



Environmental Assessment

Illawarra International Health Precinct, Huntley

108121-02 / Report 001 Rev 0

La Vie Developments

June 2009

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for and on behalf of
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STATEMENT OF CERTIFICATION

**Environmental Assessment prepared under
Part 3A of the Environmental Planning and Assessment Act 1979**

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Project to which the Environmental Assessment relates:

Project Description:	Illawarra International Health Precinct, Huntley Lot 22 DP 607750 and Lot 4 DP 258024
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Applicant's Name: Cardno Forbes Rigby
Applicant's Address: 278 Keira Street
WOLLONGONG 2500
Proponent's Name: La Vie Developments Pty Ltd

Certification:

I certify that I have prepared this Environmental Assessment and to the best of my knowledge:

- It has been prepared in accordance with Part 3A of the EP&A Act 1979 and the Regulations
- It has been prepared in accordance with the Director General Requirements dated 1 October 2008
- It does not contain information that is either false or misleading.

Signature:



Date: 15 June 2009

Executive Summary

*La Vie Developments proposes to build a \$316 million **Illawarra International Health Precinct** in Huntley, NSW. The project vision of IIHP is to develop a major Private Tertiary Referral Hospital and Health Care Precinct to service the growing regional population, as well as providing a high quality medical resource of National and International standard.*

The current proposal follows an earlier proposal for a similar development at Tullimbar. At that time, a rezoning application was lodged with Shellharbour Council to allow the proposed hospital use. Shellharbour Council however did not agree to the rezoning application. La Vie Developments subsequently discussed with Department of Planning, who advised that such a facility would be welcomed on land in a major urban release area, is close to existing or proposed town centre and public transport and is free of major constraints. This is subject to an assessment of the potential environmental impacts as a result of the proposed development.

In response to the Director General Requirements issued by the Department of Planning on 1 October 2008, La Vie engaged a project team to undertake the various aspects of the design and environmental assessment. As part of this application, La Vie is seeking Concept Approval for the masterplanning of IIHP, and Project Approval for Stage 1 Surgicentre, which is located at the northern section of the IIHP.

SITE CONTEXT

The subject site is located within the West Dapto Release Area, and immediately adjoins the existing suburb of Penrose. It is close to existing residential areas, community services, retail facilities and public transport. The site is free from major environmental constraints and is capable of being serviced by existing infrastructure.

PROPOSED DEVELOPMENT

The proposed IIHP is located at the fringe of the existing residential suburb of Penrose. The proposed Penrose railway station is located 400m from the subject site. Existing bus services are available at Penrose, and can be extended to service the subject site. Once developed, the site will become the gateway to the new development areas at West Dapto and the Illawarra first specialist precinct for health and medical services.

The key components of the proposed development are:

- 303 bed tertiary referral hospital (352 bed in total)
- 280 bed aged care facility including separate facilities for youth needing care
- School of aged care
- State of the art surgical and day procedure centre (10 beds and 4 ICU beds and 5 high dependency beds)
- 24 hour medical centre and pharmacy
- School of pharmacology research
- Pathology and radiology centres
- School of general practice, casualty/emergency room with 10 overnight beds and dedicated trauma theatres
- Stand alone Obstetrics Unit with 20 overnight beds and caesarean section theatres

- Serviced apartments for relatives of patients and outpatients while undergoing ongoing extended therapies, education and supporting facilities
- Accommodation for nursing staff, medical students and visiting medical staff
- Ancillary car parking, open space, helipad, flight path and services

The proposal will develop over the next 8-12 years matching growth in the adjacent West Dapto release area. The development will be staged to allow the proposal to become operational in the short term and ensure sufficient finance is available to fund construction.

Stage 1 of the project comprises the Surgicentre, located at the northern portion of the subject site. This is the subject of the Project Application.

The proposed development is currently permissible with consent under the Wollongong LEP 1990 and the SEPP Infrastructure.

On completion, IIHP will comprise about 100,000m² of floor area for medical services and the associated aged care, accommodation and education facilities. It has the capacity to perform more than 78,000 procedures and generate in excess of 2,000 employment positions. Whilst its primary service catchment will be the Illawarra, its regional catchment will extend from the Royal National Park to the north, and the Victorian border to the south, to take advantage of the tertiary referral services provided by IIHP.

