



**Planning &
Infrastructure**

***STATE SIGNIFICANT DEVELOPMENT
ASSESSMENT REPORT:
Hornsby Ku-ring-gai Hospital
Redevelopment Stage 1
Palmerston Road, Hornsby
(SSD 5356)***



Director-General's
Environmental Assessment Report
Section 89H of the
Environmental Planning and Assessment Act 1979

May 2013

ABBREVIATIONS

Applicant	NSW Health Infrastructure
CIV	Capital Investment Value
Consent	Development Consent
Council	Hornsby Shire Council
Department	Department of Planning and Infrastructure
DGRs	Director-General's Requirements
Director-General	Director-General of the Department of Planning and Infrastructure
EIS	Environmental Impact Statement
EPA	Environmental Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
LEP	Hornsby Shire Local Environmental Plan 1994
Minister	Minister for Planning and Infrastructure
OEH	Office of Environment and Heritage
RMS	Roads and Maritime Services
RtS	Response to Submissions
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SEPP	State Environmental Planning Policy
SSD	State Significant Development

HYPERLINKS

[Hyperlinks](#) (CTRL + click to access) are included in this document to allow quick navigation to explanations and interpretations of commonly used legal, scientific or industry terms / phrases used in this document. The explanations / interpretations appear in the glossary appendix. Be sure to print the relevant glossary appendix to enable interpretation of these terms or phrases when printing the main body of the report.

Cover Photograph: Photomontage of proposed new hospital building from Burdett Street.

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EXECUTIVE SUMMARY

This report is an assessment of a State significant development application (SSD 5356) lodged by NSW Health Infrastructure (the applicant) seeking approval for the redevelopment of the Hornsby Ku-ring-gai Hospital. The proposal is State significant development because it is development for the purpose of a hospital with a capital investment value (CIV) in excess of \$30 million, under clause 14 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011.

The site is located at Hornsby Ku-ring-gai Hospital Campus, Palmerston Road, Hornsby, within the Hornsby Local Government Area (LGA).

The proposal involves demolishing 10 existing hospital buildings, one residential building, and two at-grade car parks, and constructing in its place a new four storey hospital building, a new at-grade car park, landscaping and fencing. The redevelopment works are intended to facilitate the replacement of the existing aged infrastructure and minimise disruption to on-going health service delivery and to de-clutter and remove un-used buildings to make way for further redevelopment.

The CIV of the application is \$97 million and the proposal would generate 147 construction jobs and 171 operational jobs.

The site is zoned Special Uses A (Community Purposes) under Hornsby Shire Local Environmental Plan 1994 (Hornsby LEP), and the proposed development is permissible with consent.

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the application was exhibited from 17 January 2013 until 28 February 2013, and relevant public authorities and surrounding landowners were notified. The department received six submissions from public authorities and nine submissions from the general public, including seven submissions objected to the proposal. The key issues raised in submissions related to car parking, traffic, building appearance, building setback, overshadowing, loading dock operations, operational noise, impact on property values.

The applicant provided a Response to Submissions report (RtS) which addressed the issues raised in submissions. The RtS also included some minor design amendments relating to landscaping, the vehicular drop-off, louvers on the stair case, and the height of roof plant.

The department has assessed the merits of the proposal and considers the key issues associated with the proposal to be: built form and urban design; overshadowing; traffic and car parking; noise and vibration; developer contributions; suitability of the site; and the public interest. These issues have been assessed in detail and the department is satisfied that they can be adequately mitigated and managed to achieve acceptable levels of environmental performance. The department has recommended a range of conditions to ensure this occurs.

The department is satisfied the site is suitable for the proposed use and that the proposal is consistent with the key objectives in NSW 2021, the draft Metropolitan Strategy for Sydney 2031 and the draft Sydney North Subregional Strategy.

The department therefore considers the proposal to be in the public interest and that the application should be approved, subject to conditions.

In accordance with the Ministerial delegations issued on 27 February 2013, as the Council has not made an objection, a political disclosure statement has not been made, and there are less than 25 public submissions on the proposal in the nature of objections, the application can be determined by the Executive Director, Development Assessment Systems and Approvals.

1. PROPOSED DEVELOPMENT AND SITE DESCRIPTION

1.1 The Proposal

This report is an assessment of a State significant development application (SSD 5356) lodged by NSW Health Infrastructure (the applicant) seeking approval for the redevelopment of the Hornsby Ku-ring-gai Hospital. The proposal involves demolishing 10 existing hospital buildings, one residential building, and two at-grade car parks, and constructing in its place a new four storey hospital building, a new at-grade car park, landscaping and fencing.

1.2 Site Description and Surrounding Development

Hornsby Ku-ring-gai Hospital Campus is located in north western Sydney approximately 25 km north-west of the Sydney CBD, within the Hornsby Local Government Area (LGA). The hospital campus is bound by Lowe Road in the north, Derby Road in the east, Burdett Street in the south and Palmerston Road in the west.

The hospital campus is regular in shape, comprises an area of 6.4 ha, and is relatively level and clear of native vegetation. The campus has been developed progressively on an ad-hoc basis over a number of decades and has no consistent development pattern. The hospital buildings exhibit differing architectural styles, with variable built form and scale and the current way finding and connectivity between buildings and throughout the campus is poor.

To the north of the hospital campus is Lowe Road, beyond which is James Park. To the east and south of the campus is Derby Road and Burdett Street respectively, beyond which is low density single and two storey residential development. To the west of the campus are a number of single and two storey specialist medical consulting facilities which are accommodated within former residential dwellings.

The campus comprises 19 separate allotments and the application relates to nine allotments across two separate areas of the hospital campus.

The hospital campus and Stage 1 development location (comprising two separate areas) is shown in Figure 1.

Figure 1: Hornsby Ku-ring-gai Hospital Campus and Stage 1 Location (shown in red hatching)



1.3 Campus Development Background

Hornsby Ku-ring-gai Hospital forms part of the Northern Sydney Local Health District. The hospital provides a comprehensive range of inpatient services, including coronary and intensive care, orthopaedic, general medical, surgical, obstetric, mental health, paediatric and emergency services, as well as being a teaching hospital for the University of Sydney.

The applicant has advised that the majority of existing buildings and facilities on the hospital campus have largely reached the end of their economic and operational life, and have become ineffective and inefficient in providing contemporary health care services.

In response to the above issues, Health Infrastructure has prepared a Masterplan for the Hornsby Ku-ring-gai Hospital Campus. The subject application forms part of Stage 1 of the hospitals redevelopment under the Masterplan, and includes demolition of a number of existing buildings and construction of a new hospital building containing peri-operative services (administration and clinical space, theatres and recovery spaces), new patient wards, linen and loading docks and stores, and health information services (a further detailed description of the proposal is provided in Section 1.4 of this report). The redevelopment works are intended to facilitate the replacement of the existing aged infrastructure in a staged program to minimise disruption to on-going health service delivery and to de-clutter and remove un-used buildings to make way for further redevelopment.

1.4 Key Development Components and Features

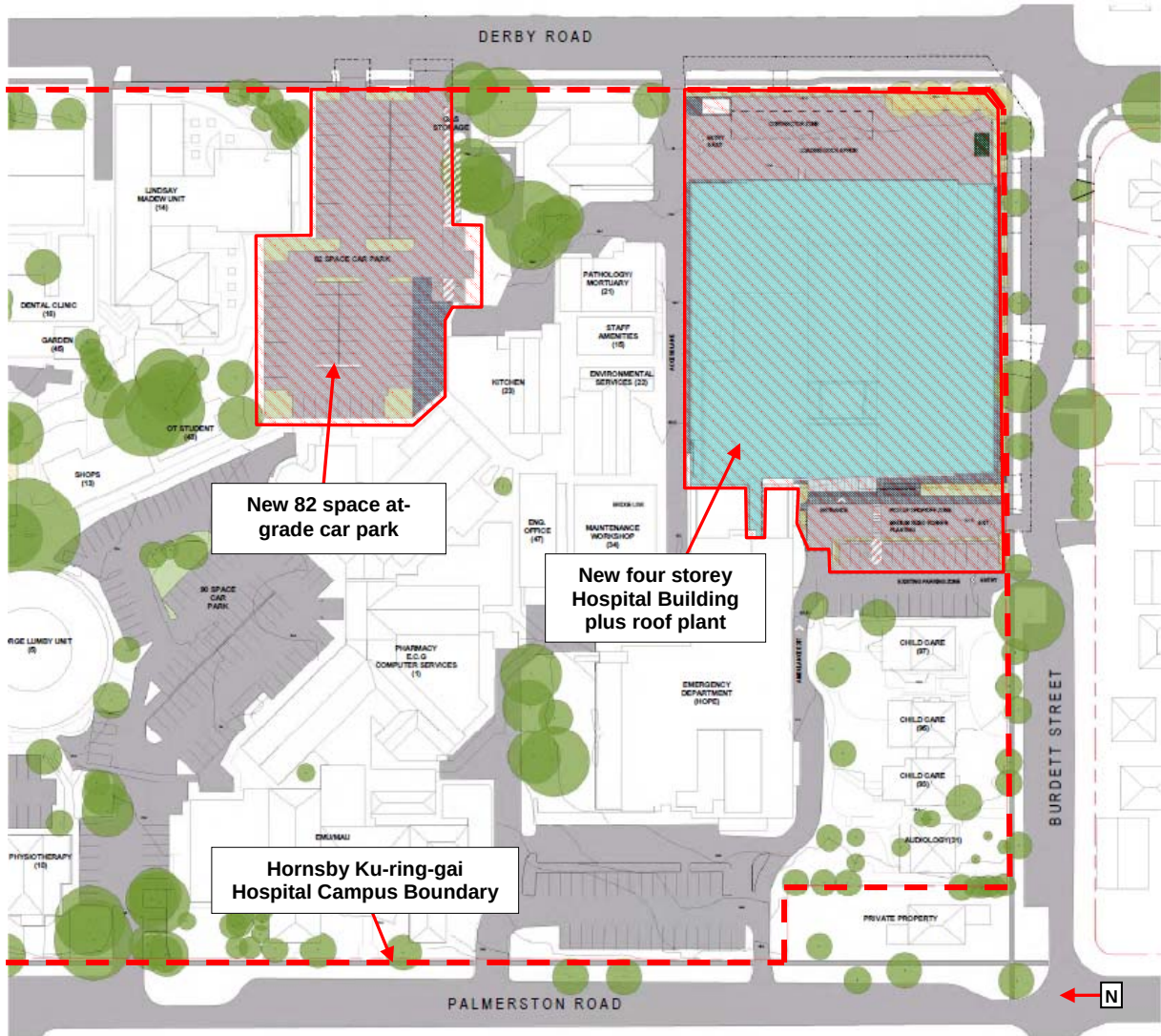
Table 1 provides a summary of the proposal's key components and features and **Figure 2** details the proposed development layout.

