NSW GOVERNMENT | Planning & Environment

STATE SIGNIFICANT DEVELOPMENT ASSESSMENT REPORT: Blacktown Hospital Redevelopment Stage 2 – Main Building Works (SSD 7714)

Environmental Assessment Report
Section 89H of the *Environmental Planning and Assessment Act 1979*

December 2016

ABBREVIATIONS

Applicant	Health Infrastructure, on behalf of Health Administration Corporation
ASB	Acute Services Building
BHC	Blacktown Hospital Campus
BLEP	Blacktown Local Environmental Plan 2015
CIV	Capital Investment Value
Consent	Development Consent
Council	Blacktown City Council
CSB	Clinical Services Building
Department	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
Infrastructure SEPP	State Environmental Planning Policy (Infrastructure) 2007
LoS	Level of Service
Minister	Minister for Planning
OEH	Office of Environment and Heritage
RBL	Rating Background Level
RMS	Roads and Maritime Services
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
WSLHD	Western Sydney Local Health District

Cover Photograph: Perspective of the western elevation (source: EIS)

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EXECUTIVE SUMMARY

This report is an assessment of a State significant development application (SSD 7714) lodged by Health Infrastructure, on behalf of the Health Administration Corporation (the applicant), seeking approval for the construction and operation of a new nine storey Acute Services Building and refurbishment of selected areas of the original Blacktown Hospital building (for which a concept proposal has already been granted under SSD 7058).

The proposal is known as the Blacktown Hospital Redevelopment Stage 2 - Main Building Works and has a capital investment value (CIV) over $30 million (approximately $289 million). As such, the Minister for Planning is the consent authority as the proposal is SSD under clause 14 of Schedule 1 to the State Environmental Planning Policy (State and Regional Development) 2011.

The subject site is zoned SP1 Special Activities - Health Services Facility under Blacktown Local Environmental Plan 2015 and hospitals are permissible in the zone.

The Department of Planning and Environment publicly exhibited the application for 30 days from 28 July 2016 until 26 August 2016, and received submissions from five public authorities, including Blacktown City Council (Council), and one from a member of the public.

Key issues raised in submissions related to: construction and operational traffic impacts, including parking; construction and operational noise impacts; construction waste management, including demolition materials associated with the original hospital building refurbishment; and operational waste and hazard management. The public submission was in relation to the need for increased provision of palliative care beds within the hospital.

The applicant submitted a Response to Submissions (RtS) to address the key issues and other matters raised in submissions. No changes were proposed to the development as a result of the RtS.

The Department has assessed the merits of the proposal and has found the key issues associated with the project include: built form; traffic and parking impacts; and noise and vibration. The Department is satisfied that the impacts of the proposed development have been addressed in the Environmental Impact Statement and RtS, and can be adequately managed through the recommended conditions. This includes the development of a Workplace Travel Plan and the creation of a Travel Plan Group, to promote a shift in travel behaviour and ongoing review and amendments to ensure targeted modal shifts are being actively pursued. A further review of the car parking demand of the hospital facilities when fully operational has also been recommended to re-evaluate the effectiveness of the travel planning initiatives and ensure car parking supply is adequate to meet peak demand when the facilities are fully operational. These measures would ensure growth of the precinct is sustainable and local amenity impacts can be managed.

The Department considers the application is consistent with the objects of the *Environmental Planning and Assessment Act 1979* (including ecologically sustainable development), State priorities, *A Plan for Growing Sydney* and *Draft West Central District Plan*. The Department is satisfied that the subject site is suitable for the proposed hospital development within an existing hospital campus and would provide additional employment opportunities. The proposal would provide significant public benefits through the delivery of additional health facilities to support a growing and ageing population. The Department therefore considers the development would be in the public interest and recommends the SSD application be approved, subject to conditions.

TABLE OF CONTENTS

1 BACKGROUND AND PROPOSED DEVELOPMENT 1
1.1 Background 1
1.2 Site Description 1
1.3 Associated Approvals 3
1.4 Project Description 4
1.5 Consistency with approved Concept Proposal 5
2 STATUTORY AND STRATEGIC CONTEXT 6
2.1 State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) 6
2.2 Delegated Authority 6
2.3 Permissibility and Zoning 6
2.4 Environmental Planning Instruments 6
2.5 Objects of the EP&A Act 6
2.6 Ecologically Sustainable Development 6
2.7 Environmental Planning and Assessment Regulation 2000 7
2.8 Strategic Context 7
2.9 Secretary's Environmental Assessment Requirements 7
3 EXHIBITION CONSULTATION AND SUBMISSIONS 7
3.1 Exhibition 7
3.2 Public Authority Submissions 8
3.3 Applicant's Response to Submissions 9
4 ASSESSMENT 9
4.1 Section 79C Evaluation 9
4.2 Key Issues 10
4.2.1 Built form 10
4.2.2 Traffic and Transport 15
4.2.3 Noise and vibration 20
4.2.4 Other Matters 24
5 CONCLUSION 27
6 RECOMMENDATION 28

APPENDIX A RELEVANT SUPPORTING INFORMATION
APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S) (INCLUDING DRAFT) AND DCP(S)
APPENDIX C GLOSSARY
APPENDIX D RECOMMENDED CONDITIONS OF APPROVAL

1 BACKGROUND AND PROPOSED DEVELOPMENT

1.1 Background

The redevelopment of the Blacktown Hospital campus is comprised of multiple stages, as outlined below and in **Table 1**:

- Stage 1 - a new Clinical Services Building (CSB);
- Stage 2 enabling works;
- Stage 2 - a new Acute Services Building (ASB);
- first stage of the new multi-storey carpark;
- second stage of the multi-storey carpark (expansion);
- refurbishment of the original hospital building; and
- various site works to facilitate redevelopment.

Table 1: Blacktown Hospital Campus Redevelopment Stages

Proposal	Stage	Date Approved	Status
CSB	One	21/12/12	Complete
Enabling Works	Two	05/04/16	Commenced
ASB	Two	N/A	Under assessment
Stage 1 Multi-storey Carpark	One	2012	Complete
Stage 2 Multi-storey Carpark	Future	N/A	Under assessment
Refurbishment Works	Two	05/04/16	Commenced
Ancillary Site Works	Ongoing	Ongoing	Ongoing

The new CSB (State significant development consent), first stage of the multi-storey carpark (Council consent) and various site works (Part 5 REF approvals) have been completed.

The second stage of the multi-storey carpark (expansion) is subject to a separate application currently being assessed by Council. Subject to approval, it is anticipated that these works would be completed in October 2017.

On 5 April 2016, a staged State significant development (SSD) application for a concept proposal for Stage 2 (SSD 7058) was approved. The concept proposal detailed the location and indicative building envelope for the new ASB and included refurbishment of the original hospital building and site enabling works. Health Infrastructure, on behalf of Health Administration Corporation (the applicant) is now seeking approval for the actual construction and operation of the ASB.

1.2 Site Description

The Blacktown Hospital Campus (BHC) is part of the Western Sydney Local Health District (WSLHD). It is located within the suburb of Blacktown and is approximately 1.2 km south-east of Blacktown central business district (CBD) and Blacktown Train Station, and approximately 30 km north-west of the Sydney CBD (refer to **Figure 1**).

The BHC covers an area of 12.42 ha and is bounded by Blacktown Road to the north, residential development to the west and east, and the 'Mullauna' retirement village and Blacktown Uniting Church to the south.

The main hospital entrance is on the western side of the campus via a roundabout at the intersection of Marcel Crescent and Panorama Parade. The ambulance station is located on the northern side of the main entrance, with the University of Western Sydney (UWS) building immediately to the east. An internal loop road runs from the main entrance to the eastern side of the campus with a left-in, left-out access at Blacktown Road. There is a separate service and delivery vehicle access from Blacktown Road to the loading dock, which is part of the original hospital building. Currently there are 1,254 on-site parking spaces, with approximately 622 of these located within the first stage of the multi-storey carpark. **Figure 2** shows the existing hospital campus.

Figure 1: Blacktown hospital campus (yellow with red outline) (Source: Six Viewer)

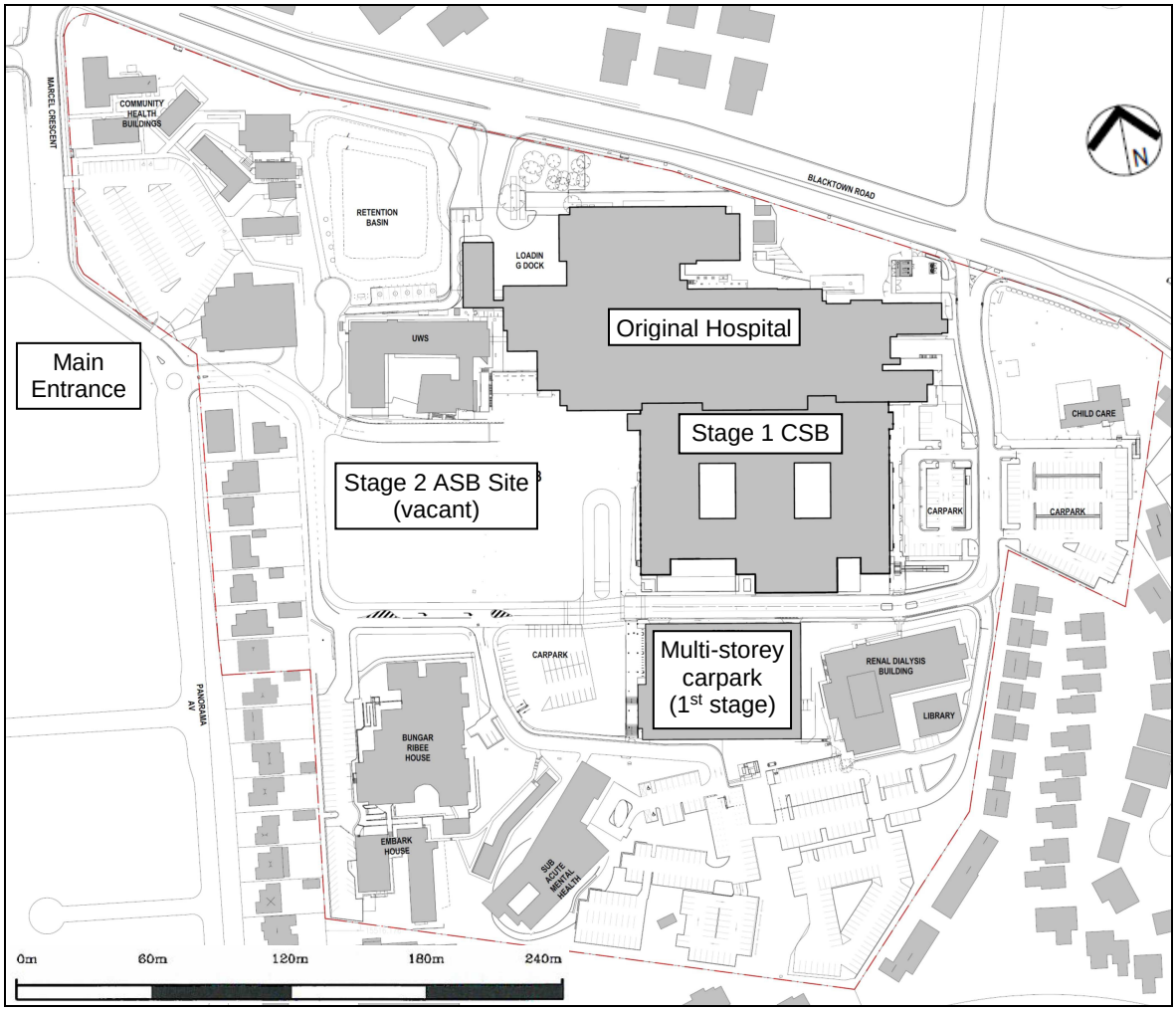

Figure 2: Existing hospital campus site plan (Source: EIS)

1.3 Associated Approvals

A description of prior site works and key campus-wide works is provided in this section. **Figure 3** shows the location of key redevelopment elements, including the Stage 2 development site (ASB site).