PROJECT JUSTIFICATION

The Illawarra Region and adjoining regions such as the Southern Highlands, South Coast Region and parts of South Western Sydney will benefit from the proposal. Key justifications for the proposal include:

- *The Illawarra and South Coast Regions have an undersupply of hospital beds (currently there are only 100 beds servicing the region).*
- *Both regions have bed occupancy levels that indicate hospital overcrowding.*
- *Existing private hospital bed numbers have not increased significantly over the last 16 years, despite increased private health insurance (47.6% of residents in Illawarra) and increased private hospital procedures.*
- *Hospital bed licensing will soon be deregulated removing the existing bed cap and allowing increased participation in the health system by private organisations.*
- *The existing burden on the public system will be relieved and future growth accommodated without the need to provide extensive new public infrastructure.*
- *The proposed staging and integration of Day Procedural Facilities will avoid the ongoing commercial difficulties experienced by the existing private hospitals.*
- *The proposal will capture much of the existing 8800 plus Illawarra residents leaving the region for treatment elsewhere.*
- *Specialist treatment in the demand areas of Cardiology, pulmonary rehabilitation will significantly improve the quality of health care in the region.*
- *The Illawarra has the lowest number of GPs in the SESIAHS. The proposal will attract and retain general and specialist practitioners and provide ongoing opportunities for graduates in medicine from the University.*

ENVIRONMENTAL ASSESSMENT

This Environmental Assessment comprises of a range of specialist studies, which assess the likely impacts of the development on the surrounding environment, residents, businesses and other educational providers. The key environmental issues are addressed in the EA as follows:

Strategic Compliance

The proposed use is permissible with consent under the local planning scheme and the WCC LEP, 1990. The proposed IIHP, as hospital, is consistent with government policy, which encourages major developments to be located adjacent to support services and planned major urban release areas. The proposed use is consistent with the principles defining the West Dapto Release Area.

Land Use Compatibility

The gross floor area of the IIHP was driven by the service requirements and the need to consolidate the facilities within close distance of each other to improve efficiency of service delivery. The floor space ratio for each use has been justified by the need for the facility to provide all the necessary services and accommodation to their staff, patients and visitors on site.

A major hospital in this location can create further attract other health related development into this area. Overtime, this locality can be the future medical precinct to supplement the existing services in Wollongong and Shellharbour.

Geotechnical

The site is currently in stable condition. The landform rises from the edge of the site towards a plateau towards the middle of the site. Martens and Associates determined that the stability risk on the site is low.

Martens and Associates have found the site is suitable for the proposed development provided further studies. The geotechnical model also indicates that the soil profile at the site is shallow with moderate soil depth occurring in isolated portions of the site. Martens and Associates identify mitigation measures on the site are implemented relating to:

- *Further Testing*
- *Footing*
- *Sediment and Erosion Control*
- *Soil Excavation*
- *Fill Placement*
- *Rock Excavation*
- *Retailing Structure*
- *Vibrations*
- *Groundwater*

Land Contamination

Martens and Associates carried out a Stage 1 Land Assessment report on the site. The assessment was based on review of historical aerial photographs, Council's development application record and soil testing. The assessment concluded that the site is not contaminated and further study is not required.

Amenity

The main amenity impacts would occur along Goolagong Street, where the proposed development fronts the existing residential area at Penrose.

Aged care residential units are proposed along Goolagong Street opposite the existing residents. The residential nature of the development ensures that the character and streetscape of Goolagong Street are maintained.

Overshadowing diagrams, prepared by Imagescape, show that the proposed development will not create any overshadowing impacts on the existing residents.

The proposed aged care units will be designed to minimise overlooking onto adjoining and existing residents. Large setbacks will be incorporated into these developments to minimise potential overlooking impact.

Traffic/Access

The existing road network and intersections around the subject site is shown operating adequately under the TMAP report.

The IIHP site is located within 700m from a proposed railway station at Huntley. Investigation with State Rail suggested that this station is a long-term proposal and there is limited funding for the station at this stage.

Traffic modelling has found that the traffic volumes will increase because of the proposed development. These increased volumes can be mitigated through a range of measures, including:

- *Intersection upgrades at key locations – Huntley Road, Princes Highway and Fowlers Road*
- *Sustainable public transport use for the IIHP development*
- *Extension of the existing bus route to service the subject site*
- *Incorporation of sufficient bike facilities to encourage alternative means of transport*
- *Upgrade existing pedestrian footpath to encourage walking*

Ecology

The ecology report prepared by BES found that the study area is heavily disturbed with the original native vegetation having long been cleared for grazing and replaced by improved pasture. Desktop investigation and site survey could not identify any significant flora, fauna, threatened flora and fauna, migratory species, endangered population, and threatened ecological communities occurred on the site.

