vehicle access and egress and the procedure for works impeding the roadway or parking zones. This construction management plan will take into account the recommendations of the Noise and Vibration Assessment at **Appendix O** and the Transport Impact Assessment at **Appendix F**.
- A dilapidation report and an Environmental Management Plan will be prepared by the appointed contractor prior to commencement of works and will include input from key stakeholders and authorities where relevant. The appointed contractor will also be responsible for assessing all of the public and property protection measures, establishing a disruption notice process, and implement the Construction Waste Management Plan and safe work method strategies regarding WHS and hazardous materials.

An indicative Erosion and Sediment Control Plan has also been included with the DA drawings at **Appendix G**. This plan has been developed with consideration of the requirements of Council and the 'Blue book'. The appointed contractor will ultimately be responsible for the installation and maintenance of the measures in accordance with Council and Blue Book requirements.

4.16 Access

An Access Review Report has been prepared by Morris Goding Accessibility Consulting and is submitted at **Appendix R**.

The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas and car parking comply with relevant statutory guidelines.

In general, the development has accessible paths of travel that are continuous throughout. In line with the reports' recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The application drawings indicate that compliance with statutory requirements, pertaining to site access and, car parking can be readily achieved.

The recommendations in this report are associated with detailed design and are achievable. These recommendations should be addressed prior to construction certificate.

The main recommendations that have arisen from the access review include:

- Provide an accessible principal pedestrian entrance,
- Provide an accessible path of travel from the principal pedestrian entrance to the lifts and Level 0b of the car park

4.17 Building Code of Australia

A Compliance Assessment against the Building Code of Australia has been prepared by Blackett Maguire + Goldsmith and is submitted with this application at **Appendix T**. The proposal is found to be capable of satisfying the requirements of the BCA 2016 and Access Standards.

4.18 Social and Economic Impacts

The proposed development will have a number of significant positive social and economic benefits for the local area and Sydney more broadly, by:

- Safeguarding employment opportunities for health professionals and key workers and creating 150 construction jobs over the course of the construction program.
- Appropriately addressing the relocation of a child care centre operating on the site. Such child care services are currently being provided on the RPA campus, with around 70 places provided within a Sydney Local Health District staffed facility on the site. This number of child care spaces provided is a small proportion of demand generated by existing staff on the RPA campus, but nonetheless contributes to staff welfare. As a result, Sydney Local Health District is in the process of securing an equivalent number of child care placements within existing commercial child care operations within the Camperdown/Glebe area. As such there will be no nett social impact as a result of the proposed development.
- Reducing the burden on off-site street parking and the limited on-site parking being utilised by hospital patients, the Queen Mary student accommodation building, and visitors to the site.
- Developing, utilising and securing a site which is currently being underutilised, and has been left to dilapidate for a number of structures.
- Increasing the level of safety and security through increased activity on the site throughout all times of the day/night.
- Providing much needed resources to support the efficient operation of RPAH, ensuring there is adequate infrastructure to support the expanding operation of this critical piece of social infrastructure.

4.19 Site Suitability and the Public Interest

The proposed development involves the construction of a multi-storey staff car park, to benefit the staff of the RPA Hospital Campus. The site is considered suitable for the following reasons:

- The site is presently underutilised, being occupied by vacant structures that do not efficiently or economically make best use of the land. A portion of these vacant structures have been fenced off and left to dilapidate, creating an unattractive streetscape and potential future safety concerns.
- The proposed use is ancillary to the operation of the RPA Hospital and as such must be appropriately located within the Campus to support this critical piece of social infrastructure. The subject site was identified for being an underutilised allotment ideally located to service the North Western Precinct of the RPAH Campus, regular in shape, and with two available street frontages to facilitate appropriate access and egress arrangements, as well as a frontage to the internal road network to take advantage of the relative permeability of the Campus.

- The size and dimensions of the land are appropriate for accommodating the proposed building envelope, and as such the proposal does not have any planning or environmental constraints which would preclude the proposed development on site.

Accordingly, in regards to the characteristics of the site and its surrounding context, the proposed development is considered to be suitable and to be within the public interest.

5.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts.

The ERA for the project has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the Site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

The Risk Assessment Matrix at **Figure 29** indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- the receiving environment;
- the level of understanding of the type and extent of impacts; and
- the likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- the complexity of mitigation measures;
- the known level of performance of the safeguards proposed; and
- the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Figure 30 – Risk Assessment Matrix