Figure 3: Indicative layout of Blacktown Hospital redevelopment areas (Source: EIS)

1.3.1 REF Approvals

Various site works have been completed to facilitate redevelopment of the campus as development approved by Health Infrastructure after a Review of Environmental Factors (REF) under Part 5 of the *Environmental Planning and Assessment Act 1979* and Divisions 10 and 17 of the State Environmental Planning Policy (Infrastructure) 2007 including:

- roadworks and temporary footpaths to maintain pedestrian and vehicle access, parking and circulation during construction works;
- demolition of the Regional Renal Dialysis Centre (RRDC) and Oncology Buildings which were located on the future Stage 2 ASB site, including carparks and access roads;
- diversion and upgrade of existing services including hydraulic, fire, electrical, information communication, security and stormwater services; and
- removal of 48 trees.

1.3.2 Stage 1

Stage 1 of the redevelopment of the hospital (SSD 5263), primarily construction and operation of the CSB, was approved by the then Executive Director, Major Projects Assessment, on 21 December 2012 and was completed in May 2016. The first stage of the multi-storey carpark (622 spaces) was approved by Council, which has also been completed.

1.3.3 Stage 2

Stage 2 site enabling works were approved as part of the concept proposal application (SSD 7058), and are scheduled for completion in February 2017. Works include excavation of approximately 33,800 cubic metres of material and associated shoring (piled walls) in preparation for construction of the two below ground levels of the proposed ASB. The enabling works also include excavation for future tunnel connections from the future ASB to the original hospital building and the new eight level CSB.

1.3.4 Future Works

In addition to the above completed works, the applicant also intends undertaking the following works to complement the Stage 2 works (subject to separate applications):

- new roof plant area on the CSB;
- second stage of the multi-storey carpark adjacent to the existing multi-storey carpark (subject to a development application to Council, now submitted);
- new main entry point from Panorama Parade and at-grade carpark (requiring acquisition of eight properties on Panorama Parade);
- diversion and upgrade of the stormwater network discharging to a combined detention/bio retention basin;
- new transformer substation to the south of the ASB; and
- two new generators in the second stage of the multi-storey carpark to provide uninterrupted power supply to the Stage 2 ASB.

1.4 Project Description

The proposed SSD application (SSD 7714) seeks approval for a new nine level (seven above ground) ASB, connections to adjacent hospital buildings, and refurbishment of selected areas of the original hospital. **Table 2** provides a summary of the development's key components and features.

Table 2: Key development components

Development Summary	• Construction and operation of an ASB comprising:
	  • Emergency Department (ED);
	  • Intensive Care Unit;
	  • Operating Suite;
	  • Sterile Supply;
	  • Birthing Suite;
	  • Newborn Care;
	  • Maternity and Women's Health Inpatient Units; and
	  • Paediatric Inpatient Unit.
	• Entry atrium connecting the ASB and CSB, forming a new main entry with drop-off area and forecourt.
	• Patient drop-off and ambulance bay adjacent to the new ED.
	• Bridge link and tunnel connections to the original hospital building, CSB and future second stage of the multistorey carpark.
	• Refurbishment of approximately 4,700 sqm of the original hospital building including:
	  • conversion of the existing ED to Ambulatory Care;
	  • refurbishment of medical imaging;
	  • refurbishment of inpatient dialysis unit;
	  • conversion of 50% of the operating suite to an endoscopy procedure suite;
	  • conversion of pathology to an administration unit; and

	• refurbishment/expansion of the kitchen.
Gross Floor Area (GFA)	36,500 sqm
Height	37.2 m (nine levels)
CIV	$289,100,000
Jobs	200 construction jobs and 485 operational jobs

Figure 4 shows the BHC and the proposed new ambulance bay in front of the ASB. The following works, subject to separate approvals, are also shown: western entry works comprising a new at-grade carpark and new hospital campus entrance from Panorama Parade; and second stage of the multi-storey carpark to the south of the ASB.

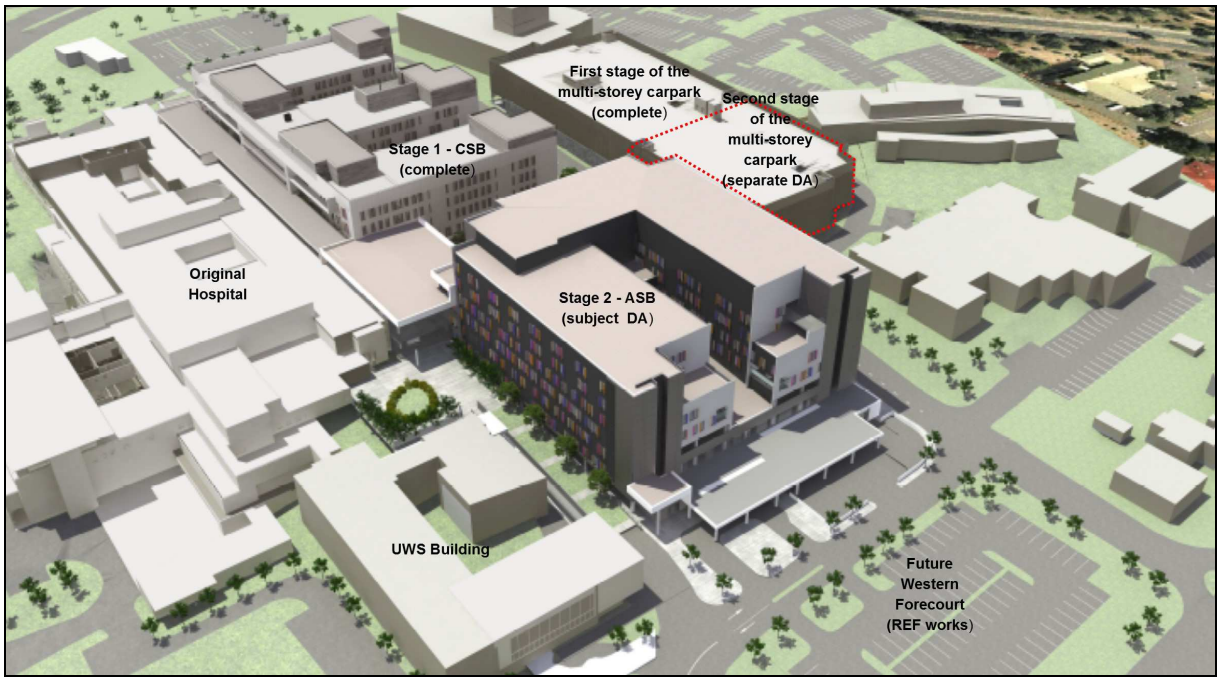

Figure 4: BHC as viewed from north-west (Source: EIS)

Subject to approval, construction of the ASB is proposed to commence in February 2017, with completion in mid-2019 to allow transfer of some operations to the ASB, followed by refurbishment of the original hospital building from mid-2019 to mid-2020.

1.5 Consistency with approved Concept Proposal

The main changes to the proposed ASB to that presented in the approved concept proposal are summarised below:

- introduction of a link bridge at Level 5 to connect to the anticipated second stage of the multi-storey carpark, and the associated walkway cantilevered from the east façade of the ASB;
- removal of the link bridge to the Stage 1 CSB above the proposed Atrium/Hospital Street extension;
- relocation of the Level 9 roof top plantroom to the southern wing (rather than the northern wing) to achieve desired clinical adjacencies in the event of future vertical expansion;
- an increase in the area of the Level 9 roof top plant enclosure to accommodate actual plant requirements and facilitate construction of any future vertical expansion;
- increase in height of 2.7 m to RL 92.0 with a flue projecting above this to RL 95.0; and
- reduction in GFA from the approved 40,000 sqm by 3,500 sqm to 36,500 sqm.

The Department of Planning an Environment (the Department) considers the changes to be consistent with the approved concept proposal.

2 STATUTORY AND STRATEGIC CONTEXT

2.1 State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The proposal is classified as SSD because it is development for the purpose of a hospital with a CIV in excess of $30 million in accordance with SRD SEPP. Therefore, the Minister for Planning is the consent authority.

2.2 Delegated Authority

In accordance with the Minister's delegations dated 16 February 2015, the Executive Director, Priority Projects Assessments, can determine the application as Council has not objected to the proposal, no political disclosure statement has been made and less than 25 public submissions were received objecting to the proposal.

2.3 Permissibility and Zoning

The Blacktown Hospital site is zoned Zone SP1 Special Activities (Health Services Facility) under the Blacktown Local Environmental Plan 2015 (BLEP) and the proposed development is permissible with consent. The proposal is consistent with the following objectives of the zone:

- to provide for special land uses that are not provided for in other zones;
- to provide for sites with special natural characteristics that are not provided for in other zones; and
- to facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.

2.4 Environmental Planning Instruments

The Department's consideration of relevant environmental planning instruments (EPIs) (including SEPPs) is provided in **Appendix B**.

Relevant EPIs include: State Environmental Planning Policy (State and Regional Development) 2011; State Environmental Planning Policy (Infrastructure) 2007; State Environmental Planning Policy No. 55 – Remediation of Land; and Blacktown Local Environmental Plan 2015. The proposal is generally consistent with the relevant requirements of these EPIs.

2.5 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to its objects (refer to glossary at **Appendix C**), as set out in Section 5 of the EP&A Act. The proposal complies with the objects of the Act as it would deliver community services and facilities, promoting the social welfare of the community. The proposal promotes the economic use of land through the redevelopment of a previously disturbed site.

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* (refer to glossary at **Appendix C**). Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

(a) the precautionary principle,
(b) inter-generational equity,
(c) conservation of biological diversity and ecological integrity,
(d) improved valuation, pricing and incentive mechanisms.

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 assessment of the environmental impacts of the project. Further, the proposed design and siting of the new nine storey ASB will ensure integration with the existing Blacktown Hospital facilities to ensure that short and long term economic, environmental and social benefits are realised.

The proposed improvement in health infrastructure would also have significant benefits for current and future generations, while limiting significant environmental impacts. The applicant has also identified a range of ESD principles to be further developed during the detailed design of the ASB.

The Department has considered the development in relation to the ESD principles and is satisfied that the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act and *Environmental Planning and Assessment Regulation 2000* (EP&A 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 Department considers the proposal is appropriate for the site given:

- it is consistent with State priorities to increase investment in health infrastructure and making more hospital beds available, which would provide improved healthcare services and reduce hospital waiting times;
- it is consistent with the priorities of *A Plan for Growing Sydney*, through the provision of new employment opportunities, providing new and improved infrastructure to support a growing population, whilst supporting the growth and development of health-related land uses and infrastructure around Blacktown Hospital;
- it is consistent with the priorities in the Greater Sydney Commission's *Draft West Central District Plan* to formalise, reinforce and capitalise on the health and education activities located within the Blacktown health and education precinct, which is located in the Blacktown Strategic Centre, and to contribute to the delivery of between 3,800 and 6,300 additional jobs targeted for this centre by 2036;
- it would provide essential infrastructure to cater for the increased demand for health services required for the ageing population; and
- it would facilitate direct investment in the region of $289 million, and would support approximately 200 construction jobs and 485 new operational jobs at completion of the ASB.

2.9 Secretary's Environmental Assessment Requirements

The EIS is compliant with the Secretary's Environmental Assessment Requirements (SEARs) 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 application and accompanying information was made publicly available for at least 30 days following the date of first publication, in accordance with the Regulation. The application and EIS were exhibited from 28 July 2016 until 26 August 2016 for 30 days:

- on the Department's website; and

- at the Department's Bridge Street Sydney Information Centre and Blacktown City Council.

The Department advertised the public exhibition in the Sydney Morning Herald, Daily Telegraph and Blacktown Advocate on 27 July 2016. The Department also notified adjoining landholders and relevant State and local government authorities in writing.

The Department received submissions from Council, Environment Protection Authority (EPA), Roads and Maritime Services (RMS), Transport for NSW (TfNSW) and Sydney Water. One submission from the public was received raising the need for provision of additional palliative care beds as an issue.

