

Environmental Assessment Report

Orange Private Hospital

Concept Plan & Project Application

Submitted to Orange City Council On behalf of Forest Road Syndicate Pty Ltd

February 2008 **■** 06411

Statement of Validity

Prepared under Part 3A of the *Environmental Planning and Assessment Act* 1979 (as amended)

Environmental Assessment prepared by

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Qualifications BEc Dip URP

Company JBA Urban Planning Consultants Pty Ltd
Address Level 7, 77 Berry Street, North Sydney

In respect of Study and Concept Plan Application

Concept Plan

Applicant name Savage Property Enterprises

Applicant address Suite 30, Upper Deck, Jones Bay Wharf

26 - 32 Pirrama Road, Pyrmont NSW 2009

Land to be developed Lot 1 DP549856 (Forest Road, Orange)

Proposed development Mixed use precinct comprising a private hospital,

associated retail facilities and commercial space,

residential development and hotel.

Environmental Assessment

An Environmental Assessment (EA) is attached

Certificate I certify that I have prepared the content of this

Environmental Assessment and to the best of

my knowledge:

 It is in accordance with the Environmental Planning and Assessment Act and Regulation.

 It is true in all material particulars and does not, by its presentation or omission of information,

materially mislead.

Godon Khly

Signature

Name Gordon Kirkby
Date 8 February 2008

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- C Architectural plans for Medi-Hotel Bureau SRH
- D Landscape Architectural plans and design reports McGregor + Partners
- E Geotechnical Investigation

 Jeffery and Katauskas Pty Ltd
- F Report to the General Manager Sustainable Settlement Strategy and OSS Structure Plan Orange City Council
- G Traffic and Parking Assessment John Coady Consulting Pty Ltd
- H Phase 1 Preliminary Environmental Site Investigation Environmental Investigation Services
- Private Hospital: Orange DA report ESD Initiatives Lincolne Scott
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- K Flora & Fauna Impact Assessment Proposed Orange Private Hospital, Forest Road, Orange FloraSearch
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Executive summary

Purpose of this report

To seek the approval of the Minister for Planning under Part 3A of the EP&A Act of a Concept Plan and Project Application for the construction of a private hospital campus on Forest Road, Orange.

This report also responds to the Director General's Environmental Assessment Requirements which were issued on 18 July 2007.

Project outline

The proposed development seeks concept approval for the development of a Private Health Precinct, comprising:

- a private hospital and ancillary retail/commercial facilities;
- hotel / short stay accommodation;
- a "medi-hotel";
- restaurant/café;
- residential accommodation; and
- on-site carparking.

In addition:

- The perimeter and external spaces of the site will be extensively landscaped; and
- All utilities will be upgraded to meet demands associated with the development.

Project applications have also been prepared for the Private Hospital and medihotel, to be located within the campus.

The private hospital will provide in-patient services that will complement the proposed Bloomfield (Orange Base) Hospital that is to be located on the opposite side of Forest Road. The medi-hotel will provide accommodation for patients requiring out-patient treatment, in close proximity to the public and private hospitals.

Patients, staff and carers associated with both hospitals will have the opportunity to use ancillary services provided in the precinct, such as restaurant/café and retail services.

The residential component of the development will provide accommodation options for potential staff of the new hospitals, as well as other residents of Orange.

The proponent

The proponent of the development is Forest Road Syndicate Pty Ltd.

Planning context

The Major Projects SEPP 2005 identifies development to which Part 3A of the EP&A Act applies, and for which the Minister is the consent authority.

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 (Classes of Development, Schedule 2 (Specified Sites) or Schedule 3 (State significant development) of the SEPP, is declared to be a project to which Part 3A applies.

On 20 June 2007, pursuant to Clause 6 of the Major Projects SEPP, the Minister for Planning, formed the opinion that the proposed development meets the criteria ins Schedule 1, Group 7, Clause 18 of the SEPP, having satisfied himself that the development is a "hospital" with a capital investment value of more than \$15 million.

On 18 July 2007, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the project.