Table 1: Key Development Components

Development summary	• demolition of 10 existing hospital buildings; • demolition of one residential dwelling; • demolition of two at-grade car parks; • construction of a new four storey hospital building plus roof top plant, containing: ○ peri-operating services, including: ▪ pre-administration and clinical space; ▪ eight theatres, including endoscopy and fixed x-ray imaging capability for planning and emergency cases; ▪ recovery space; ○ three new inpatient units; ○ support services for linen, loading docks and stores; ○ health information services (medical records); • provision of an 82 space at-grade car park in the location of the existing Theatres (Building 4 – to be demolished); and • landscaping and fencing around the perimeter of the development.
<i>Gross Floor Area</i>	• The GFA of the proposed new four storey hospital building is 14,210 sqm.
<i>Tree Removal</i>	• Removal of 39 trees which fall under the Hornsby Shire Council Tree Preservation Order 2011 (TPO) (Tree no. 26-28, 34-65, and 79-82 from the Arborist Report accompanying the EIS).
<i>Landscaping</i>	• New planting located along the southern and eastern boundaries of the development to provide screening and softened edges to Burdett Street and Derby Road.
<i>Bulk Excavation</i>	• No bulk excavation is proposed as the development does not incorporate any basement levels. • Site levelling is proposed to create the building pad for the proposed new building.
<i>Building Height</i>	• The maximum height of the building is RL 203.46 (or 22.46 m above existing ground level).
<i>Car Parking</i>	• The proposal includes the construction of a new 82 space at-grade car park (a net gain of 47 spaces for the hospital campus having regard to 35 existing spaces removed as part of the proposal).
<i>Staging</i>	• The proposal is to be undertaken in a single stage.

<i>Hospital Beds</i>	• The proposal will provide a total of 84 additional hospital beds.
<i>Value / Jobs</i>	• \$97 million capital investment value. • Creation of 147 construction jobs and 171 operational jobs.
<i>Site Description</i>	• Lot 23 DP 814181 • Lot B DP 363790 • Lots 2 - 4 DP 14774 • Lot 1 DP 232290 • Lot 188 - 189 DP 752053 • Lot 1 DP134994 <i>Note: Lot 4 in DP 14774 is being acquired by the applicant under the Land Acquisition (Just Terms Compensation) Act 1991</i>

Figure 2: Proposed Development Layout (footprint of proposed new hospital building shown in blue)



2. STATUTORY AND STRATEGIC CONTEXT

2.1 SEPP (State and Regional Development) 2011

The proposal is State significant development because it is development for the purpose of a hospital with a capital investment value (CIV) in excess of \$30 million, under clause 14 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. Therefore the Minister for Planning and Infrastructure is the consent authority.

2.2 Approval Authority

On 27 February 2013, the Minister for Planning and Infrastructure [delegated responsibility](#) for the determination of State significant development under Division 4.1 of Part 4 of the EP&A Act to the

Executive Director, Development Assessment Systems and Approvals. The proposal complies with the terms of that delegation as Hornsby Shire Council has not made an objection, a political disclosure statement has not been made and there are less than 25 public submissions on the proposal in the nature of objections.

2.3 Permissibility and Zoning

The site is zoned Special Uses A (Community Purposes) under Hornsby Shire Local Environmental Plan 1994 (Hornsby LEP). The proposed development is permissible with consent, and no specific development standards or controls apply to the site, including setbacks, floor space ratio or height.

However, "Collingridge House" (Building 32 on the hospital campus) is a locally listed heritage item in Schedule D of the Hornsby LEP. Whilst the heritage item is located on the hospital campus, it is not located on any of the allotments that form part of the project area. Consideration of heritage provisions in the Hornsby LEP is provided in Appendix B of this report.

2.4 Environmental Planning Instruments

The department's consideration of relevant [EPIs](#) (including SEPPs) is provided in [Appendix B](#). The proposal is generally consistent with the relevant requirements of the EPIs.

2.5 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the [objects of the EP&A Act](#), as set out in Section 5 of the Act. The proposal complies with the objects of the EP&A Act because the proposal would promote the orderly and economic use and development of previously disturbed land for community purposes. The proposal would protect the land for public purposes and promote the social and economic welfare of the community through the provision of improved health services.

2.6 Ecologically Sustainable Development

The EP&A Act adopts the definition of [Ecologically Sustainable Development](#) (ESD) found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes.

The department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision making process via a thorough and rigorous assessment of the environmental impacts of the proposal. The proposal is considered to be consistent with ESD principles as described in Section 6.7 of the applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Regulation.

2.7 Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

2.8 Strategic Context

The proposal is consistent with and/or supports local/state/regional strategies as outlined below:

- it is consistent with the key policy commitments and priorities of NSW 2021, the State's 10 year plan, to increase investment in infrastructure and rebuilding hospitals and health infrastructure, which will support improved healthcare;
- it is consistent with the guiding principle of the draft Metropolitan Strategy for Sydney to 2031 (draft Strategy) to integrate infrastructure, transport and land uses as the development would support the ongoing delivery of social infrastructure at Hornsby Ku-ring-gai Hospital;
- it is consistent with the draft Sydney North Subregional Strategy, which seeks to further develop centres through the promotion of mixed uses and employment generating development to service the expanding population. The proposal will provide additional jobs for the subregion and will provide critical public infrastructure to cater for the increased demand for health services required for an ageing population; and
- it will provide direct investment in the region of \$97 million, which would support 147 new construction jobs and 171 operational jobs.

2.9 Director-General's Requirements

The EIS is compliant with the Director-General's Requirements and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

3. EXHIBITION CONSULTATION AND SUBMISSIONS

3.1 Exhibition

In accordance with section 89F of the EP&A Act and clause 83 of the EP&A Regulation, the Director General has made the application and accompanying information publicly available for at least 30 days following the date of first publication, in accordance with the EP&A Regulation and the department's Advertising and Notification Policy (see **Table 2**).

Table 2: Exhibition Details

Exhibition/Notification	Medium	Dates
Publicly exhibited	Department of Planning and Infrastructure Information Centre, Hornsby Shire Council and on the department's website	17 January 2013 to 28 February 2013
Newspaper notice	Sydney Morning Herald (SMH), Daily Telegraph (DT) and Hornsby Advocate (HA)	SMH and DT published 16 January 2013 and HA published 17 January 2013
Written notices to	Landholders, public authorities, local community groups	Dated 14 January 2013

The department received six submissions from public authorities, including Hornsby Shire Council, Environmental Protection Authority (EPA), Office of Environment and Heritage (OEH), Roads and Maritime Services (RMS), Sydney Water and Transport for NSW (TfNSW). Additionally, the department received nine submissions from the general public.

A summary of the issues raised in submissions is provided in Section 3.2 and 3.3 below.