A summary of the matters raised in the public authority submissions is provided below.

3.2 Public Authority Submissions

Council
Issues raised by Council included:
- maintaining on-site parking provision throughout the ASB construction;
- impacts of construction worker traffic and parking on residential amenity;
- amenity impacts from extended all day Saturday construction hours;
- management of general operational impacts;
- visual impact of dark external finishes used on upper storeys of the building; and
- parking affordability issues leading to on-street parking issues and congestion.

EPA
Issues raised by the EPA related to:
- construction and operational noise;
- asbestos and operational 'waste' management;
- the need to vary the existing radiation control licence;
- dust, erosion and sediment controls;
- design of petroleum storage leak detection system (note that this is not within the ASB site);
- application of water sensitive urban design principles; and
- minimising energy consumption.

In particular, the EPA considered the Construction and Operational Noise and Vibration Impact Assessment did not provide adequate information to address the operational noise impacts of the development.

TfNSW
TfNSW raised issues relating to construction vehicle impacts on traffic, pedestrians, cyclists and bus services in the vicinity of the site. Operational issues included the adequacy of the existing loading dock and partnership with TfNSW and RMS to increase bus patronage to and from the hospital by staff and visitors to assist in implementing a green travel plan.

Sydney Water
Sydney Water provided advice on local water and wastewater systems, and requirements for a compliance certificate under the *Sydney Water Act 1994* and that building plans must be approved before any construction commences.

RMS raised no objections to the proposed development.

3.3 Applicant's Response to Submissions

The applicant provided a Response to Submissions (RtS) to the Department on 6 October 2016, addressing issues and concerns raised by Council, agencies and the public submission. No amendments were proposed and the Department is satisfied that the RtS satisfactorily addresses the issues raised in submissions. Key issues have been further considered in **Section 4** of this report.

In response to the issue raised by the member of the public relating to the need for additional palliative care beds, the applicant advised that a co-ordinated district wide approach is adopted for the delivery of health services, including palliative care services, to ensure the best distribution of services. The applicant advised that, accordingly, Mt Druitt will continue to provide quality palliative care.

The Department is of the opinion that this matter is not a relevant planning matter and a matter for NSW Health to consider in its health services planning to ensure efficient delivery of services.

4 ASSESSMENT

4.1 Section 79C Evaluation

Table 3 identifies the matters for consideration under section 79C of the EP&A Act that apply to SSD. The EIS has been prepared by the applicant to consider these matters and those required to be considered in the SEARs and in accordance with the requirements of section 78(8A) of the EP&A Act and Schedule 2 of the EP&A Regulation. 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.

Table 3: Section 79C(1) Matters for Consideration

s. 79C(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Consideration of relevant EPI's has been undertaken at **Appendix B.**
(a)(ii) any proposed instrument	Not applicable.
(a)(iii) any development control plan	Refer to **Appendix B.** Note that under clause 11 of the SRD SEPP, development control plans do not apply to SSD.
(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 Regulation), public participation procedures for SSD's and schedule 2 of the EP&A Regulation relating to EISs. Refer to **Section 2.7**.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development	The Department's assessment has given consideration to the likely impacts of the proposed development. Refer to **Section 4.2**.
(c) the suitability of the site for the development	The subject site is zoned SP1 Special Activities (Health Services Facility) under BLEP. Hospitals are permissible with consent.
(d) any submissions	Consideration has been given to submissions received during the exhibition of the application. Refer **Sections 3** and **4** of the Department's assessment.
(e) the public interest.	The proposed hospital redevelopment will be in the public interest as it will provide the wider community with improved and more accessible medical and health services.
Biodiversity values exempt if: (a) On biodiversity certified land (b) Biobanking Statement exists	 Not applicable. Not applicable.

4.2 Key Issues

The Department has considered the EIS, the issues raised in submissions and the applicant's response to these issues in its assessment of the development and considers the key issues to be:

- built form;
- traffic and transport impacts; and
- noise and vibration impacts.

4.2.1 Built form

The proposed ASB would be nine storeys high. The maximum proposed building height is approximately 37.2 m (RL 92.0) above the existing ground level. Two roof top enclosures housing exhaust flues would be three metres above the main building height resulting in a maximum height of approximately 40.2 m (RL 95.0). The proposed height of the ASB is comparable with the height of the recently constructed CSB (RL 86) (refer to **Figure 5** cross-section).

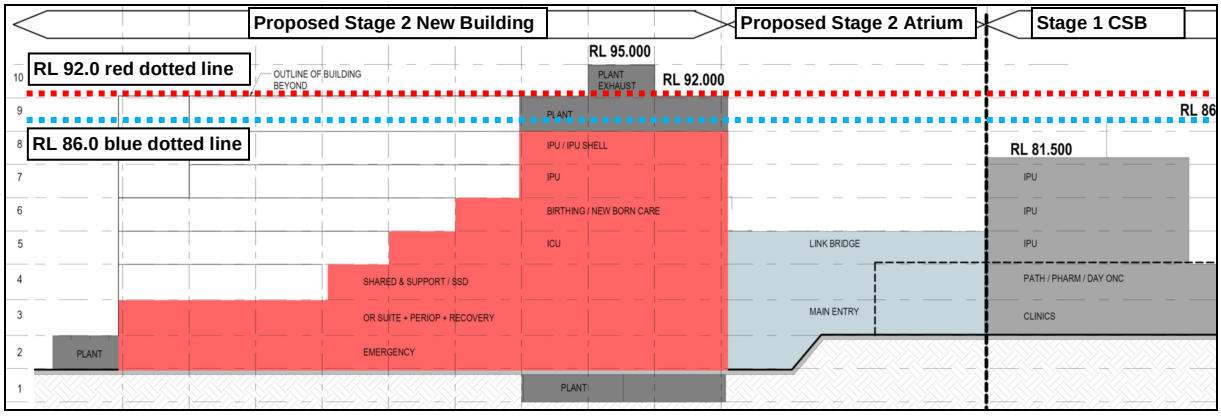

Figure 5: Section showing proposed height with RLs (Stage 2 ASB - red dotted line and Stage 1 CSB - blue dotted line) (Source: EIS)

BLEP does not provide any specific development controls regarding built form for the site. The proposal is generally consistent with the building envelope approved in the concept proposal, which established a nine storey building envelope (maximum height of approximately 34.3 metres - RL 89.3). The floorplate of the ASB is also generally consistent with the building envelope except for the plant level, which has increased in height, been relocated from the northern wing to the southern wing and incorporates an additional enclosure for the flues.

The built form comprises a three storey podium with a 'U' shaped tower above forming a northern and southern wing open to Panorama Parade. The base of the 'U' is progressively enlarged at floors 5, 6 and 7, providing outdoor terraces at these levels. Compared to the indicative built form identified in the concept proposal, this minimises bulk and scale impacts when viewed from Panorama Parade. **Figures 6** provides an indicative representation of the ASB in relation to the CSB, with the UWS building in the foreground. **Figures 7** and **8** show an indicative view from the Panorama Parade residential area. **Figure 7** illustrates the view of the approved building envelope from the Stage 2 Concept Proposal and Early Works EIS and **Figure 8** illustrates the proposed building form from the current EIS.

The ASB is also generally consistent with the scale of other new development across the hospital campus, including the Stage 1 CSB and multi-storey carpark, which are typical of institutional buildings and consistent with current industry standard for hospital buildings. Whilst the building would represent a prominent addition to the existing built form of the campus (towards residents along Panorama Parade), the proposed positioning and scale is considered appropriate for the site and locality. The western façade would be setback

approximately 80 m from residential properties along Panorama Parade which face the ASB (noting that eight properties have been acquired adjacent to the ASB site for a ground level carpark). The southwestern corner of the western façade is setback approximately 25 m from the rear of the closest dwelling in Panorama Parade.

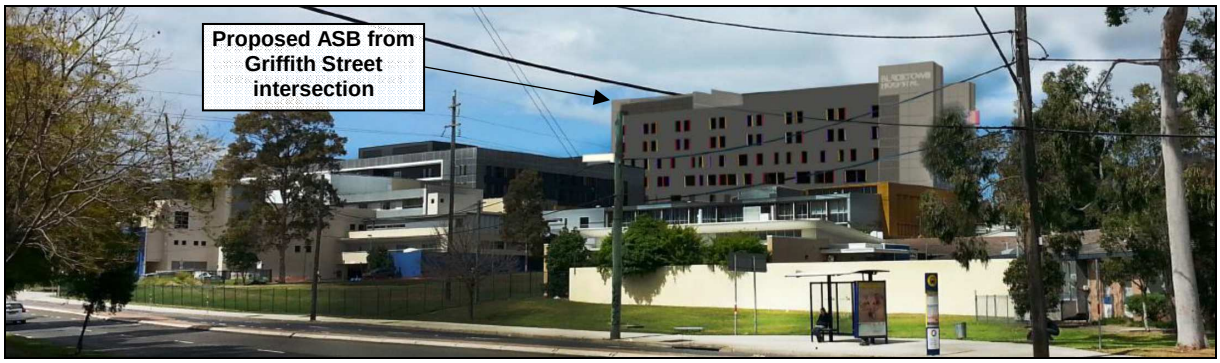

Figure 6: View of ASB from the northern side of Blacktown Road (community health facilities and UWS building in foreground) (Source: EIS)

Figure 7: Stage 2 building envelope as viewed from the intersection of Lismore St and Panorama Pde (Source: Stage 2 Concept and Early Works EIS)

Figure 8: ASB as viewed from the intersection of Lismore St and Panorama Pde (Source: EIS)

Council noted the proposal incorporates an increase in height from the approved building envelope by a total of 5.7 m, which includes the housing for exhaust flues. Council considered the dark colour of the top level of the hospital and exhaust flue housings visually intrusive and suggested this could be alleviated by the uppermost portions of the building being composed of a lighter colour material finish to blend with the skyline.

The housings for exhaust flues are well set back from the edges of the building, meaning these enclosures would be less visible from surrounding public domain. The building elevations indicate dark horizontal and vertical bands (the same colour as the enclosures) on all elevations which break up the façades (refer to **Figures 9** and **10**). The applicant noted that that colour palette of the proposed ASB aligns with the CSB thereby integrating the two buildings.

The Department concludes that the design of the proposed development exhibits design excellence in accordance with the BLEP. The Department considers that the scale of the ASB and proposed colour palette is appropriate as the:

- ASB is generally consistent with the approved building envelope;
- ASB is of a similar height to other new development within the hospital campus;
- exhaust flue enclosures would not be visible from street level;
- colour palette is a continuation of that used for the adjacent CSB;
- façade of the ASB facing the closest residential development appears much 'lighter' than the other façades due to the large banks of windows as shown in **Figure 9**;
- western elevation includes a high level of articulation and modulation to provide visual interest and minimise the visual massing from the low scale residential development to the west; and
- the proposed building has been sited and designed to mitigate any potential adverse impact on surrounding uses, including residential uses to the west and north of the site.