Orange City Council advised on 23 August 2007 that they have been delegated the assessment function of the Major Project Application by the Director General of the Department of Planning. Council has also advised that, upon submission of the Environmental Assessment, a test of adequacy of the submitted documentation will be carried out prior to the commencement of the public exhibition period.

Compliance with statutory instruments

The Orange Sustainable Settlement Strategy was endorsed by Orange City Council in 2004. Amongst other things, it identifies the development of a future "hospital suburb" on the Forest Road site, and that planning should commence to define the feasibility for, and the urban design of, that land. The site is zoned 1(a) General Farming under Orange Local Environmental Plan 2000. The relevant provisions of the Orange LEP are below:

Issue	Standard
Zone	1(a) General Farming
Permissible uses	The Hospital, motel and hostel accommodation, medical consulting rooms (where ancillary to the hospital)
Prohibited uses	Residential (at proposed densities), childcare, seniors living
Height	No specific controls
Floor Space Ratio	No specific controls

In addition, the following key state and regional planning instruments apply to development on the site:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy 55: Remediation of Land; and
- Draft State Environmental Planning Policy 66: Integration of Land Use and Transport.

The Orange Development Control Plan 2004 provides guidelines on certain types of development in the local government area, as well as containing planning controls. In particular it includes rates for the provision of on-site carparking for development on the land which has informed the level of parking to be provided on the site.

The site

The site of the proposed private hospital campus is located 3.5km to the South of the Orange CBD at 3403 Forest Road. It is approximately 6 hectares in size, and is legally described as Lot 1 in DP 549856. The site is bounded by Forest Road and the heritage-listed Bloomfield Hospital to the east/south east, to the south is an existing isolated retail premises and to the north and west the site is bounded by generally cleared farmland. The site is located wholly within the Orange Local Government Area.

Existing use & development

The site currently contains a disused outdoor cinema and associated infrastructure, however it is has not been used for this purpose for at least 20 years. It is largely cleared and comprises large areas of hardstanding which were used a car parking spaces for the cinema.

Access into the site is via two existing road reservations off Forest Road. The roads form the northern and southern boundaries of the site.

The site is generally flat with a gentle slope towards a creek on the north-west portion of the site. The highest point on the site is on the south east corner at RL 913.5 falling to RL 908 on the north west corner of the site – a fall of approximately 5.5 metres over approximately 150 metres.

The role of the Concept Plan

The Concept Plan for the Orange Private Hospital Campus establishes the vision and planning and development framework which will be used by the consent authority to assess future development proposals within the Orange Private Hospital site. It articulates what Forest Road Syndicate Pty Ltd is seeking to achieve for future development and sets the broad parameters for the future development of the site.

Background to the Concept Plan

The Concept Plan has been prepared by Cox Richardson Architects and establishes a blueprint for the future development of the Orange Private Hospital site. It demonstrates, through a series of strategies, how the components of the project can lead to the sustainable development of a mixed use precinct comprising medical, commercial, retail and residential uses.

The challenge of the Concept Plan is to address the environmental setting and challenges of the site in a way that creates a positive and sympathetic response to the local environment, including Broomfield, while at the same time providing important complementary healthcare services to western NSW.

The Concept Plan is complemented by two Project Applications for the construction of the Private Hospital in the northern-eastern part of the site and medi-hotel and ancillary services on the south-eastern part of the site.

Concept Plan design philosophy & description of proposal

The Orange Private Hospital Campus seeks to create a non-institutional health precinct that includes facilities ranging from a "traditional" private hospital, to accommodation for patients, carers and staff, and the complementary amenities to support these users. Each of these components, namely hospital, medihotel, hostel/cancer care and residential development, will complement each other, and the adjacent Bloomfield (Orange Base) Hospital.

Further, it will ensure Orange becomes a "Centre for Health Excellence", that attracts the highest quality practitioners to the facility, as well as patients from across rural and regional NSW.

The Campus development has been specifically located and designed to provide medical and ancillary services for Orange and western NSW that complement those services to be provided at the proposed Bloomfield Hospital, while at the same time delivering significant economic, social and environmental benefits for the community.