3.2 Public Authority Submissions

A summary of submissions received from public authorities is provided below:

Hornsby Shire Council (council)

Council provided the following general comments and recommendations for the department's consideration:

- Council identified that no FSR controls are applicable to the site under Hornsby LEP, however, council's Community Uses DCP requires that development in the Special Uses A Zone (the site is zoned Special Uses A (Community Purposes) under Hornsby LEP) must not exceed 0.4:1 FSR adjoining low density residential areas (the site adjoins low density residential development to the eastern and southern site boundaries). Council therefore requested that the department have regard to the DCP control and be satisfied that the bulk, scale and intensity of development are comparable with the surrounding low density area;
- Council requested that the department consider the proposed new hospital building in the context of the existing streetscape and character of the area, which comprises single and two storey development, and also ensure that the proposed new hospital building would not unreasonably restrict sunlight or result in loss of privacy and amenity to adjacent residential properties;
- Council recommended that the building setback to Burdett Street be increased to enable additional landscaping between the building and the site boundary to reduce visual impact of the building. Council recommended that the revised setback be more consistent with the existing established streetscape (setbacks of typically between 6 – 7 m along Burdett Street);
- Council identified that the additional traffic generated from the proposal (including the cumulative future traffic generated from the later stages of the hospital's redevelopment) will exacerbate traffic conditions at the intersection of Edgeworth David Avenue, Palmerstone Road and Myra Street, and requested that the applicant provide the required intersection improvement works to accommodate the additional traffic;
- Council identified that Jubilee Street is used as a primary access route to the hospital (in addition to the other roads identified in the applicant's traffic report), and that a number of accidents have occurred at the intersection of Jubilee Street and Edgeworth David Avenue, and request that the applicant consider measures to mitigate potential accidents at this location having regard to the additional traffic generated by the development;

- Council identified that the current supply of car parking for hospital visitors and staff is inadequate, and that the EIS and traffic report identified the potential to create a net gain of 400 car parking spaces through the construction of a multi-storey car park. Council requested that it be required through the conditions of consent;
- Council identified that construction traffic associated with the proposal will have an impact on residential amenity and the local road pavement, and request that a comprehensive Construction Management Plan be prepared to address these impacts. Construction access routes should be in line with current road restriction requirements and Council's Traffic and Road Safety Branch should be consulted during preparation of the Construction Management Plan; and
- Council recommended that a Transport Management Strategy be prepared for the hospital to promote active and public transport modes, particularly among staff.

The department has given consideration to the comments provided by council and is satisfied the applicant's Response to Submissions report and additional information has satisfactorily addressed the matters raised by council. Further consideration of built form, traffic and car parking issues raised by council is provided in Section 4.2 of this report.

Environmental Protection Authority

The EPA provided the following general comments and recommendations for the department's consideration:

- The EIS provides insufficient information regarding the contamination of soil and groundwater at the subject site, and it is recommended that the applicant engage a site auditor to provide a more detailed assessment of the site following demolition of existing buildings on the site and to undertake remediation (if required). It is also recommended that a condition be included to require the applicant to obtain a site audit statement to verify the suitability of the site for hospital use;
- All waste generated during the project must be properly assessed, classified and managed in accordance with the EPA's guideline to ensure proper treatment, transport and disposal at a landfill legally able to accept those wastes, and also recommended a number of mitigation measures for the transportation of waste material. There is also potential for asbestos containing waste material to be generated from the demolition of existing hospital buildings, which must be managed in accordance with the 'special waste' provisions of the Protection of the Environment Operations (Waste) Regulation 2005 and requirements of WorkCover NSW;
- Dust control and erosion and sediment control provisions should be implemented during construction of the project;
- Further information is required regarding the special circumstances that would require construction outside standard hours;
- The applicant should undertake a safety risk assessment of construction activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers (such as 'quacker' alarms rather than 'beeper' alarms), without compromising safety;
- The applicant should be required to review its arrangements for the proper assessment, handling, storage, transport, treatment and disposal of clinical and related waste arising from operation of the new hospital building to ensure compliance with relevant legislation and regulations;
- The information submitted regarding operation noise is inadequate and the applicant should prepare a detailed noise impact statement in accordance with guidance material in the NSW Industrial Noise Policy, January 2000, incorporating feasible and reasonable noise avoidance and minimisation measures into the detailed project design;
- Loading dock, waste collection and standby emergency generator testing activities should be restricted to 'day-time' as defined by the NSW Industrial Noise Policy, January 2000; and
- A noise monitoring program should be undertaken at 60 days and then one year after commencement of operation of the hospital building to verify that measured noise levels do not exceed levels predicted in the noise impact statement and acceptable noise levels in the NSW Industrial Noise Policy, January 2000.

The department has given consideration to the comments provided by the EPA and is satisfied the applicant's RtS report and additional information has satisfactorily addressed the matters raised by EPA. Further detailed consideration of contamination issues raised by the EPA and SEPP 55 is provided in Appendix B of this report, and detailed consideration of construction and operational noise impacts is provided in Section 4.2 of this report. The department is satisfied that contamination, waste management, erosion and sediment control, noise and vibration impacts associated with the construction and operation of the development can be appropriately addressed by conditions.

Roads and Maritime Services

RMS provided the following general comments and recommendations for the department's consideration:

- Balmoral Street should be included in the traffic modelling assessment as traffic signals are proposed at the intersection of Balmoral Street / Edgeworth David Avenue;
- Burdett Street and Sherbrook Roads should be included in the traffic modelling assessment;
- The SIDRA modelling has modelled Edgeworth David Avenue / Palmerston Road as a T-intersection, however Edgeworth David Avenue / Palmerston Road / Myra Street are controlled by one signal and should be re-modelled to include movements from all these roads (including Myra Street); and
- Further information should be provided on the full redevelopment of the hospital (including the future stages of redevelopment beyond Stage 1), which would enable the RMS to assess the impact of the redevelopment once it has been fully completed.

The department has given consideration to the comments provided by RMS and is satisfied that the applicant's RtS report and additional information has satisfactorily addressed the matters raised by the RMS. Further detailed consideration of traffic issues raised by RMS is provided in Section 4.2 of this report.

Sydney Water

Sydney Water provided the following general comments and recommendations for the department's consideration:

- A 150 mm drinking water main is available for connection on the eastern side of Palmerstone Road;
- The current wastewater system has sufficient capacity to serve the proposed development;
- The site is traversed by a 150 mm wastewater main, and notes that the applicant proposes to make this main redundant upon construction of replacement mains. Sydney Water requested that:
 - o the applicant consolidate Lots 23 DP 814181, Lot B DP 363790, Lot 2, 3 & 4 DP 14774 and Lot 1 DP 232290, prior to making the wastewater main redundant;
 - o all maintenance holes have unrestricted access, including a 1 meter clearance from the outer-edge and a 2.4 m headroom clearance above the maintenance hole surface level;
 - o the disused wastewater main is to be either cut up under the supervision of a Sydney Water Developer Works Inspector or be sand filled; and
 - o detailed designs are submitted to Sydney Water through the WSC for approval and all wastewater design plans comply with Sewerage Code WSA-02 (Sydney Water Edition).

The department has given consideration to the comments provided by Sydney Water and is satisfied the applicant's RtS report and additional information has satisfactorily addressed the matters raised by Sydney Water.

Office of Environment and Heritage

OEHL advised it has no comment on the proposal.

Transport for NSW

TfNSW advised it has no comment on the proposal.

3.3 Public Submissions

A total of nine public submissions were received during the exhibition, including one submission from a local resident committee. The local resident committee submission had 37 signatures of other residents who supported the submission, however, pursuant to the definition of 'public submissions' in the Minister for Planning and Infrastructure's Instrument of Delegation executed on 27 February 2013, a petition or a single submission that is signed by multiple parties is taken to be one submission. Accordingly, the local resident committee submission has been counted as one submission.

Seven of the submissions objected to the proposal (including the local resident committee submission), and two submissions did not object, but raised concerns. Key issues raised in public submissions are identified in **Table 3**.

Table 3: Summary of Issues Raised in Public Submissions

Issue	Proportion of Submissions (%)
Lack of Car Parking	89
Traffic Impact on Surrounding Road Network	78
Building Appearance, Materials and Finishes	67
Building Location and Setback	56
Overshadowing Impacts	33
Lack of Community Consultation	22
Loading Dock Operations	22
Operational Noise Impacts	11
Impact on Property Values	11

The department has given consideration to the comments provided in public submissions and is satisfied the applicant's RtS report and additional information has satisfactorily addressed the matters raised in submissions. Detailed consideration of car parking, traffic, built form, amenity and noise impacts of the proposal is provided in Section 4.2 of this report.

3.4 Applicant's Response to Submissions

The applicant provided a Response to Submissions report (RtS). The RtS included a detailed response to each of the issues raised in submissions, including additional information relating to traffic and car parking, building location and setback, revised landscaping plan, an updated acoustic report, and a revised list of mitigation measures.

The RtS also included some minor design amendments, including:

- modification to landscaping within the setback between the building and the Burdett Street boundary to provide for additional landscape buffering and mature vegetation;
- a new vehicular drop-off, canopy extension and reconfiguration of car parking for improve ambulance drop-off and patient access to the building;
- additional louvers to stair case for improved ventilation; and
- increased height of plant roof to allow for greater acoustic insulation (from RL 203.26 to RL 204.46).

The department is satisfied that the Response to Submissions report and additional information and minor design amendments satisfactorily addressed the issues raised in submissions.

4. ASSESSMENT

4.1 Section 79C Evaluation

Table 4 identifies the matters for consideration under section 79C that apply to State significant development, in accordance with section 89H of the EP&A Act. The table also represents a summary for which additional information and consideration is provided for in Section 4 (Key and Other Issues) and relevant appendices or other sections of this report and the EIS, referenced in the table. The EIS has been prepared by the applicant to consider these matters and those required to be considered in the DGRs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the Regulation.