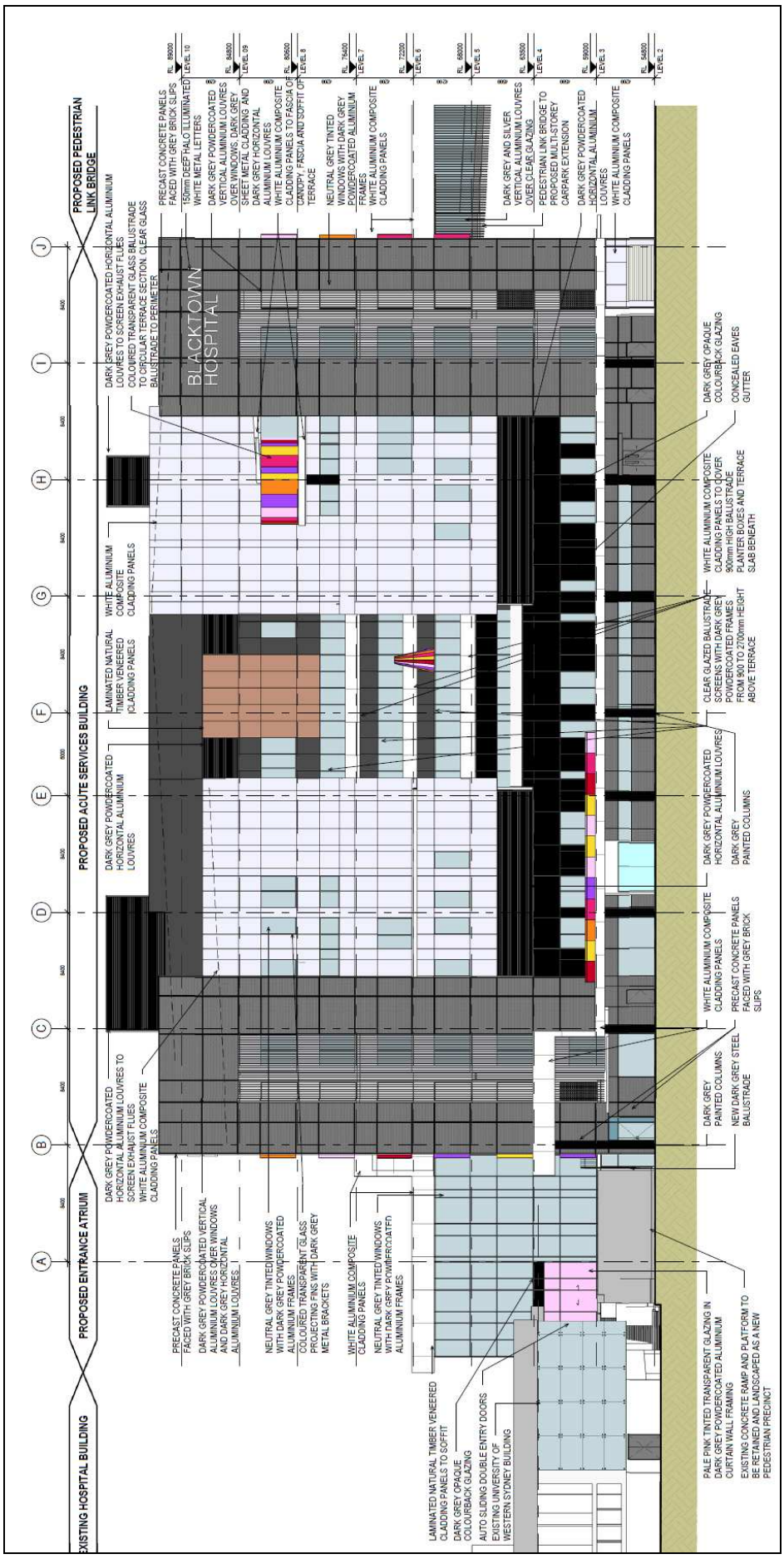

Figure 9: Western Elevation showing façade detail and the two enclosures for exhaust flues (Source: EIS)

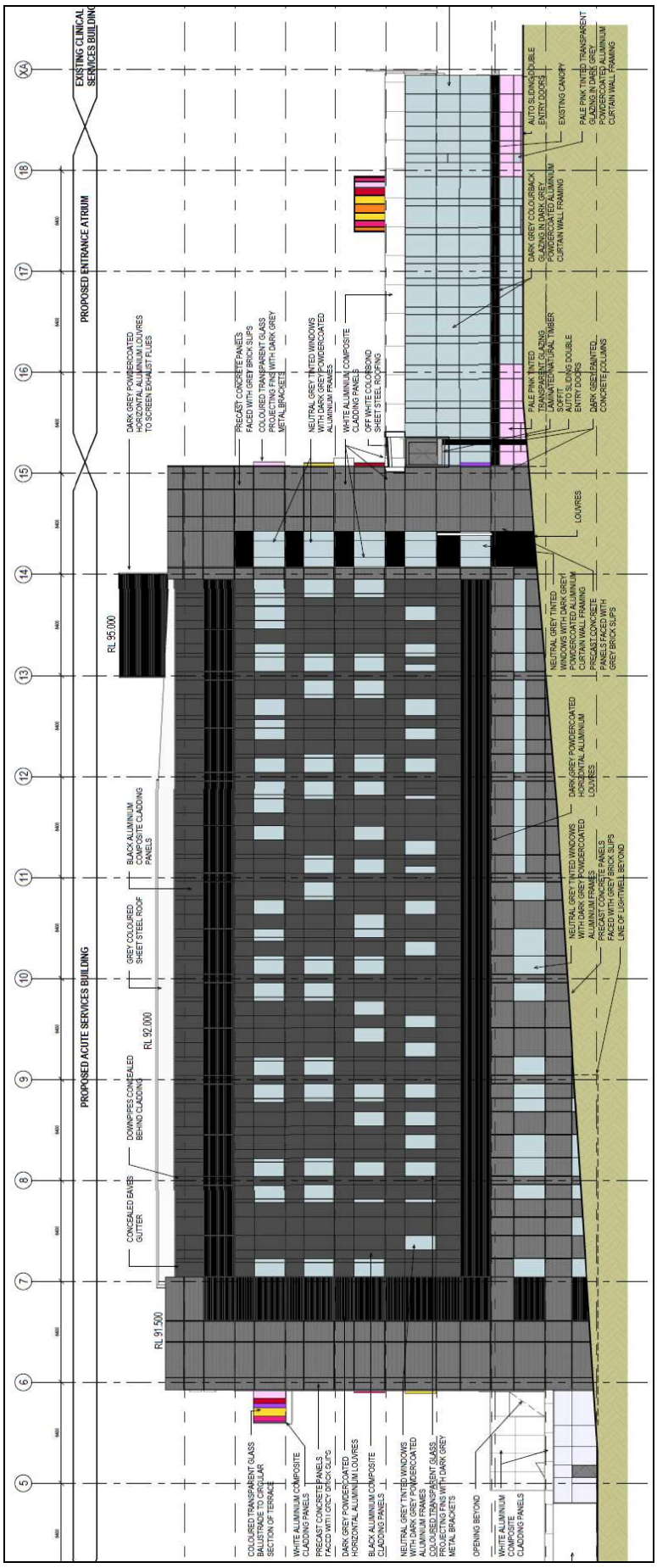

Figure 10: Southern Elevation showing the façade detail and the enclosures for exhaust flues set to the eastern end of the building (Source: EIS)

4.2.2 Traffic and Transport

Traffic impacts and site circulation

Existing transport network and site access

Blacktown Hospital is serviced by two key arterial and two local roads, being:

- Panorama Parade and Marcel Crescent to the west;
- Blacktown Road to the north; and
- Bungarribee Road to the south.

The main campus access, including emergency access to the hospital, is via a roundabout at the intersection of Panorama Parade and Marcel Crescent, with a secondary left-in, left-out access to/from Blacktown Road located along the eastern side of the campus. In addition, a designated service and delivery vehicle access exists directly from Blacktown Road to the loading dock in the original hospital.

Operational traffic

Estimated daily staff, patient and visitor activity were used by the applicant to calculate trip generation rates for the future ASB. The traffic impacts were assessed as acceptable in the Department's assessment of the concept proposal for the ASB. The modelling of traffic impacts has since been refined to include an assessment of the Griffiths Street/Blacktown Road intersection, revised peak period and assessment of the ASB when fully operational.

Modelling of the combined peak traffic generation for the two hospital entrances reveals a net increase of 219 vehicles in the AM peak and 226 vehicles in the PM peak from completion of the CSB to when the ASB is fully operational. The increase in traffic activity from completion of the ASB to Stage 2 being fully operational is approximately 16 per cent in the AM peak and 12 per cent in the PM peak. That is, a further increase of approximately 16 per cent and 12 per cent of vehicles in the respective peak periods above what was considered in the concept proposal.

RMS and Council raised no concerns with the revised model or assessment of the ASB when fully operational.

A review of the refined traffic modelling indicates that the Level of Service (LoS) for each intersection has not changed from the prior model and would generally remain at the level prior to completion of the ASB (i.e. the same as at completion of the Stage 1 CSB, at either LoS B or C). The exceptions being the Bungarribee Road/Panorama Parade intersection, which falls from a LoS B to C in the PM peak period, and the Blacktown Road/Bungaribee Road/Leabons Lane intersection, which falls from a LoS D to LoS E in the AM Peak period.

The Department notes that even though the LoS falls, the additional traffic results in only a minor increase in average delay. The modelling of the Griffiths Street/Blacktown Road intersection demonstrated that it would operate at LoS C in the AM peak, although the PM peak is expected to continue to operate at over capacity (LoS F). The traffic assessment recommended that RMS monitor the operation of the intersections in the coming years to determine if local upgrades or improvements to the wider network are required.

The Department is satisfied that the increase in traffic flows can be accommodated by the surrounding road network and intersections would continue to operate at an acceptable level of service, or would not significantly deteriorate where intersections are already near capacity or over capacity.

Construction traffic

Construction traffic is expected to travel to and from the hospital campus via the Marcel Crescent traffic lights to access Blacktown Road for travel in both directions (refer to **Figure**

11). Construction vehicles would generally enter the hospital campus via the existing main entrance on Panorama Parade.

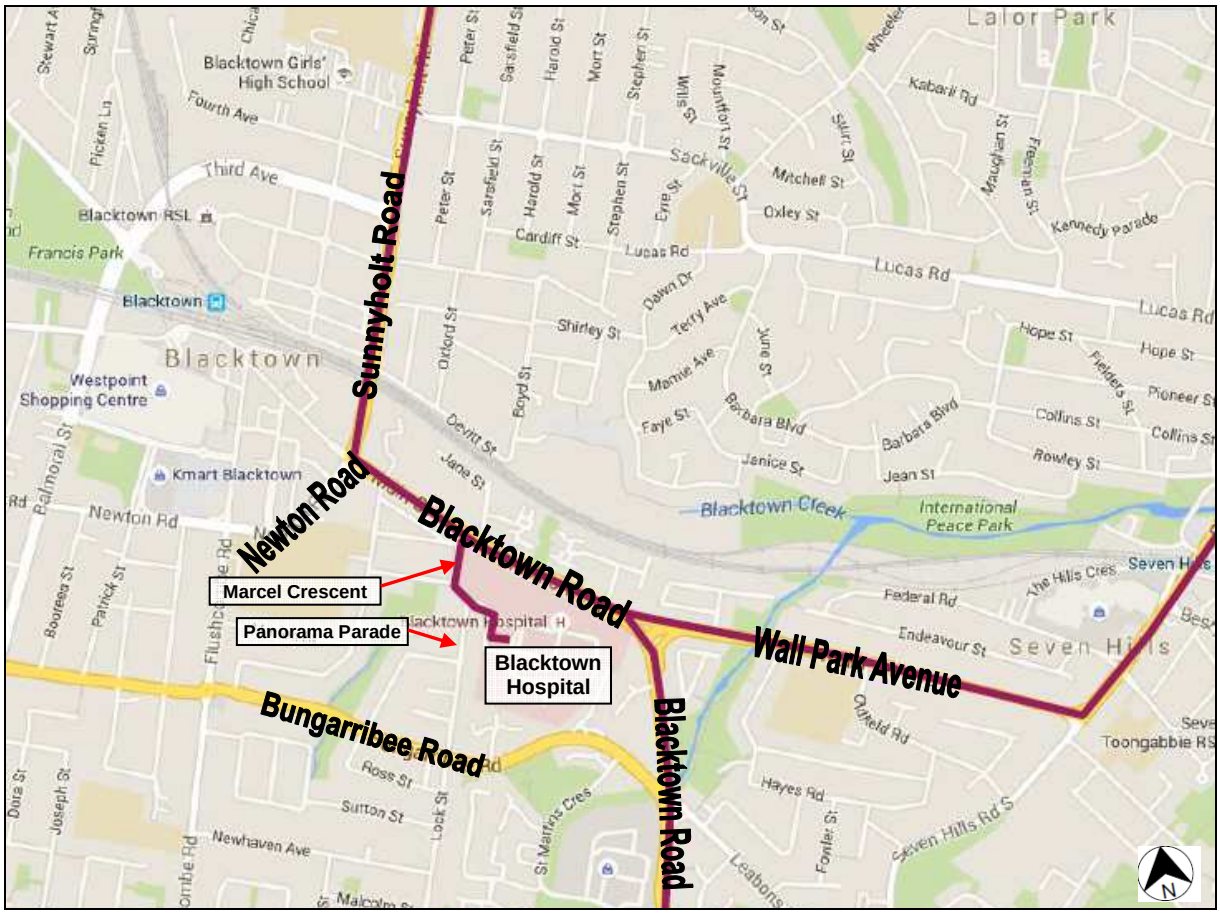

Figure 11: Construction vehicle routes in red (Source: Google)

TfNSW raised the issue of potential impacts on the operation of bus services on the road network adjacent the hospital, and the safety of pedestrians and cyclists within and adjacent to the hospital precinct particularly during commuter peak periods. To address this, TfNSW, recommended preparation of a Construction Traffic Management Plan (CTMP) in consultation with Council, RMS and the bus operator (Busways), addressing:

- any potential impacts to traffic, pedestrian, cyclists and bus services;
- any potential impacts to pedestrian access or public transport infrastructure including bus stops; and
- cumulative impacts of all projects adjacent to the ASB.