The impact assessment undertaken by BES could not identify any significant impact on the existing ecological conditions on the site. BES has identified the following mitigation measures to address any potential impacts:

- *Sediment controls*
- *Draining management*
- *Appropriate landscaping*

Visual

The site is characterised by gentle slope that rises from the edge of the site. The current land use is open grassland sustaining limited grazing activities. Low density urban residential developments adjoins the subject site to the east, and rural activities surround the site to the north, west and south.

The proposed development will affect the existing visual character of the locality. The development can be viewed from all directions in West Dapto.

The development has a modern character which is consistent with the character envisaged under the WDR program. The future hospital will be a gateway to West Dapto and will form a specialist medical precinct to reflect the future direction of the WDR.

Due to the proximity of the existing residents at Penrose to the subject site, the design of the proposed aged care facilities will maintain to low density will incorporate large front setback to ensure a consistency in the streetscape and minimise overlooking and overshadowing. The colours and materials will reflect the existing character of Penrose.

Heritage (Aboriginal)

Biosis carried out a search of the AHIMS register for Aboriginal artefacts showed that there are 46 previously recorded Aboriginal archaeological sites within 5km x 4km of the subject site, including one duplicate. No known sites are registered within 500m of the study area.

Biosis has undertaken field survey with representatives of the Illawarra Local Aboriginal Land Council to identify any Aboriginal Archaeological artefacts on site. No new Aboriginal Archaeological artefacts were identified. Biosis concluded that no assessment of scientific significance would be required.

Biosis proposed mitigation measures for the proposed development, including involvement of Aboriginal representative during the excavation phase of the development.

Electricity Transmission Lines & Health

The potential impact from the existence, and retention, of the high voltage transmission lines on the subject site, and the possibility that the EMFs from this line may have a detrimental impact on the health of persons at the proposed IIHP has been assessed.

The assessment concluded there is no justifiable impact to any person at the IIHP for the following reasons:

- *Scientific studies only identify a weak link of any detrimental health impact from long-term public exposure to ELF MEF from transmission lines*
- *The development implements impact mitigation measures in the design*
- *People at the development are unlikely to reside there on a long-term basis, which limits their exposure to the EMF from the onsite transmission lines.*

Green House Gas

An assessment has been carried out to estimate the possible green house gas emission from IIHP from each source. Opportunities and strategies to reduce the energy consumption and waste minimisation have been identified and the extent to which these energy savings will provide environmental benefits have been explored. The assessment concluded that:

- *Strategies to minimise greenhouse gas emissions in the proposal by use of energy efficient electrical appliances are pragmatic and consistent with ecologically sustainable principles;*
- *Greenhouse gas emission point sources have been identified as fuel (diesel, natural gas, fuel) consumption, purchased electricity usage, offsite treatment of wastewater, and transportation and disposal of waste;*
- *The estimated value of annual greenhouse gas emissions from this development represents 0.01 % of the total national emissions, and 1.33×10^{-4} % of the world emissions that that will reached in the middle of the 2008-2012 Kyoto period;*
- *It should be noted that the estimated greenhouse emissions from land clearing for the development should be negligible, as there is little vegetation on the site. In addition, the calculations do not take into consideration any carbon sequestration associated with the revegetation of core riparian corridors. Rehabilitation of a portion of the disturbed areas with*

vegetation will offset some of the emissions from land clearing and fuel / electricity consumption noted above. However, it is difficult to quantify the extent of this offset, as this requires estimates of the amount of the carbon sequestered in biomass and soils. The amount of carbon sequestered is a parameter, which cannot be determined with any great accuracy. It is dependent on vegetation type, geography and climate, and hence cumbersome to determine. We conservatively do not report this value, as estimates may not be accurate, and emissions calculated using these estimates would have large uncertainty values associated with them.

Noise

Noise impact because of the proposed helipad and helicopter flight path has been assessed. Wilkinson Murray suggested that the maximum number of flights per day has been established as 2 at all residences, with the exception of the one residence to the SE, in order to achieve a 24-hour noise objective of 40 dBA. In these cases, noise associated with helicopters can be classified as not significant.