Locating the private and public hospitals in close proximity will deliver important savings in travel time and costs for both practitioners and patients of the proposed private hospital, as well as enabling local patients to receive a broader range of treatments. It will also attract high quality staff to the region, who are enthusiastic to work at the two new facilities.

The new medi-hotel will create a unique facility where out-patients may stay close to their practitioner, but not in an institutional hospital environment. Patient carers and staff will also have a large range of short- and long-term accommodation options to choose from.

Infrastructure

The site is capable of servicing by the local water, sewer, electricity, stormwater, telecommunications and natural gas networks.

Connections to most services will be via existing networks that are located in Forest Road adjacent to the site.

Demand for potable water and electricity will be minimised wherever possible throughout the site through the use of efficient appliances and construction techniques. The landscape concept for the site has been prepared using the principles of water sensitive urban design, which maximises opportunity for stormwater detention and rainwater reuse.

Environmental impacts

The new Orange Private Hospital Campus has been designed to minimise impacts on the local environment, particularly the adjacent heritage-listed Bloomfield Hospital. Key impacts associated with the development are:

- Traffic , access and parking;
- Relationship to the Bloomfield Hospital and heritage landscape;
- Built form and urban design;
- Social impacts; and
- Ecologically sustainable development.

Traffic, access and parking

Traffic assessments have shown that the local road network (in particular Forest Road in the immediate vicinity of the site), has sufficient capacity to accommodate the traffic associated with both the Orange Private Hospital Campus and the Bloomfield (Orange Base) Hospital. However, to improve the operation of the intersections used to access the two hospitals, they will be augmented using a "seagull" treatment.

At-grade carparking to meet the demands of the various uses throughout the site will be located along the boundaries of the site and extensively screened to minimise visual impact.

In addition, the existing centre median on Forest Road will be converted to a pedestrian refuge, to ensure the safety of pedestrians moving between the two hospitals.

A network of courtyards, lawns and gardens throughout the site, connected via accessible paths, enable patients, staff and carers to move amongst the campus, sheltered from the extremes of weather.

Heritage

The built form of the Campus has been designed to respect and complement the existing heritage items in the vicinity of the site, namely the Bloomfield Hospital and Elm Avenue of Forest Road. This has been achieved through a generous (at least 24 metre) setback from Forest Road for all structures, and augmentation of the existing streetfront plantings with mature species and native groundcovers.

Plant species across the site have been chosen to protect and enhance the existing plantings along Forest Road, particularly *Quercus* species.

Built form and urban design

Buildings across the site will be a contemporary two storey design, with a small three-storey section defining the main entrance to the hospital. The campus has been designed to create a welcoming environment, with a non-institutional character.

The medi-hotel creates a gateway into Orange from the south, with a set back port cochere providing both shelter for users of the facility and an entrance statement for the Campus.

Social impacts

The social benefits of the proposed development are significant. Benefits arising from the close proximity of the public and private hospital attract quality medical staff to Orange, but it will also deliver significant time savings as practitioners will not need to travel long distances between patients.

Medical specialists using the Private Hospital are expected to also treat patients at both the public hospital and their rooms in the Orange CBD, thus maintaining a the current range of options for consultations with general practitioners for members of the Orange community.

The range of services provided at the two hospitals will be complementary, thus benefiting both private and public patients. The cancer care facility and medi-hotel will provide particular benefits to public patients that would otherwise need to travel significant distances for treatment.

The residential precinct will also provide housing options for medical staff in close proximity to their workplaces.

ESD

Medical, commercial and retail buildings across the campus will be designed to achieve an energy rating of 4.5 ABGR. Residential buildings will perform better than the BASIX water and energy targets.

The extensively landscaped grounds have been designed according to the principles of water sensitive urban design. This involves extensive use of bioswales and natural vegetation to filter and store stormwater for reuse throughout the site.

Staging and Implementation

The Orange Private Hospital Campus has been divided into four precincts: private Hospital Precinct, Medi-Hotel Precinct, Hostel/Cancer Care precinct and Residential precinct.