The applicant has advised that a CTMP will be prepared by the contractor.

It is expected that the ASB main building works would generate approximately 15 construction heavy vehicle traffic movements (incoming and outgoing) to the hospital during the AM, and also in the PM peak periods. The increase is considered negligible in comparison to the existing hospital traffic generation where the morning peak currently generates 313 vehicle movements and the evening peak generates 377 vehicle movements.

To ensure appropriate management of construction traffic during construction, the Department has recommended a condition requiring the preparation of a CTMP prior to commencement of works.

Functionality of loading dock

The proposal seeks to use the existing hospital loading dock accessed from Blacktown Road. TfNSW and EPA raised the adequacy of the loading dock to accommodate increased activity generated by the additional health facilities and the operations of the loading dock as a concern. In the absence of an analysis of the adequacy of the existing loading dock, TfNSW recommended development of a loading dock management plan.

The applicant has stated that as part of the project planning for the proposal an assessment of the loading dock had been undertaken, which found that it was adequate to cater for the demands of the new ASB, and would be managed under existing procedures. The applicant indicated that a post occupancy evaluation could be completed to ensure the demand associated with the ASB was appropriately managed.

The Department has recommended a condition requiring the preparation of a loading dock management plan prior to occupation of the ASB and that monitoring be undertaken once the ASB is operational to confirm that the loading dock facilities are able to accommodate the additional activities, without adversely impacting the surrounding road network.

Car parking

The RMS Guide to Traffic Generating Development does not provide a rate for car parking for public hospitals. To assess parking demand, staff attendance and trip characteristics and patient/visitor attendance (including assumed bed occupancy rates and visitor vehicle trips) were estimated in the Transport Accessibility Study. Parking demand following completion of Stage 2 is estimated to be 1,780 spaces, with future parking provision being 1,754 spaces. This provision is dependent on completion of the second stage of the multi-storey carpark and a new at-grade carpark adjacent to Panorama Parade, which would be used as a construction compound during construction of the ASB.

Once fully operational and after eight years of increased activity, peak parking demand is anticipated to increase to an estimated 2,020 spaces. It is noted that the multi-storey car parking is designed to accommodate an additional two levels, capable of providing a total of about 2,200 parking spaces, but this would not be delivered until after completion of the ASB and subject to separate approval. Should the additional multi-storey carpark levels not proceed, possibly up to 270 vehicles would need to find on-street parking during peak times.

Table 4 details expected car parking supply and demand for the operations of the hospital post-construction of the ASB and forecast demand eight years after completion of the ASB and hospital refurbishment works. The Department notes that the construction program indicates completion of the second stage of the multi-storey carpark in October 2017, with the ASB completed in mid-2019.

Table 4: Car parking supply and demand for Blacktown Hospital

		During construction of ASB	**ASB Opening**	**Stage 2 fully Operational (after 8 years)**
Supply	At-grade	632	718	718
	Multi-storey	622	1,036	1,036 (1,492)*
	Total	**1,254**	**1,754**	**1,754** (2,210)*
Demand		1,036	1,780	2,020
Shortfall		-	26	266

* The numbers in brackets is the total that could be provided by adding an additional two storeys to the existing and proposed multi-storey carparks. It is noted that the additional to the multi-storey carparks would be subject to a separate, future application.

Paid parking system

Council raised concerns in its submission regarding current ongoing problems of traffic congestion around the BHC and demand on on-street parking. Council considered this could

be exacerbated by the paid parking system for the multi-storey carpark which may be unaffordable, forcing staff, regular patients and visitors to seek on-street parking. Council disagreed with the concept of staff being required to pay for parking. The ramification of increased congestion on access for emergency vehicles was also raised.

On-site parking fees for Blacktown Hospital are charged in accordance with NSW Health's *Hospital Carparking Fees Policy: Campuses which are subject to carparking development* (Carpark Fee Policy). The policy includes concession parking rates for concession card holders, cancer patients, patients and carers that visit more than twice weekly, daily dressing outpatients and other regular cardiac or health promotion class attendees (if these services are offered at the hospital). Hospital campus volunteers and registered volunteers are entitled to free parking, subject to availability. The policy also requires a review of staff parking allocation practices so that the number of staff issued with parking permits aligns with the number of parking spaces allocated for staff parking. This arrangement has been applied to most new multi-storey carparks at public hospitals across the State.

The applicant has advised that all staff pay fees in accordance with the Carpark Fee Policy via a permit system, which provides a highly discounted rate for staff (the weekly staff rate is a few dollars more than the general public daily rate and is similar to the seven day concession parking rate). Further, the applicant has carried out a review of other comparable parking stations in the Blacktown LGA that indicates the long-stay parking costs at Blacktown Hospital are comparable with, or less than, other parking facilities in the area, including Westpoint shopping centre in Blacktown.

The Department is satisfied the fee for staff in the Carpark Policy would not deter use of on-site parking and is comparable to weekly public transport fees.

Hospital parking during construction of ASB

Council raised concerns regarding the availability of on-site car parking during construction of the ASB and various site works due to the staged nature of the hospital expansion, which will result in the loss of on-site car parking before new car parking is provided. Council noted that adequate parking provision is dependent on separate approvals, including the second stage of the multi-storey carpark (currently under assessment by Council). Council requested a suitable condition of consent to ensure the on-site parking provision would be maintained throughout project stages.

Prior to construction of the multi-storey car park, it was acknowledged that potentially 100 cars associated with the hospital were parked on-street and 900 accommodated on-site. Post completion of the Stage 1 CSB there would be 1,254 on-site parking spaces. Modelling for Stage 1 indicated a peak demand of 1,360 spaces at 2.30 pm (associated with staff shift change), leaving a shortfall of 106 vehicles to be accommodated on-street at this time, which is equivalent to the historic shortfall. The Department notes that time restrictions apply in local streets preventing all day parking by staff. Hence, parking demand in adjoining streets would not be expected to increase during the ASB construction works. Demand management strategies proposed during construction include rationalising fleet vehicle parking on site and promotion of public transport for staff access.

It is anticipated that up to 200 construction workers would be employed for the ASB construction works and the applicant has detailed that a total of 220 parking spaces would be made available for workers to park off-site at the Blacktown Bowling Club. This arrangement is considered satisfactory by the Department.

Travel Mode

Blacktown Train Station, on the Western, Cumberland and Blue Mountains Line, is located 1.2 km from the site (approximately 15 minutes by foot) and operates with frequent peak hour services. Blacktown bus routes also run between the hospital and train station. The hospital

site is also connected to the Blacktown city centre through an off-road shared pedestrian/cycle path along Blacktown Road and footpaths along residential street.

The Department notes that a 2011 review of journey to work data for the travel zone precinct, including Blacktown Hospital, revealed that 91 per cent of commuters travel to work by private vehicles, four per cent by public transport and two per cent by walking. Only five per cent of trips in private vehicles were as a passenger.

A 2011 survey of the home location of staff at the hospital also indicates that 52 per cent reside in close proximity to the hospital and within the travel zone of the Blacktown/Mount Druitt Local Government Area (refer to **Table 5**).

Table 5: Proportion of Local Staff Trips

Location (LGA)	Total Trips	Proportion of Total Trips
Blacktown	542	29%
Mount Druitt	244	13%
Blacktown North	179	10%
Other	884	48%
Total	1,849	100%

Whilst the mode share for private vehicle travel is high, the majority of staff work and live close to the hospital.

A draft Workplace Travel Plan (WTP) was included as an attachment in the Transport Accessibility Study in the EIS, and listed the following objectives:

- to ensure adequate facilities are provided at the site to enable staff and visitors to commute by sustainable transport modes;
- to reduce the number of car journeys associated with business travel by staff and visitors;
- to facilitate the sustainable and safe travel of new employees;
- to reduce the need to travel for work-related activities, particularly air travel; and
- to raise awareness of sustainable transport amongst staff and visitors.

The draft WTP included the following measures to achieve the above objectives:

- providing information to staff during their induction;
- encouraging car pooling as a means of transport;
- promoting cycling as a mode of transport; and
- marketing and promotion of WTP measures.

The applicant advised that the draft WTP was intended to be further developed in collaboration with the WSLHD, with initial steps including an updated assessment of travel mode split and the establishment of a Travel Plan Group (i.e. a hospital stakeholder group which oversees the promotional activities, guides the continued development of the Workplace Travel Plan and monitors travel behaviour). It was further noted that data could be collected periodically to assess the success (or otherwise) of the WTP. The applicant also advised that facilities for cyclists would be provided as part of a separate development (i.e. through the application for the second stage of the multi-storey carpark).

TfNSW requested that the applicant consult with TfNSW on the feasibility of re-routing bus Route 721 through the hospital. The applicant indicated they had now completed consultation with the bus operator, Busways, which consulted with TfNSW and an update of the adjusted Route 721 was provided in the RtS. TfNSW recommends that the applicant consult hospital staff and visitors on views regarding existing bus services and bus facilities and that a partnership arrangement between Health Infrastructure, RMS and TfNSW was needed to increase bus patronage.

TfNSW also requested that the adequacy of amenities at transport nodes and the need for any upgrades be addressed in line with the 'Healthy Urban Development Checklist'. It is noted that reference is made to these matters in Section 2.7 of the Transport Accessibility Study in the EIS, but no detail was provided presumably because any upgrade of Blacktown Station would not be the responsibility of NSW Health.

Conclusion

The Department is satisfied that the proposed ASB and parking generation associated with commencement of operations would be satisfactorily met by the existing and proposed future expansion of on-site car parking. However, the car parking demand is forecast to exceed supply once the ASB has been operational for eight years and there is no certainty regarding the delivery of the additional levels of car parking required to meet this demand.

The applicant has, however, initiated steps to deliver a WTP which has the potential to modify travel behaviour and reduce demand. Therefore, the successful implementation of the WTP could effectively reduce the forecast increased demand and is preferable to delivering additional car parking.

In view of the above, the Department has recommended a condition that the parking demand assessment is reviewed five years after occupation of the ASB and submitted to the Secretary to demonstrate that parking provision out to the fully operational ASB (eight years after occupation) is predicted to meet assessed demand, taking into account increased operations and the effectiveness of the Work Place Travel Plan.

4.2.3 Noise and vibration

Operational noise

The Construction & Operational Noise & Vibration Impact Assessment report (NVIA) in the EIS discusses the EPA's *Industrial Noise Policy* (INP) criteria, indicative primary plant items, typical sound power levels for this plant and general acoustic treatments. The NVIA report recommends a cumulative assessment of both plant and other noise sources as part of the acoustic design of plant items, once plant is selected, to ensure impacts to noise sensitive receivers (refer to **Figure 12**) are mitigated.