The assessment suggested that the maximum passer-by noise levels would occur when the helicopter flies over the SE residence. Maximum external noise levels of between 80 to 88 dBA are predicted from INM noise data. Therefore, sleep disturbance is likely at this residence during a helicopter flyover during the night period.

IIHP will manage the operation of the Helipad to minimise the associated noise impact on the existing residents.

Water Cycle Management

Martens and Associates has undertaken a water cycle assessment on the subject site. Specifically, the following aspects of the water cycle have been assessed:

- *Existing Drainage*
- *Rainfall*
- *Groundwater*
- *Water Quality – Mullet Creek*
- *Flooding*
- *Water Quality – Lake Illawarra*

Martens and Associates has developed a concept stormwater management system for the whole site and a concept stormwater management plan for Stage 1. The concept is based on Wollongong City Council's Urban Drainage Design Manual and On-site Stormwater Detention Code (2006).

Martens and Associates have also developed three separate treatment train process for the three sub catchments within the subject site. MUSIC modelling was carried out to ensure that the stormwater quality outcome post development is consistent with the pre development conditions.

Waste

A waste management plan has been prepared for the subject development. The plan identifies appropriate mechanisms to remove the different category of waste. The plan will be implemented in the future hospital operation.

CONSULTATION

The project team consulted with the following agencies and stakeholders:

- *Wollongong City Council*
- *Growth Centre Commission*
- *Department of Environment & Climate Change*
- *Roads and Traffic Authority (Southern Region)*
- *New South Department of Health*
- *Department of Health and Aging*
- *South Eastern Sydney Illawarra Area Health Service*
- *Ministry of Transport*
- *Sydney Water*
- *Integral Energy*
- *Jemena (previously Alinta)*
- *Public*
- *Surrounding Residents*
- *Aboriginal Communities*

Overall, Government agencies have been supportive for the nature of the proposed development. The site is relatively free of constraints, which give Government agencies the comfort that the proposed development will have limited environmental impact on the site.

Local residents raised concerns on the scale and potential amenity on the existing areas. La Vie has addressed these concerns by incorporating appropriate design in the future development.

All of the issues raised by the community, politicians and relevant agencies have been addresses in this Environmental Assessment.

CONCLUSION

This Environmental Assessment has assessed the proposed IIHP development against its potential environmental, social and economic impacts. The particular issues relevant to the IIHP site in Penrose were identified in the Director General's Requirements and through the community and stakeholder consultation undertaken by La Vie and the project team.

The key environmental issues have been demonstrated to be resolvable. Specialist reports indicated that any remaining issues could be addressed via the proposed mitigation measures and that the site is therefore suitable for the proposed IIHP.

The IIHP development has also been shown to be of potential economic and social benefit to the Penrose area and the wider Illawarra region. IIHP will provide opportunities for employment and will have the ability to attract future specialist medical activities into the area. In addition, as the IIHP will be working in cooperation with TAFE Illawarra is it also expected to have a positive impact on the future education for medical students.

The social benefits of the IIHP are evident in capital investment value, the provision of jobs and a service that is acutely lacking in the community. It will modernise the West Dapto area and provide the injection of investment essential to realise the WDRA program.

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- H. Assumptions for GHG Assessment

1 Introduction

This section describes the background to the proposal, nature of the proposed development and major project application, and the purpose and structure of this report.

1.1 Background

La Vie Developments Pty Ltd (La Vie) proposes to develop a world-class 303-bed tertiary referral private hospital and major health care campus for the residents of the Illawarra and beyond. This private hospital has been proposed on 10.5ha of vacant land in Huntley, West Dapto. The facility named, **Illawarra International Health Precinct** (IIHP), will be the largest private hospital in NSW. It will operate in conjunction with Sonic Healthcare, which has signed a 20-year lease in late 2008 to operate the Pathology and Radiology units of the hospital.

Dr Brett Gooley, the director of La Vie, has been pursuing this development since 2005. The current proposal follows an earlier discussion with Department of Planning over a site at Tullimbar for the same development. At that time, DoP advised La Vie to lodge a rezoning application. Unfortunately, Shellharbour City Council resolved not to approve the application citing flooding and traffic grounds. DoP has supported the idea of a private health facility but advised La Vie to obtain a suitable site in a designated urban release area.