Table 4: section 79C(1) Matters for Consideration

s. 79C(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Complies. Consideration of relevant EPI's has been undertaken in Appendix B.
(a)(ii) any proposed instrument	Complies. Consideration of the Draft Hornsby LEP 2011 has been undertaken in Appendix B.
(a)(iii) any development control plan	Clause 11 of State Environmental Planning Policy (State and Regional Development) 2011 provides that development control plans do not apply to State significant development. Notwithstanding, consideration of relevant DCPs has been undertaken in Appendix B.
(a)(iiia) any planning agreement	Not applicable.
(a)(iv) the Regulations	The development application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to development applications (Part 6 of the EP&A Regulations), public participation procedures for SSD's and Schedule 2 of the EP&A Regulation relating to environmental impact statements. Refer to Section 2.7 of this report.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development	Impacts of the development have been considered in Section 4.2 of this report.
(c) the suitability of the site for the development	The suitability of the site has been considered in Section 4.2.6 of this report.
(d) any submissions	Consideration has been given to submissions received during the exhibition of the development application in Section 3. Key issues raised in submissions have been considered further in Section 4.2 of this report.
(e) the public interest.	The public interest of the development has been considered in Section 4.2.7 of this report
Biodiversity values exempt if: (a) On biodiversity certified land?	Not applicable.
(b) Biobanking Statement exists?	Not applicable.

4.2 Key and Other Issues

The department considers the key environmental issues for the application to be:

- built form and urban design;
- overshadowing;
- traffic and car parking;
- noise and vibration;
- developer contributions;
- suitability of the site; and
- the public interest.

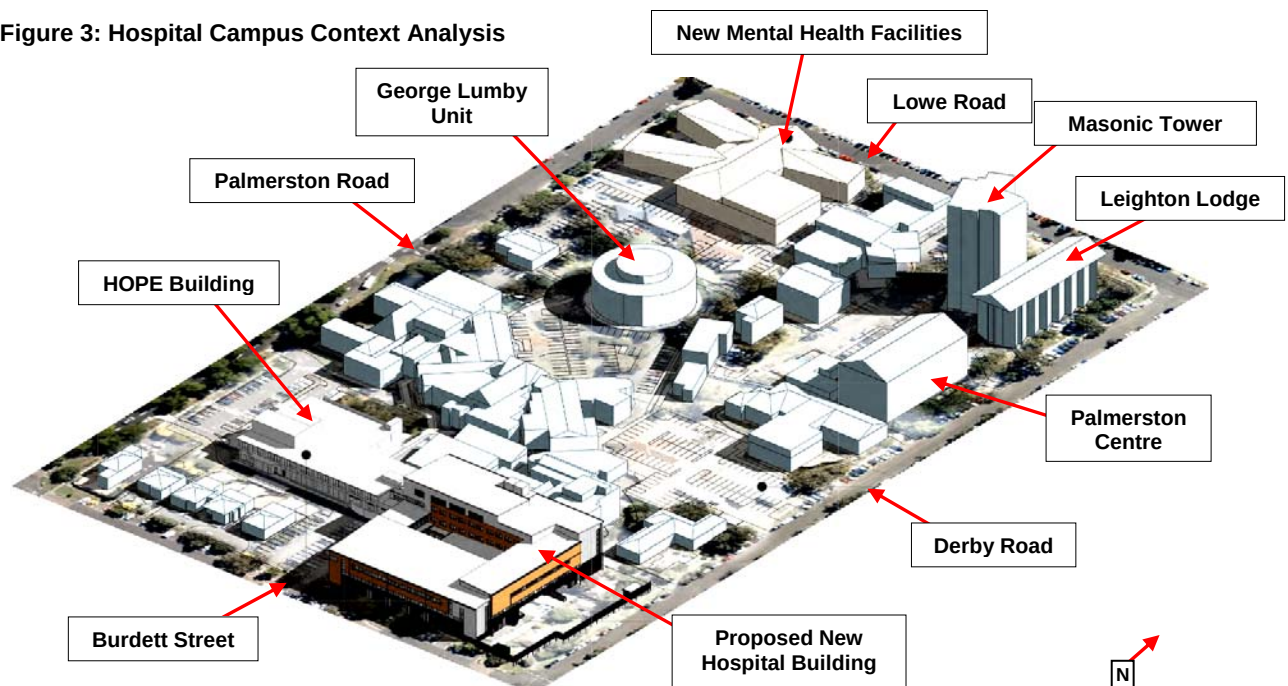
4.2.1 Built Form and Urban Design

The proposal includes the construction of a new hospital building located in the south eastern corner of the hospital campus at the corner of Burdett Street and Derby Road. The new building comprises four storeys plus roof top plant rooms and has a gross floor area of 14,200 sqm. The new building is to accommodate Peri-operating Services, three new inpatient units, support services for linen, loading docks and stores and health information services. The height, bulk, scale and setbacks of the building were key issues raised by council and the general public during exhibition of the proposal. The siting of the proposed new hospital building on the hospital campus is shown in **Figures 1** and **2** of this report.

There are no specific development controls which apply to the site, including building height, FSR or setbacks, under Hornsby Shire Local Environmental Plan 1994 or the Draft Hornsby Local Environmental Plan 2011. Accordingly, the department has considered each of these aspects of the proposed new building on merit, having regard to the appropriateness of the proposal in the context of existing surrounding development, the future development of the hospital campus, and the potential impacts of the proposal on surrounding residential development.

In the context of the existing hospital campus, the overall bulk and scale of the proposed new building is comparable with a number of other two and three storey buildings on the hospital campus, including the adjacent HOPE building, the George Lumby Unit, Leighton Lodge, Palmerstone Centre, and the approved new mental health facilities building. The proposed new building is also significantly lower in height than the nine storey Masonic Tower building. A context analysis illustrating the scale of the proposed building against other buildings in the hospital campus is provided in **Figure 3**.

Figure 3: Hospital Campus Context Analysis



The proposed building is, however, located at a prominent corner position within the hospital, and is surrounded by low density residential dwellings along Burdett Street and Derby Road. Accordingly, potential amenity impacts arising from the proposed new building on the surrounding low density residential development are a key consideration.

The building has a maximum height of RL 203.46 (22.46 metres above ground level), which occurs in the north western portion of the building footprint where a roof plant room is located. The building height steps down from its highest point towards the southern face of the building fronting Burdett Street to RL 193.90 (12.9 metres above existing ground level), which represents a reduction of 9.56 metres from the highest point. The building height also steps down from its highest point towards the eastern face of the building fronting Derby Road to RL196.4 (15.4 metres above existing ground level), which represents a reduction of 6.8 metres from the highest point. The tapered building height design is intended to reduce the building's mass and bulk from the primary viewpoints along Burdett Street and Derby Road (opposite low density residential development). The eastern and southern elevations of the proposed building, illustrating the step down in building height, are shown in **Figures 4** and **5**.

Figure 4: Eastern Elevation (view from Derby Road)

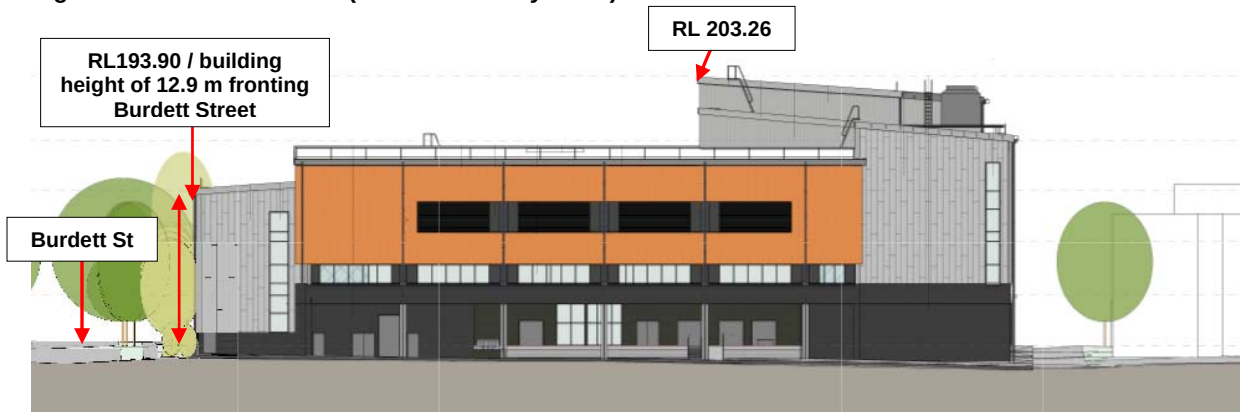
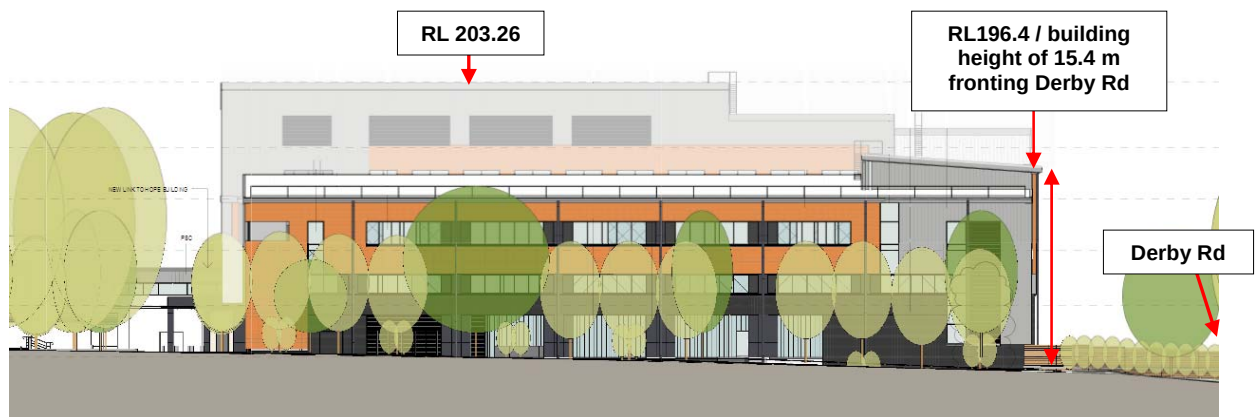


Figure 5: Southern Elevation (view from Burdett Street)



To break up the built form of the building and reduce perceived height, bulk and scale, the façade design incorporates a horizontal expression and a complementary mix of colours, materials and finishes, including a dark masonry base, floating glazed middle section, and terracotta top. The architectural statement accompanying the EIS identifies that the colour and material choices are intended to reference the colours and materials used in the surrounding built environment and to promote aesthetic connection with the adjacent HOPE building. Additionally, the architectural statement identifies that the arrangement of materials on the façade is intended to give the impression of a building containing fewer storeys than it actually has, thereby reducing perceived bulk.