Council noted that the EIS mitigation measures did not specifically address operational impacts, such as noise associated with mechanical plant. The EPA noted that the NVI assessment did not appear to include an assessment of the potential for sleep disturbance from events such as loading dock activities and ambulance operation within the site, or internal traffic generated by the proposal and associated parking areas.

It is noted that the loading dock would remain in its current location within the original hospital building with access to and from Blacktown Road. The loading dock would be shielded from residential areas by the existing hospital buildings or separated by Blacktown Road. The ambulance station stays in its current location on Marcel Crescent, close to the intersection with the existing main hospital access (refer to **Figure 13**).

The existing ambulance access/Emergency Department entry is located at the western end of the original hospital building, adjacent to the UWS building and near the western side of the Stage 1 CSB, approximately 90 m from the rear of the closest dwelling in Panorama Parade. Staff parking is currently located behind Nos. 13 to 25 Panorama Parade.

Figure 12: Nearest sensitive receivers and noise measurement location (Source: EIS)

The new ambulance access would be located at the western end of the proposed ASB, approximately 40 m from the closest dwelling (number 13) in Panorama Parade (approximately 30 m from the rear fence of this property). The front of dwellings on the western side of Panorama Parade would be located approximately 80 m away from the proposed ambulance bay. Unlike the existing ambulance bay, which is shielded by the UWS building, the proposed ambulance bay is essentially open to the adjacent ground level carpark and Panorama Parade. In addition, it is noted that a new main hospital entrance would be located approximately 16 m to the north of number 13 Panorama Parade.

The applicant advised that separate noise assessments were carried out for the second stage of the multi-storey carpark (separate DA) and proposed at-grade carpark (REF for western forecourt).

For the operational phase, the EPA considers that the EIS does not provide adequate information to address the operational noise impacts of the development and recommends the applicant be required to either:

a) undertake quantitative assessment of predicted noise impacts of the operational phase of the proposed development on surrounding residences and other noise sensitive land uses, including impacts from activation of ambulance and other emergency service vehicle reversing alarms, especially during the evening and night; or
b) ensure that noise impacts of mechanical plant and equipment and the activation of ambulance and other emergency service vehicle reversing alarms do not exceed the noise limits set out in **Table 6**, measured at the most affected noise sensitive receiver in Panorama Parade.

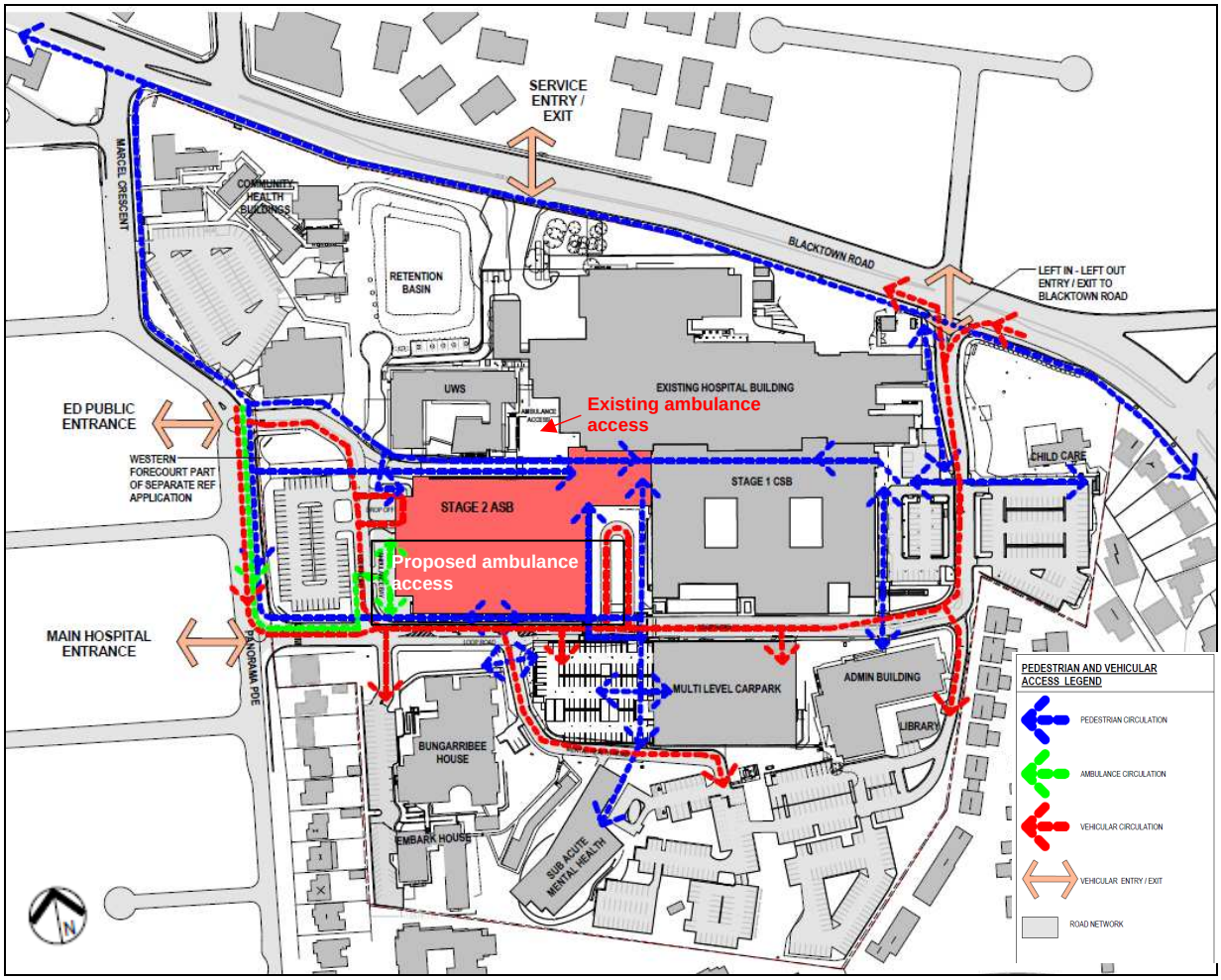

Figure 13: Pedestrian and Vehicular Circulation (Source: EIS)

Table 6: Proposed Noise Limits

Noise descriptor	$LA_{eq(15\ minute)}$	$LA_{eq(period)}$	$LA_{eq(1\ minute)}$
Evening	47 dB(A)	45 dB(A)	-
Night	46 dB(A)	40 dB(A)	56 dB(A)

The EPA also recommended that:

- service vehicle activities and back-up generator testing be restricted to 'day' time;
- ambulance and service vehicle parking be designed to avoid the need to activate reversing beepers;
- noise mounds or other passive noise mitigation measures be installed to minimise the impact of emergency and internal traffic movements on adjoining residences;
- mechanical services are not to exhibit tonal, intermittent or impulsive noise characteristics and are to be maintained and housed in adequately designed enclosures; and
- noise compliance monitoring of mechanical plant and equipment is to be undertaken during commissioning to ensure avoidance of unintended and unacceptable noise impacts.

The applicant indicated that all mechanical plant (including the diesel generator), loading dock operations, ambulance operations within the hospital, apart from emergency sirens, would comply with the INP.

The Department considers that potential operational impacts can be adequately mitigated and has recommended conditions to ensure that operational noise impacts are identified, monitored and any additional measures are implemented to ensure compliance with the noise limits set out in **Table 6**.

Construction noise and vibration

The NVI assessment identifies potentially sensitive receivers as being the residences along Panorama Parade, as shown in **Figure 12**. Construction of the ASB is expected to commence in February 2017 and be completed by mid-2019. Refurbishment works are anticipated to commence after the ASB works and be completed by mid-2020.

The EPA considered that the proposal was likely to generate significant demolition, construction and construction-related noise and vibration impacts on surrounding residents. It is noted that the structural elements of the building include a footing system consisting of oversized bored piles, socketed into rock.

The NVI assessment states that a detailed construction noise assessment cannot be undertaken until a contractor is engaged and prepares a construction program. Indicative construction noise levels were identified as 55 to 65 dB(A), and that these noise levels would potentially be experienced at the boundaries of the nearest residential receivers.

Proposed construction hours are:

- Monday to Friday 7am to 6pm;
- Saturdays 7am to 5pm; with
- no work on Sundays or public holidays.

Based on the *Interim Construction Noise Guidelines* (ICNG), the acceptable management levels for noise emissions from construction activities are based on the existing background noise level in the area and type of receiver. The proposed day time noise management levels (NMLs) for residential receivers and the hospital are outlined in **Table 7**, including out of hours work on Saturdays (the ICNG specifies standard construction hours on Saturday of 8 am to 1 pm). Typically the noise levels would be lower than the "highly noise affected" noise level of 75 dB(A) for residential receivers (as established by the ICNG). The NVI assessment states that construction outside of standard hours on Saturdays is proposed to reduce the overall construction timetable and that noise restrictions would apply as shown in **Table 7**.

Table 7: Noise management levels

Location	Time of Day	Noise Management Level
Panorama Parade	Saturday 7 am – 8 am	47 RBL + 5 dB(A)$L_{eq,(15min)}$
	Weekdays 7 am – 6 pm Saturday 8 am – 5 pm	52 RBL + 10 dB(A)$L_{eq,(15min)}$
Hospital wards and operating theatres	When in use	45 (assumes external noise level 65-70 dB(A) attenuated by facade)
Hospital Offices	When in use	70 (external most affected point of the premises)

The indicative construction noise levels are higher than the NMLs in **Table 6**. In view of this, the EPA recommended a number of construction noise mitigation measures to be included in a Construction Environmental Management Plan (CEMP).

Amenity impacts on surrounding residential properties from proposed construction on Saturdays before 8 am and after 1 pm, which are outside of standard recommended construction hours, was also raised by the EPA and Council. The approved construction hours for the CSB development also included work from 7 am and 5 pm on Saturdays and the applicant advised that no complaints were received and that similar management measures would be implemented for construction of the ASB. Potential mitigation measures identified in the NVI assessment included:

- positioning major mobile plant such as far as possible from sensitive receptors;

- starting morning site works furthest from the residential receivers;
- acoustic review of proposed construction activities and plant/methods to identify work items likely to exceed EPA guidelines; and
- acoustic controls or management techniques such as use of screens, scheduling of noisy works, and respite periods.

Construction workers (estimated at 200) arriving in local streets early in the morning to park at the Blacktown Bowling Club was raised by Council as a potential cause for concern for local residents with regard to noise and general amenity. The applicant advised that the CEMP would incorporate measures to ensure the amenity of nearby residents was maintained, to be communicated to users of this car parking area at the relevant site induction.

A detailed Construction Noise and Vibration Management Plan (CNVMP) is necessary to establish appropriate noise control measures. A condition of consent is recommended accordingly. In addition to the noise attenuation methods identified by the applicant, the Department also recommends a condition requiring noise and vibration monitoring to be undertaken throughout construction works to ensure that levels remain below the established criteria.

The NVI assessment stated that the proposed works would be unlikely to cause significant vibration impacts on residences to the west. To ensure that any impacts on the adjacent hospital were properly managed, the following measures were identified by the applicant:

- use of alternative equipment or techniques to minimise vibration; and
- vibration monitoring during the initial stages of piling.

Subject to recommended conditions and the preparation of a CNVMP, the Department is satisfied that construction noise and vibration impacts can be satisfactorily managed and mitigated.

4.2.4 Other Matters

Solar Access and Overshadowing

An assessment of the mid-winter shadow diagrams reveals that ASB would primarily result in additional overshadowing within the hospital campus itself. Residential properties on the western boundary (Panorama Parade) would experience a short period of overshadowing in the early morning during the mid-winter, primarily on private open space areas (refer to **Figures 14** to **16**).

The Department considers that adequate solar access would be maintained at the impacted residences and that a minimum two hours of solar access to living areas and three hours of solar access to private open space areas can be maintained. This standard is consistent with the complying development standard for similar social infrastructure. Therefore, the Department considers the overshadowing impacts to be acceptable.