Subsequent project or development applications will be lodged for the Hostel/Cancer Care precinct and Residential precinct that build upon the Concept Plan and will provide a greater level of design detail. The concept plan Statement of Commitments outlines a series of investigations, strategies and guidelines that will be undertaken to inform the detailed design planning for the development of each precinct.

Construction of the new Private Hospital Campus will not affect the construction of the Bloomfield (Orange Base) Hospital.

Development contributions for local infrastructure will be paid to Orange City Council in accordance with the relevant Orange development contributions plan.

Conclusion

The development of the Orange Private Hospital Campus enables the City of Orange to capitalise on its position as a "centre of health excellence" and provide world-class health facilities for its local community and the people of western NSW.

The Campus is consistent with the long-term settlement strategy for the City of Orange, and also meets the NSW State Government's objectives of improving health services in regional areas.

It will provide unique and complementary medical facilities in a non-institutional environment, together with ancillary activities such as a range of accommodation options for staff and patients that will provide benefits across western NSW.

The Forest Road Syndicate Pty Ltd is seeking approval for a Concept Plan and two Project Applications for the site to provide certainty, and to allow for coordinated development of the Orange Private Hospital Campus to complement development of the Bloomfield (Orange Base) Hospital.

1.0 Introduction

This Study and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is to fulfil the Environmental Assessment Requirements issued by the Director General on 18 July 2007, for the environmental assessment of a Concept Plan for development of approximately 6ha of land at Forest Road, Orange into a Private Hospital Precinct.

The proponent, Forest Road Syndicate Pty Ltd, is proposing the development of a Private Health Precinct, comprising:

- a private hospital and ancillary retail/commercial facilities;
- hotel / short stay accommodation;
- a "medi-hotel": and
- residential accommodation.

The report has been prepared by JBA Urban Planning Consultants Pty Ltd, for the proponent, Forest Road Syndicate Pty Ltd, and is based on information provided by Savage Property Enterprises (Commercial) Pty Ltd and supporting technical documents provided by the expert consultant team.

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General's Environmental Assessment Requirements under Part 3A of the EP & A Act. It should be read in conjunction with the information contained within and appended to this report.

This report:

- Outlines the vision for the development of a Private Hospital Precinct at Forest Road, Orange.
- Establishes the basis for change to the existing zoning and planning provisions to the site.
- Presents a Concept Plan to guide the future development of the site.
- Provides an assessment of the environmental impacts of the proposed land use change and Concept Plan.
- Contains two Project Applications, one for the Private Hospital and the other for the development of the motel and associated retail facilities.

The report is structured as follows:

Volume 1:

- Section 4.0: Forest Road, Orange Concept Plan
- Section 7.0: Private Hospital Project Application
- Section 10.0: Medi-Hotel Project Application

Volume 2 contains the Appendices which include the range of technical studies undertaken to inform the land use change and Concept Plan and its environmental assessment.

These studies address the Director General's requirements for the environmental assessment and the state significant study. They provide a technical assessment of the environmental impact of the proposed development, and recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

1.1 Statutory Context

The Major Projects SEPP 2005 identifies development to which Part 3A of the EP&A Act applies, and for which the Minister is the consent authority.

Clause 6 of the SEPP states that development, which in the opinion of the Minister is development of a kind referred to in Schedule 1 (Classes of Development, Schedule 2 (Specified Sites) or Schedule 3 (State significant development) of the SEPP, is declared to be a project to which Part 3A applies.

On 20 June 2007, pursuant to Clause 6 of the Major Projects SEPP, the Minister for Planning, formed the opinion that the proposed development meets the criteria ins Schedule 1, Group 7, Clause 18 of the SEPP, having satisfied himself that the development is a "hospital" with a capital investment value of more than \$15 million.

On 18 July 2007, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the project.

A copy of the Director General's Environmental Assessment requirements and authorisation to lodge a Concept Plan is included in **Appendix A**.