The building is sited with a setback of 2.7 to 2.9 metres to the southern Burdett Street boundary and the setback accommodates a footpath and screen planting intended to soften the impact of the southern façade on Burdett Street. The building is also setback 21.9 metres to the eastern Derby Street Boundary, and the setback accommodates a service yard with loading dock facilities which is screened by fencing and planting along the boundary. The setbacks of residential development opposite the proposed building along Burdett Street and Derby Road are typically between 6 and 7 metres. Photomontages from Burdett Street and from the corner of Burdett and Derby Road, illustrating the setbacks of the proposed building, are provided in **Figures 6 and 7**.

Figure 6: Photomontage from Burdett Street (without screen planting)



Figure 7: Photomontage from corner of Burdett Street and Derby Road (without screen planting)



During assessment of the application, the department raised concern with the 2.7 metre setback from the southern Burdett Street boundary, as the height of the building in this location is 12.9 metres above existing ground level, which is significantly higher than existing low density residential development opposite the site. The setback also does not facilitate an adequate deep soil zone to allow vegetation of an appropriate scale to provide appropriate screening of a building of this size. The department requested that the applicant provide a greater setback along with an increased deep soil zone, in collaboration with additional plantings of mature vegetation to provide appropriate screening along Burdett Street.

In response to the above request, the applicant advised that the overall siting of the building is driven by a number of factors, including:

- functional adjacency and connection with the Hornsby Obstetrics, Paediatric and Emergency (HOPE) building, facilitating fast access from Maternity and Emergency departments to theatres and supporting other key flows;
- minimising disruption to remaining operating health services;
- minimising decanting and relocating of significant support services (allowing for maximum provision of clinical services within budget for the proposal);
- alignment with the hospital campus Masterplan; and
- a large area of the campus is required to accommodate the high priority clinical service building.

The applicant advised there is no flexibility for the building to be moved further to the north or ability to reduce the footprint to gain a greater setback along the Burdett Street boundary as:

- moving the building further to the north would:
 - o obstruct the access lane way to existing hospital facilities and would abut against a number of existing functional health buildings; and
 - o require additional demolition of hospital facilities and services (including the three storey Pathology / Mortuary Building, environmental services and a maintenance workshop) which would impede service delivery and functions of the hospital.
- reducing the footprint would:
 - o reduce the desired functionality and connectivity of the building; and
 - o result in a taller building, potentially increasing visual and amenity impacts to surrounding low density residential development (if no GFA was to be lost as a result of reducing the footprint).

Notwithstanding, the applicant made modifications within the setback to the Burdett Street boundary to provide further capacity for mature vegetation and landscape screening of the building. The modifications included narrowing the concrete maintenance path along the buildings edge and supplementing the existing street trees which grow on the council verge with plantings of *Tristanopsis laurina* (Water Gum) within the setback. The additional trees are to be planted at regular intervals and will grow to a height of 6 metres and have a canopy spread of 4 to 6 metres, and are intended to provide year-round visual screening of the southern façade of the building.

The garden bed between the building and the existing street footpath was also increased slightly and varies in width between 1.74 and 1.95 metres, which takes greater advantage of the deep soil area and allows for more varied planting with a combination of groundcover, grasses, and shrubs to create a layered effect when viewed from Burdett Street.

During the assessment, the department also met with the applicant to discuss the proposed building setback to Burdett Street, and the department suggested the applicant consider a number of further design amendments to reduce potential visual impacts of the building when viewed from Burdett Street. The suggested design amendments included recessing the Level 3 floor plate away from the southern face of the building and / or providing additional landscaping and screen planting along the council verge and within the 90 degree parking area opposite the building along Burdett Street. The applicant responded by identifying that the suggested design amendments to Level 3 would impact on the functionality of the building and would impact the entry lobby areas located below on Level 2 and Level 1. Notwithstanding, the applicant conceded that additional landscaping could be provided along the council verge to provide additional screening of the building, and that they would accept a condition to require the provision of additional landscaping in this location.

The department accepts that there are a number of significant site constraints and factors driving the design and siting of proposed new hospital building which have led to a limited setback along the southern Burdett Street boundary. It is also acknowledged that any minor increase in setback would not result in any discernable reduction in perceived bulk and scale. The request for a greater setback was intended to facilitate an increased deep soil zone in collaboration with additional plantings of mature vegetation to provide greater screening of the building when viewed from the south.

Whilst the applicant's response has not included any increase in the setback, the design response of narrowing the concrete maintenance path, providing an expanded garden bed and additional plantings of mature vegetation is considered to assist in achieving the objective of improving visual buffering of the building from Burdett Street. The department also considers that the provision of additional landscaping within the council verge would further reduce potential visual impacts of the building when viewed from Burdett Street.

Accordingly, the department has considered the limited setback of the proposal from the southern Burdett Street boundary on merit, and has concluded that the proposal is justified for the following reasons:

- the building is comparable in bulk and scale with other existing buildings on the hospital campus;
- the incorporation of design elements and complementary colours, materials and finishes, which break up the built form of the building when viewed from the street;
- the retention of street trees and planting of additional trees and shrubs between the development and the site boundaries and within the council verge, which will assist in providing a visual buffer between the development and the surrounding residential area;
- the constrained nature of the existing hospital campus;
- the minimal impact on the residential amenity enjoyed in the immediate surrounding area;
- the siting of the building will minimise disruption to remaining operating health services;
- the siting of the building will facilitate optimal functionality and connectivity with the HOPE building; and
- the bulk and scale is appropriate for its functional requirements and is typical of hospital/health infrastructure development.

Additionally, the setback of the building to Derby Road is 21.9 metres, which accommodates a service yard and loading dock facilities. This setback is significantly greater than the 6 – 7 metre residential setbacks opposite the proposal, and to reduce potential visual impacts of the service yard and loading dock, the applicant has provided fencing and screen planting along the Derby Road boundary. The department is satisfied that the proposed fencing and screen planting will adequately reduce potential visual impacts of the building and surrounds when viewed from Derby Road.

4.2.2 Overshadowing

Overshadowing was a key issue raised in public submissions. The EIS identifies that the proposed new building would not result in any overshadowing impacts to surrounding development during the mid summer, however, during the mid winter period, the building will result in the following impacts:

- the front yards of five dwellings, and north facing windows of two dwellings on Burdett Street will be overshadowed at 9:00 am, however these shadows will be gone by midday; and
- the carriageway close to the intersection of Burdett Street and Derby Road, and part of the front yards of two dwellings on Derby Road and three dwellings on Burdett Street will be overshadowed between midday and 3:00 pm.

The morning, noon and afternoon shadow diagrams of the mid winter period, illustrating the above impacts, are provided in **Figures 8, 9 and 10**.

Figure 8: June 9:00 AM

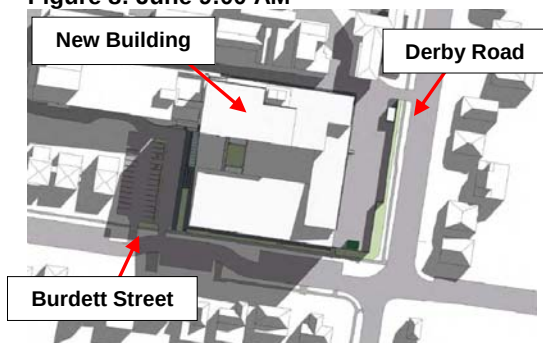


Figure 9: June 12:00 PM

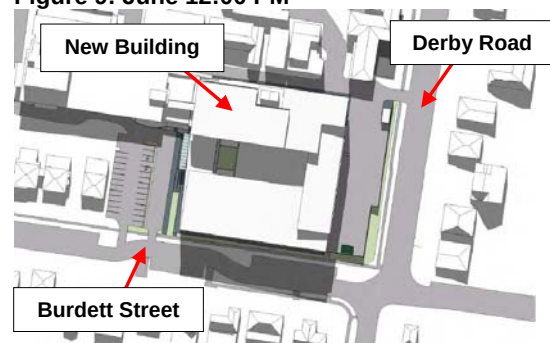
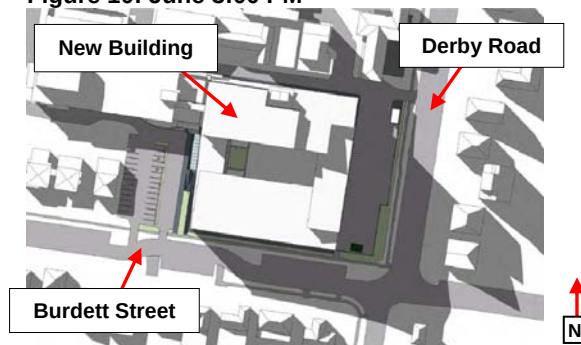


Figure 10: June 3:00 PM



There are no overshadowing controls applicable to the proposed development. For the purpose of assessing the proposal, the department has adopted the controls for solar access in the council's High Density and Medium Density Development Control Plans (DCP), which prescribes that, unless site conditions dictate, new buildings adjacent to residential areas should be designed to allow:

- at least 2 hours of sunshine to the private open space of adjacent dwellings between 9 am and 3 pm on 22 June; and
- north facing windows of adjacent dwellings to receive a minimum 3 hours of sunshine between 9 am and 3 pm on 22 June over a portion of their surface.