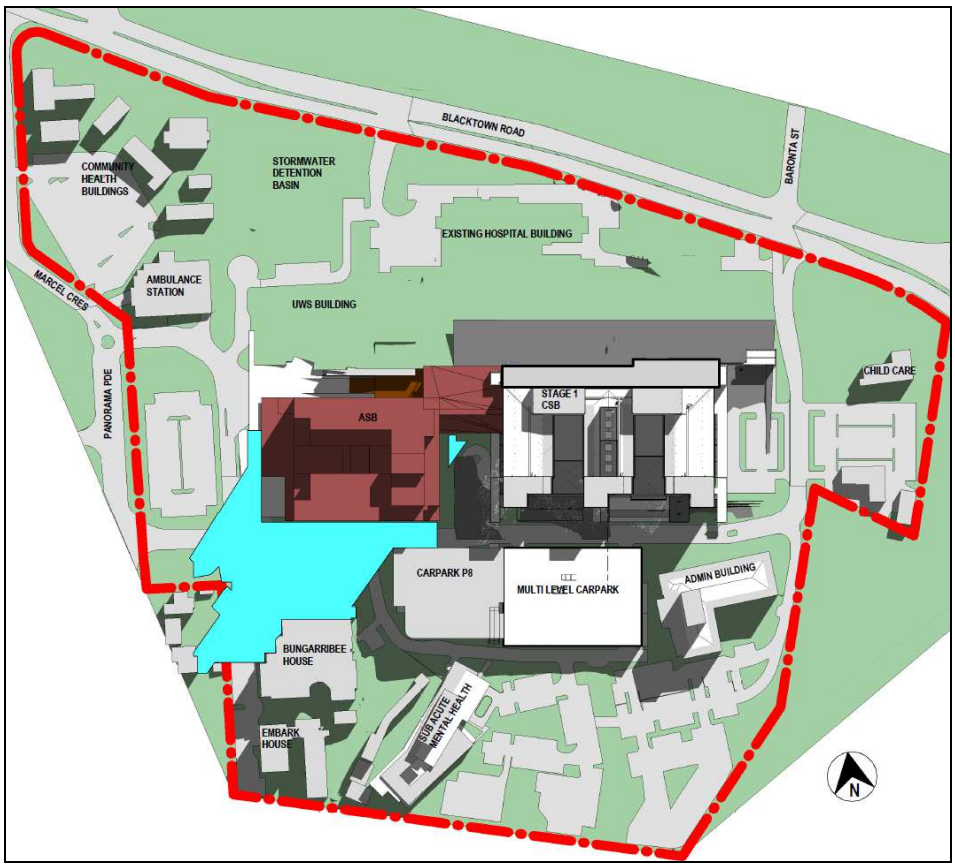

Figure 14: Mid-winter 9 am Shadow Diagram (Source: EIS)

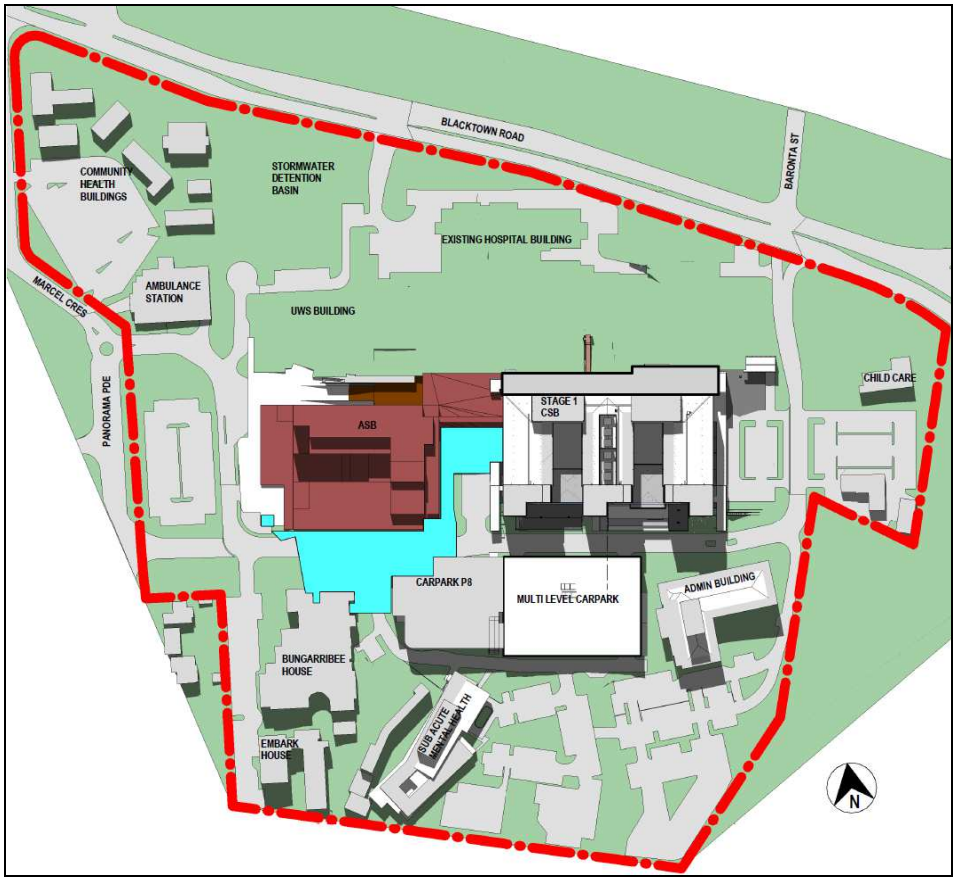

Figure 15: Mid-winter 12 midday Shadow Diagram (Source: EIS)

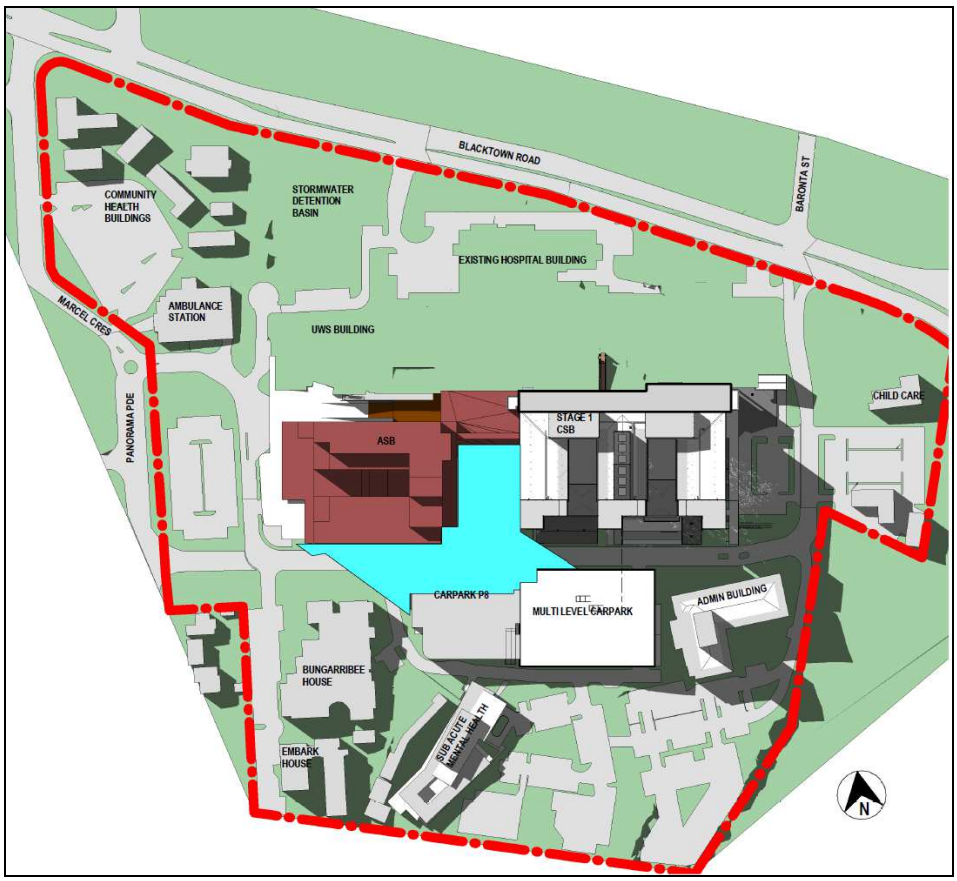

Figure 16: Mid-winter 3 pm Shadow Diagram (Source: EIS)

Waste and Hazard Management

The Blacktown – Hospital Redevelopment Stage 2 Waste Management Plan provides the basis for a more detail construction waste management plan and to update the WSLHD Waste Management Policy for operation of the ASB, however, it does not address potential hazards associated with refurbishment of the existing hospital. A Preliminary Hazard Assessment formed part of the EIS.

The EPA recommended that:

- an unexpected finds procedure is prepared, including for asbestos and lead-based paint and that Safework NSW is to be consulted concerning any asbestos waste that may be encountered;
- waste concrete and rinse water are not to be disposed of on-site;
- all waste generated is to be assessed, classified and managed in accordance with the 'Waste Classification Guidelines' (DECC 2009); and
- the existing hospital 'waste management plan' be modified as necessary in accordance with NSW Health's *Waste Management Guidelines for Heath Care Facilities* (1998) and the applicant apply for and obtain any necessary amendment to the existing 'radiation user licence'.

The applicant stated that an Unexpected Finds Protocol was approved as part of the Stage 1 CSB and would be implemented for the Stage 2 ASB project and further that soil contamination surveys (ground works) and hazardous materials surveys (demolition works) would be completed prior to works commencing.

The applicant stated that the CEMP, prepared prior to commencement of works, would detail waste control and management principles and procedures. The Department is generally satisfied that construction and operational waste would managed appropriately but has

recommended a condition relating to unexpected finds for both the ASB site and the areas of the existing hospital to be refurbished.

Ecologically Sustainable Development

The Integrated Water Management Plan includes the following water cycle management features:

- bio-retention basin to treat stormwater from the ASB and adjoining sub-catchments to the south within the hospital boundary (the plans in the Integrated Water Management Plan are yet to include the new at-grade carpark to the west of the ASB); and
- strategies to reduce potable water demand including selection of water efficient fixtures with appropriate WELS ratings, installation of pulse water meters (to Sydney Water standards) for all major uses of water for data collection and water-leak detection, and selection of drought tolerant plants to minimise irrigation water demand.

The EPA stated that energy and water conservation should be considered during the detailed design phase and recommended implementation of Water Sensitive Urban Design (WSUD) principles, including stormwater harvesting and treatment for non-potable re-use. Further, the EPA considered that a detailed analysis should be provided of how proposed ESD initiatives deliver feasible and reasonable best practice standards.

The applicant stated that a 10 per cent energy efficiency improvement would be achieved for the ASB on the *Building Code of Australia Section J – Energy Efficiency* standards, and this outcome was also being implemented at other public hospitals.

The EIS lists the ESD features considered in relation to the ASB as:

- energy conservation and on-site generation;
- use of materials which possess low embodied energy, reuse and recycling; and
- waste minimisation during construction and operation to reduce the amount of waste going to landfill.

The Department is satisfied that the applicant has investigated sufficient ecologically sustainable development initiatives.

5 CONCLUSION

The Department has reviewed the EIS and considered advice from public authorities and Council. Issues raised in submissions have been duly considered and all relevant environmental issues associated with the proposal have been thoroughly assessed.

The Department's assessment concludes that the built form of the new ASB building is appropriate given it is generally consistent with the approved concept proposal for the site (including the endorsed building envelope) and the massing of surrounding hospital buildings, and is of an appropriate scale within the context of the entire hospital campus.

The Department is also satisfied that adequate car parking would be made available to accommodate the demand generated by the new facilities and appropriate measures are being implemented to encourage changes in travel behaviour to potentially negate the need for future additional car parking. The Department has recommended conditions to ensure that this is further investigated post implementation and monitoring of the workplace travel plan for the hospital and once the hospital is fully operational.