La Vie searched for a site that meets the following criteria:

- suitable size with services
- adjoins residential growth area
- no or minimal constraints (eg. flooding)
- has good access
- close to public transport

La Vie subsequently bought a site at the edge of the existing suburb of Penrose. The site is identified within the West Dapto Release Area (WDRA), and is located approximately 2.5km from the existing town centre and railway station at Dapto. Under the draft West Dapto Masterplan, part of the site is identified as the neighbourhood centre of Huntley Village and is located approximately 800m from the proposed Huntley Station, which is scheduled to be constructed in the next 20-30 years.

La Vie made numerous representations to DoP and other relevant State and Local agencies with respect of the proposed development. DoP issued a Clause 6 declaration on 20 June 2008 confirming the major project status (**Appendix A**). Following the declaration, La Vie lodged a Preliminary Environmental Assessment to DoP in July 2008, leading towards the issue of the Director General's Requirements (DGRs) to guide the preparation of the Environmental Assessment (**Appendix A**).

La Vie has commissioned a group of specialist consultants to prepare this Environmental Assessment in accordance with the DGRs. Simultaneously, La Vie has:

- Signed a 20 year lease with Sonic Healthcare to establish and operate the Pathology Laboratory and Radiology Service of the Precinct
- Received licences from the NSW Department of Health for the operation of a 352 bed private hospital and day procedure licence with 6 operating theatres
- Signed a Memorandum of Understanding with Illawarra TAFE to provide workforce training for students

The proposal will be constructed in stages. Due to the scale of the proposed development, La Vie wishes to seek Consent approval for the master planning of the project, and Project approval for Stage 1 of the development. These approvals will be followed by individual *Project*

Applications/Development Applications for each stage, depending on the delegations from the Minister/Director General.

1.2 Development Overview

The Illawarra International Health Precinct (IIHP) comprises the following components:

- 303 bed tertiary referral hospital (352 bed in total)
- 280 bed aged care facility including separate facilities for youth needing care
- School of aged care
- State of the art surgical and day procedure centre (10 beds and 4 ICU beds and 5 high dependency beds)
- 24 hour medical centre and pharmacy
- School of pharmacology research
- Pathology and radiology centres
- School of general practice, casualty/emergency room with 10 overnight beds and dedicated trauma theatres
- Stand alone Obstetrics Unit with 20 overnight beds and caesarean section theatres
- Serviced apartments for relatives of patients and outpatients while undergoing ongoing extended therapies, education and supporting facilities
- Accommodation for nursing staff, medical students and visiting medical staff
- Ancillary car parking and open space

The construction of the Centre will be developed in stages, allowing the proposal to become operational in the short term and ensuring sufficient finance is available to fund construction. The staging also allows each subsequent stage to be modified (based on feedback from each stage) to better meet users needs. The staging plan reflects the need basis of the health of the Illawarra. **Section 3.3.1** describes the detail on the staging proposal.

Collectively, these stages comprise about **107,000m²** of floor area, and have the capacity to accommodate up to 632 overnight patients, and undertake up to 78,000 procedures each year.

In total, the IIHP will generate up to **3,500 direct full time equivalent construction jobs**. The overall construction capital is **\$315.7 million (see Quantity Survey Report in separate volume)**.

1.3 The Proponent

La Vie Developments Pty Ltd is owned and managed by Doctor Brett Gooley. Dr Gooley, the Principal of Illawarra International Health Precinct, has extensive experience in the development and management of health care facilities. The following is a brief summary of the developments previously completed by Dr Gooley, all of which he currently owns and operates:

- **Australian Health Care Centre** – Corner Hotham Road and the Princes Highway, Kirrawee. Established in 1981 as Sydney's first 24-hour medical centre providing a pharmacy, dentist, radiology and office space.

- **Blue Cross Medical Centre** – extended hours medical centre at 322 Kingsgrove Road, Kingsgrove. The centre includes pharmacy, dentist, radiology and other small businesses and was established in 1991.
- **Kingsgrove Day Hospital** – also at 322 Kingsgrove Road, Kingsgrove. The Hospital operates as a day procedure centre and was established in 1991.
- **Woolloomooloo General Practice** – established in 1998 the practice is located in the former Sydney Sailor's Home, which Dr Gooley has converted to boutique accommodation.