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

Table 6 – Environmental Risk Assessment

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Significance of Impact	Manageability of Impact	Residual Impact
Key: C – Construction - O - Operation						
Noise	C + O	▪ Increase in noise and vibration levels during construction activities ▪ Increase in noise levels during the operation	▪ Implementation of Construction Noise and Vibration Measures which considers the construction methodology and details specific mitigation measures in accordance with the DECCW Interim Construction Noise Guideline. ▪ Appropriate mitigation measures to be implemented to ensure vibration levels will not compromise human comfort or result in building damage. ▪ Appropriate sound minimisation measures to be incorporated within the plant and mechanical areas.	C = 3 O = 3	C = 2 O = 3	C = 5 (low/medium) O = 6 (medium)
Traffic and Parking	C + O	▪ Increase in construction traffic on local roads ▪ Increase in traffic and parking on local roads during operation	▪ Additional parking is proposed. ▪ A Construction Traffic Management Plan has been prepared detailing measures to minimise any adverse impacts arising from construction traffic.	C = 3 O = 1	C = 3 O = 1	C = 6 (medium) O = 2 (low)
Heritage	O	▪ Potential to impact on heritage significance in the Precinct.	▪ The new works have been designed to have a negligible impact on the local heritage items.	O = 1	O = 1	O = 2 (low)
Visual and Built Form	O	▪ Visual impact of the development when viewed from the public domain.	▪ The building has been sited and incorporates design mechanisms to reduce bulk.	O = 3	O = 2	O = 5 (low/medium)
Amenity	C + O	▪ Potential privacy impacts on adjoining properties. ▪ Potential overshadowing of adjoining properties.	▪ The building has been designed to limit privacy and overlooking of the adjoining properties. ▪ The design and orientation of the building looks to minimise shadow impacts.	C = 3 O = 3	C = 3 O = 3	C = 6 (medium) O = 6 (medium)

6.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 7** below. These measures have been derived from the previous assessment in **Section 4.0** and those detailed in appended consultants' reports.

Table 7 – Mitigation Measures

Mitigation Measures
Heritage ▪ A Heritage Architect should be engaged to periodically monitor the works on site, give necessary advice and sign off upon conclusion. ▪ The new colour scheme should be appropriate to the building type, style and surrounding heritage colours within the historical RPA Campus and have hue and tonal relationships with traditional colour schemes. ▪ Prior to the commencement of any work, consideration shall be given to the development of temporary protection measures that would identify potential risks and outline methodologies to negate any physical impact on significant fabric located in the vicinity of the area of works on the subject site. This is to be prepared by a suitability qualified contractor and implemented prior to the works to be monitored by the architect and followed by all tradespeople involved.
Acoustic The following recommendations have been devised by Acoustic Logic: ▪ Polished concrete surface or similar must be avoided in the car park to prevent tyre squeal. ▪ Broom finished or float surface or other similar finishes should be adopted. ▪ Speed limit on Brodie Street and in the car park itself to be limited to 15km/h to minimise noise generation. Below 15km/h, the primary noise source will be from the car engine, as opposed to type on road noise, and so provided that vehicle speeds are controlled, there will be little additional benefit in selecting road finishes to further reduce noise. ▪ Speed humps should either be concrete or plastic type, and should be fixed/installed to avoid any impact noise generated when cars drive over them. ▪ Use of noise absorptive lining to the underside of the slab soffit over the entry/exit boom gate (and any covered queuing areas) areas should be installed (50mm thick Echosoft or similar material with NRC no less than 0.8). ▪ Acoustic review of any boom-gate or inter-com system at the car park entry should be conducted at detailed design stage. ▪ A detailed construction noise and vibration management plan should be undertaken following preparation of the construction program ▪ Detailed acoustic review of all external plant items should be undertaken following equipment selection.
Stormwater ▪ Stormwater infrastructure will be constructed in accordance with the Stormwater plans.
Sediment and Erosion Control ▪ The Sediment and erosion control measures outlined in the Erosion and Sediment Control Plan (refer Civil Report) will be installed prior to commencement of any work on the site and maintained throughout the duration of the works and/or until any areas that require to be turfed and landscaped have been completed.
Operational Traffic Management ▪ A Plan of Management will be prepared for the operation and management of the car park. ▪ Preparation of a Green Travel Plan.
Contamination The following recommendations have been devised by Environmental Investigation Services: ▪ Prior to the commencement of remediation works: – The site management plan for remediation works in the RAP should be reviewed and implemented by the Remediation/Construction Contractor. – Approval must be sought from the local council for the general acceptance of the proposed remediation strategy in order to comply with Section 3.4.6 of the Site Auditor Guidelines 2006. – Geotechnical advice should be sought regarding the requirements of any backfill material used for the reinstatement of remediation areas and retention strategies (if required) for excavations close to/on the site boundaries. – If asbestos is encountered or likely to be present an Asbestos Management Plan (AMP) should be prepared. ▪ Prior to the commencement of excavation:

Mitigation Measures

- The remediation area should be clearly marked with spray paint and/or pegs. The impacted soil should be covered with builders plastic or similar in order to limit exposure.
- Geotechnical advice should be sought regarding the stability of the adjacent structures and/or adjacent areas prior to commencing the excavation (as required).
- Prior to the commencement of excavation, a suitable NSW EPA landfill facility (with an appropriate license to accept the waste stream) should be contacted and the necessary approvals should be obtained for disposal;
- During excavation and the removal of materials:
 - The pavement in the remediation area (if present) should be removed with care using an excavator or similar. Care should be taken not to track over the area with heavy machinery.
 - Further samples of the fill material at the site should be analysed to confirm the waste classification for off-site disposal.
 - impacted fill material from this area should be excavated in small sections using an excavator or backhoe until the target depth has been reached.
 - The fill should be directly loaded onto trucks with tracking systems for transport to the landfill and dispose in accordance with the assigned waste classification. Landfill dockets should be retained and forwarded to the EC for documentation.
 - Any water encountered within the excavation should be sampled at the time of the soil validation sampling. The water should then be pumped out of the excavation by a liquid waste contractor and disposed of in accordance with Council/EPA requirements.
 - Backfill the excavation (if required) with clean virgin excavated natural material (VENM) which should be compacted to the requirements of the proposed development.
 - The contingency measures outlined in the RAP should be implemented in the event of unexpected finds or validation failure.
- Following the remediation of the site:
 - Obtain validation samples from the natural soil following the excavation and removal of impacted fill (refer to the RAP for more details).
 - All documents including landfill dockets should be retained and forwarded to the PM and EC for inclusion into the validation report prepared by the EC.
 - A validation report will be prepared documenting the remediation works undertaken above. The validation report will include documentation of waste disposal, waste tracking, results of the validation testing and other information as applicable.

Crime Prevention Through Environmental Design

- If a painted finish is to be applied to the internal car park structure, consider a light finish to enhance reflections of light.
- Colour coding, naming, numbering or a similar method of identification and differentiation between levels within the car park should be adopted. This will assist in wayfinding and enhance feelings of safety and purpose within the car park.
- The following types of signage should be provided:
 - Appropriate identification signage, such as building name or street address signage, at key points of the car parking structure to identify the car park as a facility associated with the RPA Hospital;
 - Signage in an appropriate location to advertise the specific security measures available on-site and emergency contact details such as '000';
 - Suitable wayfinding signage should be provided at all ingress/egress points of the car park to help reduce the opportunities for people to find excuses to gain unauthorised access and/or to loiter in areas of the car park or immediately adjacent to entries. It is recommended that suitable way finding signage is provided in the detailed design of the development.
- CCTV cameras should be installed at key entries and exits and in other strategic areas to provide maximum surveillance. These cameras must be vandal resistant and have the ability to clearly identify and record faces, shapes and colours.
- Communication measures such as intercom systems should be installed in key locations for users to call for assistance in an emergency or when they feel unsafe.
- The provision of formal security with regular patrols around the Site and surrounding streets should also be considered to help increase surveillance opportunities.
- Lighting should be provided in and around the car park structure, particularly at the main entries and exits to facilitate surveillance opportunities and reduce the opportunity for predatory crimes, malicious damage and other offences. It is important to position lighting to ensure that there are no shadows between cars and to minimise the contrast between shadows and illuminated areas.
- All lighting proposed within this development, and subject to the further review, should meet the minimum Australia and New Zealand Standards and objectives for crime and fear reduction as outlined in Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas. Lighting should be adequate to permit facial recognition, informal surveillance and reduce the threat of predatory crime.

Mitigation Measures

- A review should be undertaken of the lighting provided between the car park and the various buildings on the RPA Hospital campus. This review should examine the lighting available along key pedestrian desire lines, and if necessary, identify any upgrades which need to occur to ensure appropriate paths of travel are well lit.
 - Boom gates should be provided at the vehicular entry/exit points to the car park to ensure that access is regulated. These gates should be equipped with an electronic system which allows for restricted access. Access control strategies should be provided at pedestrian entry and exit access points to prevent unauthorised entry in the car park.
 - Doors at pedestrian access points should remain closed and open outwards for pedestrians egressing from the car park structure. The doors should remain externally locked.
 - Ensure mechanisms are in place for ongoing maintenance of the car park including the rapid removal policy for vandalism and the removal of graffiti.
 - Use high quality materials for construction to lessen the likelihood of damage and help to reduce maintenance costs.
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7.0 Conclusion and Justification

The Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the proposed development. The EIS has addressed the issues outlined in Secretary's Environmental Assessment Requirements (**Appendix A**) and accords with Schedule 2 of the EP&A Regulation.

The EIS has considered and assessed a range of environmental issues including the scale and form of development on site, traffic and parking, landscaping, stormwater, construction noise and vibration impacts, infrastructure requirements and contributions, waste management, sustainability, environmentally sustainable design, and heritage impacts.

Having regard to the overall environmental assessment undertaken as part of the EIS, the proposed redevelopment is not considered to give rise to any unreasonable adverse cumulative impacts on the environment. The assessment has demonstrated that, with appropriate mitigation measures, any potential environmental impact resulting from the proposal can be effectively mitigated.

The proposed multi-storey staff car park development on the Royal Prince Alfred Hospital site will not give rise to any adverse impacts in terms of the biophysical, social, and economic environment. The redevelopment satisfies the four principles of ecological sustainable development required to be assessed by the *Environmental Planning and Assessment Regulation 2000*.

The proposed multi-storey staff car park will expand of the RPA Hospital Precinct car parking facilities to address the current shortfall of parking spaces and the projected increase in parking demand driven by population growth and service expansion.

On this basis, we have no hesitation in recommending the proposal be approved.