The Department is of the view that the recommended conditions and implementation of measures detailed in the applicant's EIS and appendices, and the RtS report, would adequately mitigate the residual environmental impacts associated with the proposal.

The hospital building is facilitating the desired delivery of infrastructure at Blacktown Hospital identified in *A Plan for Growing Sydney* and the *Draft West Central District Plan*. The proposal would also provide 485 operational jobs and 200 construction jobs. The Department concludes that the site is suitable for the proposed development and the proposal is in the public interest given the significant social benefits it would provide to the community. Accordingly the Department recommends that the SSD be approved, subject to conditions.

6 RECOMMENDATION

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Priority Projects Assessments:

(a) **consider** the findings and recommendations of this report;
(b) **approve** the State significant development application for the Blacktown Hospital Redevelopment (SSD 7714); and
(c) **signs** the attached development consent at **Appendix D**.

Prepared by: Megan Fu, Senior Planner

Endorsed by:

7/12/16

David Gibson
A/Director
Social & Other Infrastructure Assessments

Approved by:

David Gainsford 16/12/16
Executive Director
Priority Projects Assessments

APPENDIX A RELEVANT SUPPORTING INFORMATION

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning and Environments website as follows.

1. Environmental Assessment
   http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7714

2. Submissions
   http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7714

3. Applicant's Response to Submissions
   http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7714

APPENDIX B CONSIDERATION OF ENVIRONMENTAL PLANNING INSTRUMENT(S) (INCLUDING DRAFT) AND DCP(S)

The primary controls guiding the assessment of the proposal are:

a) State Environmental Planning Policy (State and Regional Development) 2011;
b) State Environmental Planning Policy (Infrastructure) 2007;
c) State Environmental Planning Policy No.55 – Remediation of Land;
d) Blacktown Local Environmental Plan 2015; and
e) Blacktown Development Control Plan 2015.

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The aims of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) are to identify State significant development and State significant infrastructure and provide the necessary functions to joint regional planning panels to determine development applications.

The proposed development is SSD in accordance with section 89C of the EP&A Act because it is development for the purpose of a hospital with a CIV in excess of $30 million, under clause 14 of Schedule 1 of SRD SEPP. Therefore the Minister for Planning is the consent authority.

State Environmental Planning Policy (Infrastructure) 2007

The aim of the Infrastructure SEPP is to facilitate the effective state wide delivery of infrastructure by providing greater flexibility in the location of infrastructure and service facilities, allowing the development of surplus government land, identifying relevant environment assessment categories for development and relevant matters to be considered and providing for consultation with relevant public authorities.

In accordance with clause 104 of the Infrastructure SEPP, the proposed development was referred to the RMS for consideration as traffic generating development. RMS raised no objections to the proposed development.

State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 aims to provide a state wide approach to the remediation of contaminated land. In particular, SEPP 55 aims to promote the remediation of contaminated land to reduce the risk of harm to human health and the environment by specifying under what circumstances consent is required, specifying certain considerations for consent to carry out remediation work and requiring that remediation works undertaken meet certain standards.

A Detailed Site Investigation (DSI) or Phase 2 Environmental Site Assessment (ESA) report was prepared for the proposed ASB. This follows on from a Preliminary Site Investigation (PSI) carried out in 2014. A further 22 boreholes were drilled as part of the DSI. Fill was encountered across the ASB site at an average depth of 0.8 m below ground level (BGL) overlying natural clays (typical of weathered shale) on shale bedrock.

Fill samples were analysed for a comprehensive suite of metals/metalloids, Total Petroleum Hydrocarbons (TPHs), Total Recoverable Hydrocarbons (TRH), Benzene, Toluene, Ethybenzene and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs) and the results compared to National Environmental Protection Measures for Health Investigation (or screening) Levels (HILs for low density residential and commercial/industrial land uses and Ecological Investigation Levels (EILs) for urban residential/open space and commercial/industrial land uses. There were no exceedances of the HILs and two exceedances of the EILs for benzo(a)pyrene (BaP) for boreholes BH10 (within a planter bed adjacent to the parking area on the western side of the CSB and BH15. The DSI was of the

opinion that the concentrations were not considered to represent a risk as BaP is not readily bioavailable and the fill material is within the area of excavation for the ASB, with excavated material to be disposed of offsite.

The DSI report concluded that the Stage 2 site is suitable for ongoing use as a hospital without further contamination investigation or management.

The Department is satisfied that the investigations completed and the unexpected finds procedure would adequately manage contamination risks.

Blacktown Local Environmental Plan 2015 (BLEP)
Consideration of BLEP aims to promote development that is appropriate to its context and enhances the amenity of the Blacktown community and environment. Consideration of the relevant clauses of the BLEP is provided in **Table 1**.

Table 1: Assessment against Blacktown LEP 2015

Blacktown LEP 2015	**Objectives**	**Department Comment/Assessment**	**Complies Yes/No**
Zone SP1 Special Activities – Health Services Facility	(a) to provide for special land uses that are not provided for in other zones; (b) to provide for sites with special natural characteristics that are not provided for in other zones; and (c) to facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.	The site is zoned SP1 Special Activities (Health Services Facility). The proposed development meets the objectives of the zone and as the works are associated with the original hospital, the development is ancillary to that purpose and is permissible with consent.	Yes
Clause 7.7 Design Excellence	The objective of this clause is to ensure that development exhibits design excellence that contributes to the natural, cultural, visual and built character values of Blacktown.	Consideration of Design Excellence has been given in accordance with clause 7.7 of BLEP. The Department concludes that the design of the proposed development exhibits design excellence. The proposed development is associated with the existing hospital at the site and the new Stage 1 CSB and is contained within the campus footprint. The development represents a consistent building scale within the BHC. Furthermore, the proposed building has been sited and designed to mitigate any potential adverse impact on surrounding uses, including residential uses to the west and north of the site.	Yes

Blacktown Development Control Plan 2015
It is noted that clause 11 of State Environmental Planning Policy (State and Regional Development) 2011 provides that development control plans do not apply to SSD. Notwithstanding, consideration of relevant controls has been given in **Table 2**.

Table 2: Consideration of Blacktown Development Control Plan 2015

Blacktown DCP 2015	**Objectives**	**Department Comment/Assessment**	**Complies Yes/No**
Part A 4.3 Tree Preservation	Legal provisions for the preservation of trees are in force under Blacktown LEP 2015. These provisions require the consent of Council for the removal of trees as well as for the lopping or topping of trees. However, where development approval has been given, trees within 3m of the perimeter of a building may be removed without further approval. A prescribed tree for the purpose of Clause 5.9 of Blacktown LEP 2015 is: (a) a perennial plant with a self-supporting stem which: - has a height of more than 3 m; and/or - has a trunk diameter of more than 200 mm or more measured 1 m above ground level. (b) the effect of that development on the landscape or scenic quality of the locality; (c) whether any trees or other vegetation on the land should be preserved. Existing trees should be preserved wherever possible. The siting and layout of a development at the initial concept stage should consider the location of trees and favour their preservation.	The application does not involve tree removal.	Yes
4.6 Noise Reduction	Expected traffic volumes on designated roads may create noise which will exceed the level generally acceptable by the community for residential development. Noise can be reduced by sensitive site planning, architectural design, construction techniques and noise barriers.	Noise reduction was considered in the assessment of impacts of the ASB construction works. Establishment of noise management levels and appropriate mitigation measures was considered. This information is included in the Noise and Vibration Assessment. In its RtS, the applicant has committed to compliance with operational noise limits recommended by the EPA.	Yes
6 Carparking	Council's carparking requirements are largely based on the standards applied by the Roads and Maritime Services in its publication *Policies Guidelines and Procedures for Traffic Generating Developments*. Recognizing the varying availability of public transport within Blacktown, the aim of the carparking provisions of Blacktown DCP 2015 is to provide a comprehensive guide for the provision of parking for new development in order to:	All relevant transport accessibility, traffic impacts and carparking matters are addressed in the Transport Accessibility Study and Construction Traffic Management Plan. The proposal is consistent with this clause of the SLEP.	Yes

	(a) ensure adequate traffic safety and management; (b) ensure an adequate environmental quality of parking areas (both safety and amenity); and (c) provide parking areas that are convenient and sufficient for the use of employees and visitors generated by new developments.		
7 Services	Development consents granted by Council for most forms of development will include a condition requiring the applicant to provide evidence that arrangements satisfactory to Sydney Water, authority for the provision of telephone and internet services, provision of gas supply with a local gas supplier and provision of postal services to their developments.	Investigations of the utility requirements for the development have been undertaken and services are available and capable of satisfying the requirements of the development.	Yes
8.1 Solar Access	New development should retain reasonable levels of solar access to neighbouring properties and the public domain. In relation to the erection of buildings, Council will be concerned with the shadows cast by that development on land in the vicinity and may require the submission of shadow diagrams to assess the effect of the development on nearby land and the development proposal itself.	The ASB has been designed to maintain mid-winter solar access to adjoining residential properties on Panorama Parade. The shadow diagrams indicate no overshadowing outside the BHC between noon and 3 pm in winter, with minimal overshadowing of parts of the backyards of three residential properties at 9 am.	Yes
Part G Waste Management	(a) provide advice to applicants as to how to minimize waste generation and disposal, and reduce the handling of waste during demolition and construction; (b) encourage building design and construction techniques which minimises waste; (c) provide advice to applicants as to how to prepare a waste management plan; and (d) require source separation of materials and use of other design features which complement waste collection management services offered by Council, private providers and other bodies.	As part of the EIS, the applicant has prepared a Waste Management Plan addressing both construction and operation. More details will be included in a CEMP and in its RtS, the applicant has committed to updating the existing BHC waste management plan, as necessary, to take into account the operation of the ASB.	Yes

APPENDIX C GLOSSARY

Delegated Authority
On 16 February 2015, the Minister for Planning delegated his functions under section 89E of the *Environmental Planning and Assessment Act 1979* to the Executive Director, Priority Projects Assessments to determine applications where:

(a) the relevant council has not made an objection, and
(b) a political disclosure statement has not been made; and
(c) there are less than 25 public submissions in the nature of objections.

Ecologically Sustainable Development
Can be achieved through the following:

(a) the precautionary principle - namely, that 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. In the application of the precautionary principle, public and private decisions should be guided by:
  (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  (ii) an assessment of the risk-weighted consequences of various options,
(b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
(c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
(d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
  (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
  (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
  (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.(Cl.7(4) Schedule 2 of the Regulation)

Objects of the Act

(a) to encourage:
  (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
  (ii) the promotion and co-ordination of the orderly and economic use and development of land,
  (iii) the protection, provision and co-ordination of communication and utility services,
  (iv) the provision of land for public purposes,
  (v) the provision and co-ordination of community services and facilities, and
  (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
  (vii) ecologically sustainable development, and
  (viii) the provision and maintenance of affordable housing, and
(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Relevant Environmental Planning Instruments.
These are EPIs that are required to be taken into consideration in the assessment of the development under s. 79C. A detailed evaluation of each is provided at Appendix B.

Section 79C Evaluation
*(1) **Matters for consideration—general***
In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:
(a) the provisions of:
(i) any environmental planning instrument, and
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
(iii) any development control plan, and
(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and
(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),
that apply to the land to which the development application relates,
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
(c) the suitability of the site for the development,
(d) any submissions made in accordance with this Act or the regulations,
(e) the public interest.
***Note.** See section 75P (2) (a) for circumstances in which determination of development application to be generally consistent with approved concept plan for a project under Part 3A.*
***Note.** The consent authority is not required to take into consideration the likely impact of the development on biodiversity values if:*
(a) the development is to be carried out on biodiversity certified land (within the meaning of Part 7AA of the Threatened Species Conservation Act 1995), or
(b) a biobanking statement has been issued in respect of the development under Part 7A of the Threatened Species Conservation Act 1995.

APPENDIX D RECOMMENDED CONDITIONS OF APPROVAL