Having regard to the above controls (which is intended to apply to new residential development rather than new hospital development), all surrounding residential dwellings will continue to receive more than 3 hours of sunshine on north facing windows, and the proposal will not result in any overshadowing of private open spaces areas at the rear of the affected residential properties as overshadowing impacts are largely contained to the front yards.

Accordingly, the proposal complies with the solar access controls prescribed in the DCP, and the department considers the minor additional overshadowing impacts resulting from the proposal to be acceptable.

4.2.3 Noise and Vibration

The EIS was accompanied by an Acoustic Assessment Report (acoustic report) which addressed the noise and vibrations impacts of the demolition and construction works and the operation of the proposed new hospital building.

Construction Noise

The nearest noise sensitive receivers to the subject site include the residential land uses to the south of the site along Burdett Street and to the east along Derby Road. In addition, a number of non-residential noise sensitive receivers are located in proximity to the site, including a church at the corner of Burdett Street and Palmerstone Road, the Wahroonga Children's Early Learning Centre at the corner of Burdett Street and Palmerstone Road, and a child care centre managed by the hospital located along Burdett Street.

The Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) (ICN Guideline) establishes construction noise management levels for surrounding sensitive residential receivers, and for surrounding non-residential sensitive receivers. Relevant construction noise management levels for the proposal are outlined in **Table 5** below.

Table 5: ICN Construction Noise Management Levels for Surrounding Land uses

Residential			
Type of Receiver	Daytime (7 am to 6 pm)		
	Measured RBL (L _{A90(15 min)} dBA)	Noise Management Level (RBL +10 dBA)	Highly Noise Affected (dBA)
Residential along Burdett St and Derby Road	43	53 ¹	75 ¹
Non-Residential			
Type of Receiver	Management Level L _{Aeq(15 min)} (applies when properties are being used)		
Place of Worship (church at the corner of Burdett Street and Palmerstone Road)	45 dB ²		

¹ external construction noise management level which applies at the residential property boundary that is most exposed to construction noise

² internal construction noise management level which applies at the centre of an occupied room

The ICN Guideline does not identify specific construction noise management levels for child care centres (such as the nearby Wahroonga Children's Early Learning Centre or the child care centre managed by the hospital), and identifies that these types of noise sensitive land uses require a separate investigation to determine suitable noise levels on a project-by-project basis.

To address potential construction noise and vibration impacts of the proposal, the acoustic report recommended a condition requiring the preparation of a construction noise and vibration management

plan addressing the ICN Guideline and Assessing Vibration – A Technical Guideline (Department of Environment and Conservation (NSW), 2006).

The EPA recommended that the applicant consider undertaking a safety risk assessment to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers (such as 'quacker' alarms rather than 'beeper' alarms), without compromising safety.

To ensure the amenity of the surrounding residential and non-residential receivers is protected throughout the construction works, in accordance with the recommendation of the acoustic report, the department has recommended a condition requiring the applicant to prepare a Construction Environmental Management Plan, which would include a section on construction noise and vibration management which would need to address all relevant requirements contained in the ICN Guideline, including:

- identification of specific activities that will be carried out and associated noise sources;
- identification of all potentially affected residential and non-residential receivers;
- detail construction noise management levels for residential and non-residential receivers based on the ICN Guideline (including establishing a specific criteria for the nearby Wahroonga Children's Early Learning Centre or the child care centre managed by the hospital);
- description of feasible and reasonable noise mitigation measures and procedures to manage noise levels to in accordance with the construction noise management levels; and
- noise and vibration monitoring and reporting procedures.

The department has also recommended that the applicant investigate the use of audible movement alarms during the construction, as suggested by the EPA.

Additionally, the applicant has sought to extend construction hours for the proposal beyond the recommended standard construction hours of the ICN Guideline as follows:

- Monday to Friday 7 am to 7 pm (ICN Guideline recommends Monday to Friday 7 am to 6 pm);
- Saturday 8 am to 5 pm (ICN Guideline recommends Saturday 8 am to 1 pm); and
- No work on Sundays or public holidays.

It is noted that the proposed works are to be undertaken in close proximity to adjoining residential development and the ICN Guideline identifies that noise from construction work in the evening and on Saturday afternoons can be annoying to most residents as it may interrupt leisure activities. Therefore, the department has recommended a condition restricting construction hours to the above standard construction hours from the ICN Guideline. Should the applicant have any particular need to undertake work outside standard hours, the applicant may seek variation to the approved construction hours from the Director-General during construction.

The department is satisfied that, subject to the recommended conditions, any noise impacts associated with the construction of the proposed development can be adequately mitigated and managed.

Construction Vibration

Construction works have the potential to generate vibration which can result in ground borne noise, human discomfort, cosmetic damage and building damage. To address potential vibration impacts of the proposal, the acoustic report recommended the imposition of a condition requiring the preparation of a construction noise and vibration management plan addressing the ICN Guideline and Assessing Vibration – A Technical Guideline (Department of Environment and Conservation (NSW), 2006) (Vibration Guideline).

The proposal includes some minor site levelling, however it does not incorporate a basement level and therefore there will be minimal excavation or rock breaking required, and minimal potential vibration impacts resulting from the construction works. Notwithstanding, there are a number of factors affecting vibration levels, including the particular type of plant used, the local geotechnical conditions and the distance between the boundary of the site and surrounding receivers.

To ensure vibration is appropriately managed throughout the construction phase, the department has recommended a condition requiring the applicant to prepare a Construction Environmental Management Plan, which will include a section on construction noise and vibration management. The

section on vibration management will need to establish appropriate criteria and safe working distances to minimise vibration impacts, and to address relevant requirements of the ICN Guideline and the Vibration Guideline.

Additionally, the department has recommended a condition requiring that vibration monitoring is undertaken throughout the works to ensure that the vibration levels remain below the criteria established in German Standard DIN 4150-3 (1999-02) and British Standard BS 6472:1992.

Operational Noise

Noise will be generated during the operation of the development from mechanical plant equipment, traffic generation and loading dock and car park activities.

Operational noise was a key issue raised in submissions and the EPA raised concern with potential operational noise impacts in its submission.

The acoustic report established operational noise goals for mechanical plant for the surrounding land uses based on the NSW Industrial Noise Policy (Environmental Protection Authority, 2000) (INP) which are identified in the **Table 6**.

Table 6: Operational Noise Goals for Surrounding Land uses

Residential			
Type of Receiver	Noise Level dB re 20 µ Pa		
	Day	Evening	Night
Residential (Intrusive)	48	48	43
Residential (Amenity)	47	44	40
Non Residential			
Type of Receiver	Time of Day	Recommended LA _{eq} Noise Level dB	
		Acceptable	Recommended Max
Hospital Ward (internal)	Noisiest 1 hr period	35	40
Hospital Ward (external)	Noisiest 1 hr period	50	55
Place of Worship	Noisiest 1 hr period when in use	35	40
Commercial Premises	When in use	65	70

The acoustic report also established an operational noise goal for the surrounding child care centres based on the Guideline for Child Care Centre – Acoustic Assessment by the Association of Australian Acoustical Consultants (AAAC). The noise goal relates to noise generated from road traffic or industry, and is as follows:

- 55 dBA at the outdoor play areas; and
- 40 dBA at indoor play or sleeping areas.

The acoustic report included a quantitative noise assessment of predicted operational noise emissions from mechanical plant against the operational noise goals for the residential and non-residential noise sensitive receivers. The assessment identified that a number of mitigation measures will need to be implemented to attenuate mechanical plant noise levels to comply with the noise goals. Suggested mitigation measures include:

- containing mechanical plant items in plant rooms;
- installation of insulation on plant room walls and roof;
- locating intakes and exhausts away from affected receivers;
- silencers on external air inlets and outlets;
- design criteria for Stand-by Generator;
 - o maximum aggregate sound power level of 75 dBA;
 - o maximum overall sound pressure level of 47 dBA at 10 m from generator; and
- design criteria for Substation;
 - o maximum aggregate sound power level of 55 dBA at 1 m from substation.