In addition to the above, Dr Gooley undertook a feasibility study to construct a 250 bed private hospital in Menai in 1984. Whilst the project did not proceed, an Administrative Review Tribunal determined that Dr Gooley had the “*necessary know-how to establish and operate a superior private hospital*”.

The above developments currently employ in excess of 100 people and annually treat approximately 150,000 patients. Each year the above day procedure facilities undertake in excess of 2,500 surgical procedures. The above facilities and Dr Gooley has an exemplary record of high quality medical care.

Dr Gooley is an experienced physician with over 30 years experience and has worked in Australia, England and America. Dr Gooley has visiting medical officer (VMO) status at various Sydney hospitals including Princes of Wales and St. Vincent's Hospitals.

1.4 Major Project Application

Under the State Environmental Planning Policy (SEPP) (Major Projects) 2005, Hospitals are classified as major projects under Part 3A of the Environmental Planning Assessment Act (EP&A Act) 1979 if the proposal satisfies the criteria under Clause 18 of the SEPP:

18 Hospitals

1. *Development that has a capital investment value of more than \$15 million for the purpose of providing professional health care services to people admitted as in-patients (whether or not out-patients are also cared for or treated there), including ancillary facilities for:*
 - (a) *day surgery, day procedures or health consulting rooms, or*
 - (b) *accommodation for nurses or other health care workers, or*
 - (c) *accommodation for persons receiving health care or for their visitors, or*
 - (d) *shops or refreshment rooms, or*
 - (e) *transport of patients, including helipads and ambulance facilities, or*
 - (f) *educational purposes, or*
 - (g) *research purposes, whether or not they are used only by hospital staff or health care workers and whether or not any such use is a commercial use, or*
 - (h) *any other health-related use.*
2. *For the purposes of this clause, professional health care services include preventative or convalescent care, diagnosis, medical or surgical treatment, psychiatric care or care for people with disabilities, care or counselling services provided by health care professionals.*

The proposed development has a construction capital **in excess of \$315 million**. It satisfies the classification of hospital under the Major Projects SEPP.

The proposal was declared as a major project on 20 June 2008 under Part 3A of the Act (**Appendix A**). The Director General's Requirements were issued on 11 October 2008 confirming the scope of the Environmental Assessment (**Appendix A**).

This Major Project Application includes the following components:

- **Concept Application for the entire proposal, and**
- **Project Application for Stage 1**

The latter stages will be subject to further project applications or development applications, depending on the delegation from the Minister/Director General.

1.5 Director-General's Requirements

DoP issued DGRs on 1 October 2008 to enable the Environmental Assessment (EA) to be started, following consultation with the following public authorities:

- Wollongong City Council (WCC)
- Department of Environment and Climate Change (DECC)
- Department of Water and Energy (DWE)
- Department of Health (DoH) Private Health Care Branch
- Southern Eastern Sydney Illawarra Area Health Service (SESIAHS)
- Department of Primary Industries (DPI)
- Ministry of Transport (MoT)
- Roads and Traffic Authority (RTA)

Table 1 lists the DGRs and identifies where each item is addressed in this document. The final DGR's are included in **Appendix A**.

Table 1.1 – DGRs & Structure of EA

Director General's Requirements (dated 1 October 2008)	Where addressed in this in EA?
General Requirements	
(1) An Executive Summary	Executive Summary
(2) Detailed description of the project including the: <ul style="list-style-type: none"> (a) description of the site including cadastral and title details; (b) A thorough site analysis and description of the existing environment; (c) Suitability of the site for the proposed development; (d) likely environmental, social and economic impacts; and (e) design, construction, operation, maintenance, rehabilitation and staging as applicable; 	Chapter 2
(3) Consideration of the following with any variations to be justified: <ul style="list-style-type: none"> (a) all relevant State Environmental Planning Policies; (b) Wollongong Local Environmental Plan 1990; (c) Draft West Dapto Local Environment Plan 2007; and (d) The Illawarra Regional Strategy; 	Chapter 5
(4) Draft Statement of Commitments	Chapter 8
(5) Conclusion and Justification of the Project	Chapter 9