Orange City Council advised on 23 August 2007 that they have been delegated the assessment function of the Major Project Application by the Director General of the Department of Planning. Council has also advised that, upon submission of the Environmental Assessment, a test of adequacy of the submitted documentation will be carried out prior to the commencement of the public exhibition period.

1.2 Project Team

An expert project team has been formed to deliver the project and includes:

Proponent Forest Road Syndicate Pty Ltd
Project/Development Manager Savage Property Enterprises
Urban Planning JBA Urban Planning Consultants

Architects Cox Richardson; Bureau SRH Pty Ltd

Landscape McGregor + Partners

Quantity Surveyors Donald Cant Watts Corke (NSW) Pty Ltd

Geotechnical Jeffery and Katauskas Pty Ltd

Contamination Structural Design Solutions

Building Services Lincolne Scott

ESD Advanced Environmental

Traffic and Transport John Coady Consulting Pty Ltd

Phase 1 Preliminary Environmental

Site Investigation

Environmental Investigation Services

Noise Acoustic Logic

2.0 Site Description

2.1 Location and Context

The site of the proposed private hospital is located 3.5km to the South of the Orange CBD on Forest Road (see **Figure 1**). The site is bounded by Forest Road and Bloomfield Hospital to the east/south east, to the south is an existing isolated retail premises and to the north and west the site is bounded by generally cleared farmland. The site is located within the Orange Local Government Area.



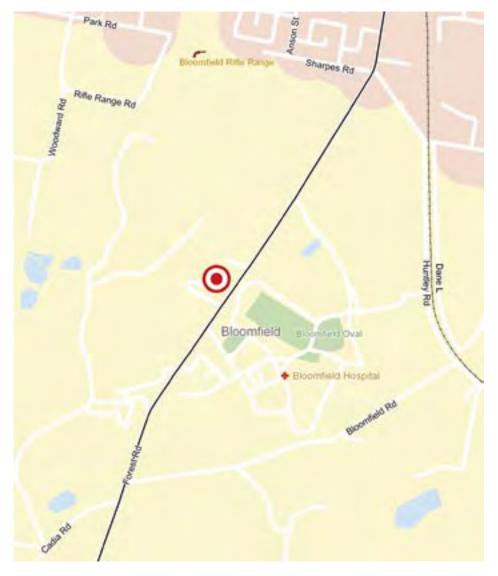


Figure 1 - Locality Plans

2.2 Land Ownership and Legal Description

The site is known as 3403 Forest Road and is legally described as Lot 1 in DP 549856. The current owner of the site is Forest Road Syndicate Pty Ltd.

2.3 Site Description and Analysis

Existing use

The site currently contains a disused outdoor cinema and associated infrastructure, however it is has not been used for this purpose for at least 20 years. It is largely cleared and comprises large areas of hardstanding which were used a car parking spaces for the cinema.

Physical Context

The site has an area of approximately 6 hectares and is generally flat with a gentle fall towards the creek to the north west. The highest point on the site is on the south east corner at RL 913.5 falling to RL 908 on the north west corner of the site – a fall of approximately 5.5 metres over approximately 150 metres.

Access

Access to the site is obtained directly from Forest Road which is classified as a rural road. There are also two existing roads on the site which run perpendicular to Forest Road. One is located along the northern boundary of the site and the second runs parallel to the southern boundary of the site. The site is not affected by any road widening or road realignment proposal.

Existing Infrastructure and Services

The only existing infrastructure on the site is an electricity kiosk station which is supplied via an overhead 11kV supply in Forest Road. The site is not currently connected to the Council's stormwater system or sewer system. Nor is the site connected to the Town's water and gas supplies. Nor is there any communications infrastructure on the site.

Vegetation

The site is generally clear of vegetation with the exception of a row of trees located to the south of the site. A significant row of trees are also located just north of the site on the adjacent property. None of the vegetation on the site is listed as being significant and the Section 149 certificate issued for the site notes that the land does not include or comprise critical habitat. The site is not identified as being bushfire prone.