The acoustic report identified that the noise generated from the car park and loading dock activities would also comply with the operational noise goals (outlined in **Table 6**), provided a number of operational procedures were implemented for the loading dock, as follows:

- loading dock should only operate between 7 am and 6 pm;
- only one arrival or departure event is recommended every 15 minutes;
- engines should be switched off when vehicles are in the loading dock; and

- no air conditioning or ancillary systems should operate when vehicles are in loading dock.

The applicant has committed to incorporating all noise attenuation measures of the acoustic report to achieve the operational noise goals in the mitigation measures detailed in the EIS.

Conclusion

To ensure that the on-going amenity of the surrounding residential and non-residential receivers is protected throughout the operation of the development, the department has recommended a condition requiring compliance with the operational noise goals established in the acoustic report.

Additionally, the EPA have recommended undertaking a noise monitoring program at 60 days and then one year after commencement of operation of the hospital building to verify that the measured noise levels do not exceed the operational noise goals and acceptable noise levels in the NSW Industrial Noise Policy, January 2000. The department has recommended a condition to ensure this occurs.

The department is satisfied that, subject to the recommended conditions, any noise impacts associated with the operation of the proposed development can be adequately mitigated and managed.

4.2.4 Traffic and Transport

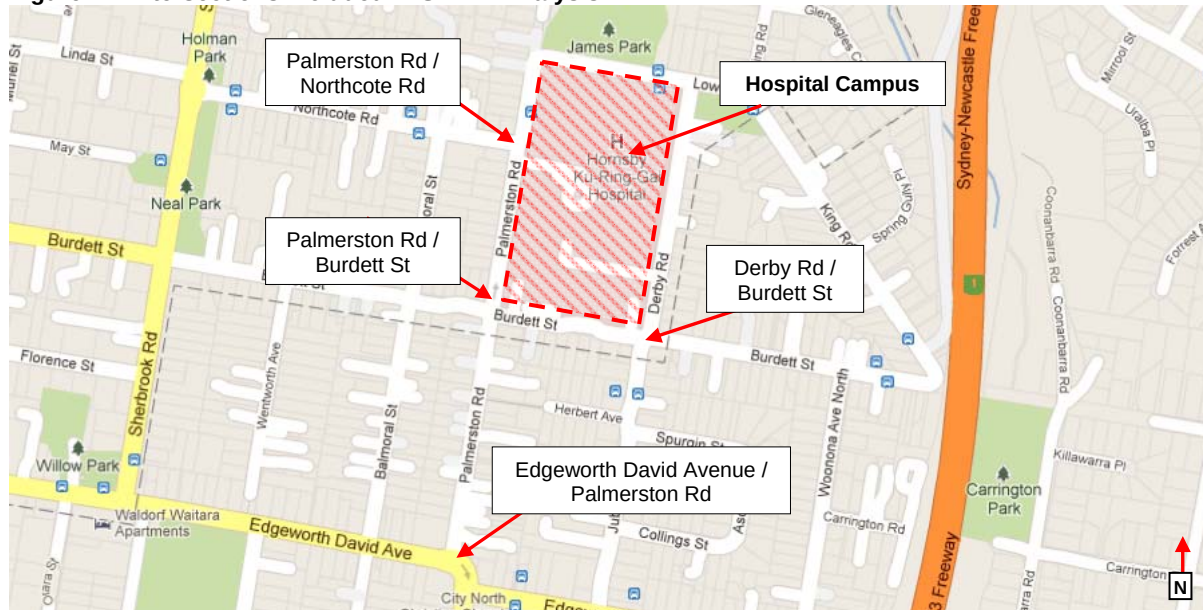
The EIS was accompanied by a Transport Assessment Report (traffic report) which addressed impacts of the proposal on the surrounding road network and car parking supply. Traffic and car parking impacts associated with the proposal were key issues raised by council and in public submissions.

Traffic

The proposal will result in an additional 84 hospital beds and 171 additional staff at the hospital campus. The traffic report identified that the additional beds and staff would generate an additional 155 vehicle trips per peak hour period, and assuming a 75 percent arrival / departure profile during the morning and afternoon peak periods respectively, the proposal would result in an additional 116 vehicle trips per peak hour period in one direction.

The traffic report also included a cumulative traffic analysis which took into consideration the additional 45 vehicle trips per peak hour period generated by the new mental health facilities building which is currently under construction at the northern end of the hospital campus (MP08_0227 approved on 13 January 2012). The cumulative traffic analysis identified that the two developments would result in a combined additional 200 vehicle trips per peak hour period compared to the existing operation. Assuming a 75 per cent arrival / departure profile during the morning and afternoon peak periods respectively, the two developments would result in a combined 150 vehicle trips per peak hour period in one direction.

To ascertain the impact of the above trip generation rates on the operation of the surrounding road network, the traffic report included a SIDRA analysis of key approach intersections in proximity to the hospital campus, having regard to the cumulative trip generation rate of 150 vehicle trips per peak hour period in one direction. The analysis included the intersections of Golden Highway / Myall Street and Golden Highway / White Street / Hospital Access, which are identified in **Figure 11**. The results of the SIDRA intersection analysis are provided in **Table 7**.

Figure 11: Intersections included in SIDRA Analysis

Table 7: Analysis of Surrounding Intersections

Intersection	Peak Period	Existing Intersection Delay	Existing + Proposed Intersection Delay	Existing Level of Service	Existing + Proposed Level of Service
Palmerston Rd / Northcote Rd	AM	5.8	5.9	A	A
	PM	5.9	6.0	A	A
Palmerston Rd / Burdett St	AM	8.0	8.9	A	A
	PM	10.1	10.4	A	A
Derby Road / Burdett St	AM	7.9	7.9	A	A
	PM	7.7	7.8	A	A
Edgeworth David Ave / Palmerston Rd	AM	8.9	9.2	A	A
	PM	9.7	9.7	A	A

The analysis identifies that all key approach intersections currently perform at Level of Service “A” (equivalent to a good level of service), and will continue to perform at a Level of Service “A”, with only a minor increase in intersection delays following the additional the traffic generated by the proposal and the approved mental health building.

As identified in Section 3.2 of this report, the RMS requested that additional traffic modelling be undertaken of intersections along Balmoral Street and Sherbrook Road (to the west of the site), and requested remodelling of the Edgeworth David Avenue / Palmerston Road intersection to include movements from Myra Street (which also forms part of the intersection). In addition, the RMS and council requested that further consideration be given to the full redevelopment of the hospital, including the cumulative future traffic generated by the later stages of the hospital's redevelopment (beyond stage 1). Council also identified that the full redevelopment of the hospital would exacerbate the intersection performance of Edgeworth David Avenue / Palmerstone Road / Myra Street and requested that the applicant provide the required intersection improvement works. Council also requested further consideration of the additional traffic along Jubilee Street and measures to mitigate potential accidents along Jubilee Street. Traffic impacts on the surrounding road network were also a key issue raised in public submissions.

The applicant responded to the RMS and council in the RtS by identifying that the redevelopment of the hospital (including the proposal and the approved mental health facilities) would only result in some additional 200 vehicle trips per peak hour period, and the surrounding road network is currently operating at a Level of Service “A” with ample capacity to accommodate the additional traffic generated by the development. The RtS also identified that the traffic report has provided an analysis of relevant intersections close to the hospital campus, but the operation of further intersections (as requested by the RMS) are subject to local and through traffic, which does not form part of the investigation of the impacts of the hospital. Additionally, the RtS identified that the function and operation of surrounding roads / intersections and traffic management are the responsibility of relevant State and local authorities as these roads are mainly used by local residents and through traffic.

The RtS also identified that it is unreasonable and unnecessary at this stage to attempt to gauge the impact of the full redevelopment of the hospital as the timing, funding, delivery and unknown details of future redevelopment of the campus make it difficult to determine the impact of traffic generation. Any attempt to predetermine future traffic control scenarios would be unconstructive. Therefore, should any further stage of redevelopment occur, appropriate and relevant studies will be carried out to represent the actual impact of the development on the surrounding road network.

The RtS also highlighted the principles in the department's Circular D6 - Crown Development Application and Conditions of Consent, which provides exemptions from the upgrading of local roads beyond the site perimeter for health service developments providing an essential community service.

The department has considered the submitted traffic report, comments provided by the RMS and council, public submissions and the applicant's RtS. The existing surrounding road network is currently operating at a good level of service, and the low level of traffic generated by the development can be adequately accommodated on the surrounding road network without resulting in any adverse impact on the surrounding intersection performance. The department therefore does not consider it warranted to undertake further investigations, and there is no direct need (or associated funding) for local road upgrades as a result of the development. Additionally, pursuant to the department's Circular D6, Crown health service developments providing an essential community service, such as the proposed development, are generally exempt from incurring contributions towards the widening of roads or other general traffic management improvements.

Notwithstanding the above, the department notes that the proposal forms Stage 1 of the hospital's redevelopment under the health service Masterplan for the Hornsby Ku-ring-gai Hospital Campus, and there is an intention for the applicant to undertake further on-going redevelopment of the hospital campus, subject to additional funding. Should the applicant wish to pursue additional stages of hospital's redevelopment in the future, it will be required to prepare detailed studies to identify any impacts of development on the surrounding road network and any required road upgrades, and the applicant has indicated their intention to continue to work with council and the RMS as part of this process.