Director General's Requirements (dated 1 October 2008)	Where addressed in this in EA?
(6) Signed statement from the author of the EA confirming that the information is neither false nor misleading	Page v
Key Assessment Requirements	
Land Use <ul style="list-style-type: none"> provide a table outlining the different land uses, FSR, development yield and site coverage for each use and total GFA for the development; identify proposed ownership and title arrangements for each of the proposed land uses; consider surrounding land use, patterns, density and character and assess potential land use conflicts. Include proposed land uses as detailed in the Draft West Dapto Local Environment Plan 2007. provide details of the electricity easement including permissible and proposed development within the easement; identify the type of clinical services proposed and the relevant regulatory jurisdictions and approvals/licences required; demonstrate an evidence-based approach to the proposed clinical services including the views of the Department of Health; provide details on the type of educational uses to be provided on the site and the relationship to education institutions (eg Wollongong University, TAFE NSW). 	<p>Section 3.3</p> <p>Section 3.2.1</p> <p>Section 2</p> <p>Section 2.9</p> <p>Section 5.1.2</p> <p>Section 4</p> <p>Section 3.2.5</p>
Urban Design - Built form <ul style="list-style-type: none"> typical plans (elevations / sections) and associated development controls, identifying the height, density, bulk, scale and character of the proposed built form in relation to surrounding development (existing and proposed), landscape and topography; typical plans and sections of the public domain, identifying the proposed street network and car parking, pedestrian and bicycle linkages and landscape treatments; assessment of visual impacts using photomontages and views analysis; details of the location, accessibility and legibility of the main hospital entrance and pedestrian circulation through the site; details of proposed landscaping. Staging <ul style="list-style-type: none"> identify proposed precincts, staging, timing and uses contained within each precinct; address the implications of the development for the West Dapto release area in terms of the timing for the delivery of services, infrastructure in relation to the likely future demand. 	<p>Chapter 3 + separate volume</p> <p>Section 6.8 Chapter 3</p> <p>Section 3.3.5</p> <p>Section 3.3.1</p> <p>Section 5.4</p>
Amenity impacts <ul style="list-style-type: none"> analyse the potential impacts of the design on existing and future surrounding development such as visual, privacy and overshadowing and proposed mitigation measures. address potential health concerns related to the transmission lines traversing the site. 	Section 6.5

Director General's Requirements (dated 1 October 2008)	Where addressed in this in EA?
Heritage conservation <ul style="list-style-type: none"> • assess and address any impacts of the development on flora and fauna, including potential indirect impacts such as water quality, and the management of these; • assess the impacts on and management of any potential archaeological items; • the EA should address and document the information requirements set out in the draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation involving surveys and consultations with the Aboriginal community; • identify the nature and extent, if any, of impacts on Aboriginal cultural heritage values across the project area; • Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. 	Section 6.9
Biodiversity <ul style="list-style-type: none"> • assess and address any impacts of the development on flora and fauna, including potential indirect impacts such as water quality, and the management of these. 	Section 6.7
Traffic, Transport and Access <ul style="list-style-type: none"> • detail existing traffic conditions, road networks and road capacity; • detail proposed emergency and service vehicle access and public access arrangements, including potential conflicts between pedestrians and vehicles; and • Identify pedestrian and bicycle linkages and facilities for cyclists to support and promote this mode of transport. • prepare a traffic impact study in accordance with RTA Guide to Traffic Generating Developments. This should also consider the suitability of the railway level crossing on Avondale Road. • prepare a Transport Management and Accessibility Plan (TMAP) in accordance with the draft interim TMAP guidelines and addressing the following issues: <ul style="list-style-type: none"> ○ Detail the measures to be taken to meet the State Plan target of 25% Journey to Work Trips by public transport at full development. ○ Estimate the likely modal split and assess the capacity and potential infrastructure and service upgrade requirements as a result of this; ○ Proposed loading dock(s) and car parking arrangements, demonstrating a minimalist approach to car parking provisions; ○ Identify all pedestrian and bicycle connections to and through the site during and construction and operation. Identify requirements, which will encourage walking and cycling to the site. 	Section 6.6
Economic Impact <ul style="list-style-type: none"> • detail the catchment of the proposed services along with the catchment and distance of other existing and expanding health services in the region; • identify potential conflicting and / or complimentary roles for the proposed hospital with existing public and private hospitals in the region; • identify any negative economic impacts to the Region, such as possible closures of other hospitals or health services, from the development and, if relevant, any required and appropriate mitigation measures; 	Chapter 4
Ecological Sustainable Development <ul style="list-style-type: none"> • demonstrate how the development will satisfy ESD principles including BASIX, water sensitive urban design measures, energy efficiency, transport options, recycling and waste disposal. 	Sections 6.11 and 6.13