Hydrology, Groundwater Conditions and Soils

Jeffery Katauskas Pty Ltd was commissioned to undertake a Geotechnical Investigation of the site (Refer **Appendix E**). Boreholes dug out during the investigation indicated the following:

- The site is underlain by Tertiary Basalt which varies in depth between 1.5 metres and 5.2 metres.
- Natural soils on the site predominantly comprise silty clay with some clayey silt and silty gravelly clay layers.
- Soils on the site are generally of medium plasticity with some areas of high and low plasticity encountered in some boreholes.
- The silty clays sampled are assessed to have low to moderate shrink/swell potential with changes in moisture content.
- Groundwater levels vary between 1.3 metres to 2.8 metres.

2.4 Surrounding Development

To the East of the site

Directly opposite the site on the eastern side of Forest Road is Bloomfield Hospital (see **Figure 2**) which comprises some 144 hectares of public hospital services. The Hospital has just recently received planning permission to expand its services, through the relocation of the Orange Base Hospital to a new facility to be constructed at that location, thereby forming a comprehensive health campus and an important health hub. The buildings are currently low rise, with approved buildings rising to 3 storeys in height. The hospital is set in an historic landscape setting and is listed on the State Heritage Register.



Figure 2 - Bloomfield Hospital

To the North and West of the site

To the north and west of the site is Crown Reserve land. Currently this land is undeveloped, however in the future it is likely that this land will be developed for residential use as a result of the projected southward expansion of the Orange Urban Area.

Also to the west of the site are an existing watercourse and two dams (see Figure 3).



Figure 3 – Surrounding Crown Reserve lands

To the South of the site

The parcel of land to the south of the site is also generally clear of development, with the exception of a small rural post office building and a few scattered low scale buildings as shown in **Figure 4** below.



Figure 4 - Development to the south of the site

3.0 Planning Framework and Context

3.1 NSW State Plan

The development of the Orange Private Hospital meets the following objectives of the NSW State Plan, launched by the NSW Premier the Hon Morris lemma MP in November 2006. In particular, the hospital facilitates the delivery of:

- Health communities
 - S1 Improved access to quality healthcare
 - S2 Improve survival rates and quality of life for people with potential fatal or chronic illness through improvements in health care
- NSW: Open for Business
 - P1 Increased business investment
- Stronger Rural and Regional Economies
 - P6 Increased business investment in rural and regional NSW
 - P7 Better access to training in rural and regional NSW to support local economies

3.2 Strategic Plans

The Orange Sustainable Settlement Strategy

The Orange Sustainable Settlement Strategy was endorsed by Council in 2004. The Strategy follows an investigation into Orange's urban land needs for the next 20 years, including an assessment of urban land supply and demand, infrastructure capacity, city form and structure and urban constraints. The Strategy will inform future zoning for the city and surrounds. Council's report and recommendations on the Strategy relating to the site are at **Appendix F**.

The Forest Road site is considered in the strategy as part of Land Unit No. 11 (LU-11). The strategy identifies the potential development role for LU-11 as being rural in the short term with conversion to urban residential in the medium to long term. The strategy however acknowledges that there is short term potential for a limited urban role associated with the development of the new base hospital. A plan showing the site within LU11 is shown at **Figure 5** below.

Following the exhibition of the strategy, Council endorsed the recommendation that:

planning commence immediately to define the feasibility of, and urban form for, establishing a hospital "suburb" within Land Unit 11.....as indicated in the Structure Plan.

The proposed uses for the Forest Road site are therefore consistent with Council's future strategic planning for the city and in particular the South Development Areas. Discussions are currently taking place with Orange City Council regarding the appropriate zoning provisions to apply to the site in the new Template LEP.