The department also considers that measures to reduce car dependency through public transport initiatives will assist in reducing traffic impacts on the surrounding road network (further discussion of public transport initiatives is provided later in this section of the report).

Car Parking

As identified in Section 3.2 of this report, car parking was a key issue raised by council and in public submissions. Council identified that the current provision of car parking for hospital visitors and staff is inadequate and requested that a multistorey car park be required through the conditions of consent.

There is no applicable car parking assessment criteria for public hospitals within the Roads and Maritime Services Guide to Traffic Generating Development, and the Hornsby Shire Council Car Parking Development Control Plan 1995 (Hornsby DCP) identifies that the provision of car parking in hospitals is to be determined from a parking study.

The traffic report included an analysis of car parking demand at the hospital campus based on survey results for travel modes for staff, outpatients and visitors. The traffic report identified that the proposal would generate an additional car parking demand for 100 spaces, made up of:

- 74 spaces for staff;
- 14 spaces for outpatients; and
- 12 spaces for visitors.

The proposal includes the construction of a new 82 space at-grade car park and removal of 35 existing car parking spaces, thereby resulting in a net gain of 47 car parking spaces across the hospital campus. When considering the proposed development in isolation, with a demand of 100 spaces, the proposal results in a shortfall of 53 car parking spaces.

However, separate to the proposal, the applicant has recently undertaken at-grade car parking improvements on the hospital campus under the exempt development provisions of State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP), including a car park in the centre of the hospital campus which provides an additional 62 spaces (known as the 'bullring').

When taking into consideration the net 47 car parking spaces provided as part of the proposal plus the 62 spaces in the bullring car park, the cumulative total of available car parking is 109 spaces, which can adequately accommodate the additional demand generated by the proposal (100 spaces).

Additionally, the existing hospital campus operates with a car parking short fall of 279 spaces, which is offset by on-street car parking directly surrounding the hospital campus. Following completion of the proposal, the overall cumulative car parking shortfall across the hospital campus would decrease from 279 to 270 spaces (a reduction of nine spaces). Therefore, the proposal will not result in any additional demand for on-street car parking surrounding the campus than currently exists.

As identified earlier, the proposal results in the removal of two existing at-grade car parks (loss of 35 car parking spaces in total), including a 25 space car park which was constructed and allocated to service the additional demand generated by the new mental health facilities, which are currently under construction at the northern end of the hospital campus. The applicant has identified that these spaces will be re-allocated to the bullring car park. The department considers the relocation of these spaces acceptable as they will be closer to the new mental health facilities than the original 25 space car park.

Whilst the additional car parking demand generated by the proposal would be adequately accommodated on site, the department notes that a significant shortfall in car parking currently exists at the hospital campus (and would continue to exist following the Stage 1 redevelopment). The applicant will need to continue to alleviate the existing shortfall through the provision of additional car parking and further effort to promote sustainable transport by encouraging more use of public and active transport to reduce the level of car parking demand. The applicant has committed to the preparation of a parking strategy to address supply of car parking across the hospital campus as part of the on-going redevelopment, including consideration of construction of a multi-storey car park, subject to obtaining additional funding.

Public and Active Transport

The site is well serviced by public transport with the nearest railway stations being Hornsby Station (1.5 km east of the hospital campus), and Waitara Station (1.8 km north east of the hospital campus). Additionally, public bus services travel to the hospital campus from Hornsby Station, with the pick-up and set-down of these services at the front entrance of the Hospital, in Palmerston Road (Shorelink Bus service numbers 574 and 575). The frequency of the public bus services is approximately every 30 minutes during peak hours. The hospital campus is also well serviced by walkway and pedestrian footpaths and facilities along surrounding streets.

The traffic report included surveys of staff, outpatients and visitor travel modes to and from the hospital campus which identified the following:

- Public transport as mode of travel to and from hospital campus
 - o 6 per cent of staff;
 - o 12 per cent of outpatients; and
 - o 4 per cent of visitors.
- Active transport as mode of travel to and from hospital campus (walking and cycling)
 - o 6 per cent of staff;
 - o 10 per cent of outpatients; and
 - o 0 per cent of visitors.

The above survey results identify relatively low usage of public and active transport modes. However, the proposal includes the provision of 40 bicycle parking spaces, and the traffic report recommended a number of initiatives to promote public and active transport usage among staff, outpatients and visitors, including:

- preparation of a work place travel plan and transport access guide;
- public transport incentive scheme for staff (subsidised public transport tickets);
- negotiating additional bus services to the hospital campus;
- introduction of a waiting list for car parking and car parking fees for hospital staff;
- provision of improved bus shelters and waiting areas; and
- promoting the merits of walking and cycling.

The department considers that the above proposed initiatives would contribute significantly towards achieving higher use of public and active transport modes among staff, outpatients and visitors, which would assist in reducing traffic generation and overall car parking demand of the hospital. Accordingly,

the department has recommended a condition that the applicant prepare a green travel plan incorporating the above initiatives.

4.2.5 Developer Contributions

Hornsby Shire Council Section 94 Development Contributions Plan 2007-2011 (S94 Plan) applies to all land within the Hornsby LGA. The S94 Plan facilitates the collection of contributions for the provision of public amenities and public services required as a result of future development. The S94 Plan administers contributions for the following purposes:

- community and cultural facilities;
- open space, recreational facilities and bushland regeneration;
- civic and urban improvements;
- roads and traffic management facilities; and
- cycleways.

The S94 Plan generally applies to residential development, however, it also applies to non-residential development which generates additional employment, such as the proposed development.

The applicant has requested an exemption from payment of contributions under the S94 Plan on the basis that the proposed development is providing a significant public benefit to the community and that any payment of contributions for other local services would consume resources and funding provided specifically for the project and provision of essential health services for the community. Additionally, the applicant identified that proposal satisfies the departments existing Circular D6 - Crown Development Application and Conditions of Consent, which provides exemptions from payment of certain contributions for health service developments providing an essential community service.

Pursuant to Section 94B of the EP&A Act, the Minister for Planning and Infrastructure is able to vary the development contributions required after due consideration of the relevant contributions plans.

Whilst the proposal will generate additional employment, thereby triggering the application of the S94 Plan, the department acknowledges that the proposal will provide a significant public benefit to the community through the provision of improved health services, and that the proposal satisfies the exemption provisions in Circular D6.

The department has therefore recommended that the applicant be exempt from paying contributions under the S94 Plan for the proposed development.

4.2.6 Suitability of the Site

The site is considered suitable for the proposed development as:

- the proposal is within the existing Hornsby Ku-ring-gai Hospital campus, and located in proximity to existing health services;
- the siting of the proposed new building would provide functional adjacency and connectivity with the existing Hornsby Obstetrics, Paediatric and Emergency (HOPE) building;
- the siting would minimise disruption to on-going hospital related activities and enable continuity of health services to the community;
- the siting of the proposed new building will facilitate the future redevelopment and expansion of health facilities on the hospital campus through de-cluttering and removing unused buildings and consolidating and upgrading existing health services;
- the site has previously been disturbed and is relatively level and clear of native vegetation;
- the siting and design of the proposed new building and provision of existing and proposed landscaping and vegetation will minimise visual or amenity impacts to surrounding low density residential development; and
- the site is serviced by infrastructure utilities and public transport services.

Accordingly, the department considers the site suitable for the proposed development.

4.2.7 Public Interest

The subject applications forms part of Stage 1 of the hospital's redevelopment under the health services Masterplan for Hornsby Ku-ring-gai Hospital, and includes demolition of a number of existing buildings and construction of a new hospital building containing peri-operative services (administration and clinical space, theatres and recovery spaces), new patient wards, linen and stores, loading dock and health information services.

The proposed redevelopment works would result in a number of significant social and economic benefits for the region, including:

- improved quality health service facilities available to the public;
- improved healthcare, treatment and quality of life outcomes for patients;
- increased investment and employment opportunities for the region, including \$97 million capital investment value and the creation of 147 construction jobs and 171 operational jobs; and
- enhanced health education and training opportunities at the hospital campus with new and improved technology and services.

Given the residual impacts associated with the development can be mitigated and managed, the department considers the proposal to be in the public interest.

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The proposal seeks approval to demolish existing buildings, construct a new four storey hospital building and construct car parking, known as Hornsby Ku-ring-gai Hospital Redevelopment Stage 1, at Hornsby Ku-ring-gai Hospital, Hornsby.

The department has reviewed the submitted EIS and duly considered advice from public authorities and the general public. Issues raised in submissions have been duly considered and all relevant environmental issues associated with the proposal have been thoroughly assessed. The proposal is consistent with the strategic objectives for the area.

The department is of the view that the recommended conditions and implementation of measures detailed in the applicant's EIS and appendices, and the Response to Submissions report and appendices, will adequately mitigate the environmental impacts of the proposal.

On balance, the department considers the site to be suitable for the proposed development and that the proposal is in the public interest given the significant social and economic benefits associated with the hospital redevelopment works. Accordingly the department recommends that the State significant development be approved, subject to conditions.

5.2 Recommendation

In accordance with section 89E of the Environmental Planning and Assessment Act, 1979, it is recommended that the Executive Director, Development Assessment Systems and Approvals, as delegate of the Minister for Planning and Infrastructure, grant development consent for Hornsby Ku-ring-gai Hospital Redevelopment Stage 1 (SSD 5356).

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