Director General's Requirements (dated 1 October 2008)	Where addressed in this in EA?
Geotechnical and Contamination <ul style="list-style-type: none"> geotechnical report addressing matters such as suitability of the site for its proposed uses, slope stability, erosion hazard, proposed earthworks and retention methods. Assess suitability of the site for the proposed uses in accordance with SEPP 55. 	Sections 6.3 and 6.4
Noise <ul style="list-style-type: none"> the EA must include a comprehensive assessment of the predicted noise impacts associated with the project in accordance with relevant policies. Special consideration should be given to the proposed helicopter pad. 	Section 6.12
Utilities and Infrastructure <ul style="list-style-type: none"> provide a utility and infrastructure servicing strategy, demonstrating the development can be adequately serviced for water supply, wastewater, stormwater, electricity, gas and communications. This should consider the stages of the project and how this corresponds to the staging of the West Dapto Release area. 	Section 3.3.4
Drainage, Stormwater and Groundwater Management <ul style="list-style-type: none"> address flooding, drainage and stormwater management issues, including: on-site detention of stormwater, water sensitive urban design and drainage infrastructure; fully assess the existing groundwater features, including existing licences on site, and identify potential impacts on groundwater including any works likely to intercept, connect with or infiltrate the groundwater, measures to manage or mitigate and impacts, as well as any impact in existing groundwater users. 	Section 6.13
Developer Contributions <ul style="list-style-type: none"> Scope and justification of developer contributions between the proponent and the State (via relevant agencies including Roads and Traffic Authority and Ministry of Transport) based on the demand for services generated by the development and Department of Planning guidelines; Scope and justification of developer contributions between the proponent and Wollongong Council based on existing Section 94 plans and Department of Planning Guidelines. 	Section 3.5
Consultation Requirements	
<p>Provide written evidence demonstrating an appropriate and justified level of consultation with the following relevant parties during the preparation of the Environmental Assessment:</p> <p>(a) Agencies and other authorities:</p> <ul style="list-style-type: none"> Wollongong City Council; Department of Environment & Climate Change; Roads and Traffic Authority; Ministry of Transport; NSW Health and South Eastern Sydney Illawarra Area Health Service; Department of Health and Ageing. <p>(b) Public</p> <ul style="list-style-type: none"> Surrounding residents; Local Aboriginal communities. 	Chapter 7

1.6 Purpose of this Report

The aim of this EA is:

- To identify all constraints affecting future developments on the subject site
- To assess the capability of the subject site to support future development
- To demonstrate the economic, social and environmental attributes of the proposed development and consider the feasibility of the proposal based on existing and projected demographics data
- To investigate options to free up developable lands via a range of flood mitigation measures
- To propose a range of measures to ensure the proposed development comply with the flood plain management policies and other relevant strategies and legislations.

1.7 Project Team

La Vie has engaged a project team to undertake the project management services, design, town planning and specialist investigations. The team comprises:

- Illawarra Regional Development Group – Project Management, Consultation
- Imagescape Pty Ltd – Architectural and Landscape Design
- Cardno – Engineering, Town Planning, Environmental Services, Traffic
- Martens and Associates – Geotechnical, Contamination Land, Water Cycle Management
- Biosis – Archaeology
- BES – Ecology
- Wilkinson Murray – Noise
- Hardes and Associates – Business Planning, Economic Analysis
- Peter Jordan – Health Planning

1.8 Structure of this Report

This EA is structured as follows:

- **Chapter 2** describes the physical conditions of the site, analyses its surrounding land uses and identifies the likely environmental impacts of the proposed development
- **Chapter 3** presents the proposed development, explains the design concept,
- **Chapter 4** states the economic justifications for the proposed development, considers the economic impacts and identifies the needs and alternatives
- **Chapter 5** considers the proposal against the relevant legislations and statutory requirements
- **Chapter 6** identifies the environmental issues associated with the development, considers their existing conditions, assesses the likely impacts, and proposes mitigations measures or environmental safeguards to address any likely negative impacts
- **Chapter 7** summarises the outcomes of the consultation
- **Chapter 8** presents the draft Statement of Commitments
- **Chapter 9** states the key findings, conclusions and recommendations.