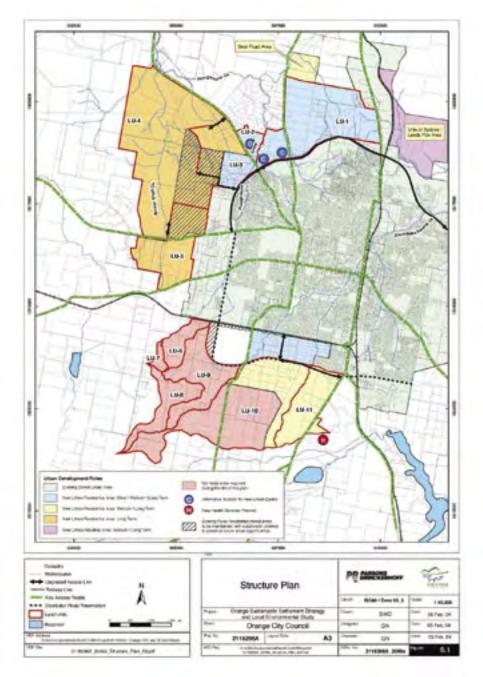


Figure 5 - Orange Settlement Strategy Structure Plan

3.3 Relevant Legislation

The Environmental Planning and Assessment Act (EP&A Act) is the only legislation relevant to this concept plan application.

3.3.1 Environmental Planning and Assessment Act 1979

Part 3A of the EP&A Act outlines the process for considering major project applications. In particular it outlines:

- What development consists a major project;
- The matters which the minister must take into account when assessing a major application;
- Information which must be submitted with an major project application;

- The environmental assessment requirements for approval;
- Public exhibition of major project applications;
- Assessment report procedures; and
- Appeals under Part 3A.

3.3.2 Protection of the Environment Operations Act 1997

The NSW Environment Protection Agency issues licences under the *Protection* of the Environment Operations Act 1997. The licences are used to control the acute, localised and cumulative impacts of pollution on the environment in NSW. Certain medical facilities, such as hospitals, pharmacies and medical consulting rooms that generate or store a certain quantity of hazardous waste each year are required to be licenced under this Act.

The Orange Private Hospital Campus may generate or store waste classed as hazardous, once the facility is operational.

However, as operators have not yet been appointed to construct or manage each of the facilities located on the campus, the exact nature of wastegenerating and using facilities is not yet known, and nor is the quality of waste they will use or store.

Therefore, once proponents and/or operators of the medical facilities on the campus have been appointed, and the designs and uses of each of the facilities have been refined, the NSW EPA will be approached to ascertain whether or not a licence to generate or store hazardous waste on site is required.

Should a licence under the POEO Act be required, it will be obtained prior to the issue of an occupation certificate for each of the medical facilities.

3.3.3 Protection of the Environment Operations Act 1997

This section summarises the relevant state and regional environmental planning instruments and policies that apply to the site. The following planning instruments and planning policy documents are of key relevance to the proposed development:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy 55: Remediation of Land;
- Draft State Environmental Planning Policy 66: Integration of Land Use and Transport; and
- Orange Local Environmental Plan 2000.

3.3.4 Relevant guidelines (or draft guidelines)

The following guidelines have been addressed during the preparation of this concept plan:

 Contamination – Guidelines for Consultants Reporting on Contaminated Sites. NSW Environment Protection Authority, 1997; State Environmental Planning Policy No 55 – Remediation of Land

- Flora and fauna:
 - draft Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (December 2004), prepared by the (then) Department of Environment and Conservation;
 - Guidelines for Threatened Species Assessment (DEC and DPI 2005); and
 - Threatened species assessment guidelines: the assessment of significance (DECC 2007).
- Traffic "Guide to Traffic Generating Developments". Section 3 Landuse Traffic Generation. Roads and Traffic Authority, October 2002

3.3.5 State Environmental Planning Policy (Major Projects) 2005

Major Projects SEPP identifies development that is of state significance. Clause 6 of the Major Projects SEPP provides that development, that in the opinion of the Minister for Planning is development of a kind referred to in Schedule 1 (Classes of Development), is declared to be a project to which Part 3A of the EP&A Act applies.

On 20 June 2007, pursuant to Clause 6 of the Major Projects SEPP, the Minister for Planning, formed the opinion that the proposed development meets the criteria in Schedule 1, Group 7, Clause 18 of the SEPP, having satisfied himself that the development is a "hospital" with a capital investment value of more than \$15 million.

Subsequently, on 18 July 2007 the Director General's Environmental Assessment Requirements for the project were issued.

On 23 August 2007, Orange City Council advised that they have been delegated the assessment function of the Major Project Application by the Director General of the Department of Planning. This concept plan is therefore submitted to Council for their review and assessment.

3.3.6 State Environmental Planning Policy (Infrastructure) 2007

The aim of State Environmental Planning Policy (Infrastructure) 2007 is to make the relevant traffic authority aware of, and given the opportunity to make comment on developments that generate significant levels of traffic. The Traffic Authority for the site is the NSW Roads and Traffic Authority (RTA). The RTA has been consulted during the preparation of the Concept Plan and a traffic impact assessment is discussed in **Section 5.5** of this Report and included in **Appendix G**. The report concludes that the site is appropriate for its intended uses.

3.3.7 State Environmental Planning Policy 55: Remediation of Land

State Environmental Planning Policy 55 – Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. It requires that a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated, and that is the land is contaminated whether or not the land can be made suitable for the proposed use. A Phase 1 Environmental Site Investigation has been undertaken and is discussed in **Section H** of this report.

3.3.8 SEPP (Building Sustainability Index: BASIX) 2004

SEPP (Building Sustainability Index: BASIX) 2004 (the BASIX SEPP) requires certain types of residential development be accompanied by a list of commitments by the applicant as to the manner in which the development will be carried out. Those commitments show how that development will meet certain water and energy saving targets applying to that development. BASIX also overrides provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

The residential component of the Orange Private Hospital campus will be designed to exceed the energy and water targets applying to the site (refer to **Appendix I** – Private Hospital: Orange – DA Report – ESD initiatives). BASIX certificates showing compliance with this SEPP will accompany a subsequent Project or Development Application in the Residential Precinct of the Campus.

3.3.9 Draft State Environmental Planning Policy 66: Integration of Land Use and Transport

Draft State Environmental Planning Policy 66 – Integration of Land Use and Transport (Draft SEPP 66) aims to ensure that the urban structure, built forms, land use locations, subdivision and street layouts help achieve the following relevant planning objectives:

- (a) improving accessibility to housing, employment and services by walking, cycling, and public transport,
- (b) improving the choice of transport and reducing dependence solely on cars for travel purposes,
- (c) moderating growth in the demand for travel and the distances travelled, especially by car,
- (d) supporting the efficient and viable operation of public transport services,
- (e) providing for the efficient movement of freight.

The proposed Orange Private Hospital Campus locates complementary land uses in close proximity to each other, so that the site functions in a self-contained manner and is linked to the Orange CBD by the proposed public bus route.

3.3.10 Orange Local Environmental Plan 2000

The Orange Local Environmental Plan 2000 (Orange LEP) currently provides the planning framework for the assessment of this development proposal. It identifies land use zones within which certain land uses are permissible or prohibited. It also includes a number of Clauses containing provisions that must be considered in determining development applications. The relevant aspects of the amended Orange LEP are set out in **Table 1** below.

The site is zoned 1(a) General Farming Zone under the Orange LEP. As can be seen from the table, some of the proposed uses on the site are currently prohibited in the 1(a) General Farming Zone. Under Section 75J(3) of the Act, the Minister is able to approve the carrying out of a project that is part permissible and is therefore able to consider the concept plan. It should be noted that the proposed uses on the site are supported by the Orange Sustainable Settlement Strategy that has been endorsed by Council and will inform future zoning decisions in the city.

Table 1 - Relevant provisions under Orange LEP

Standard
1(a) General Farming
The Hospital, motel and hostel accommodation, medical
consulting rooms (where ancillary to the hospital)
Residential (at proposed densities), childcare, seniors
living
No specific controls
No specific controls

The proposed residential development and childcare facility are prohibited in the zone. Under Section 75J(3) of the Act, the Minister is able to approve the carrying out of a project that is part permissible and is therefore able to consider the concept plan. It should be noted that the proposed uses on the site are supported by the Orange Sustainable Settlement Strategy that has been endorsed by Council and will inform future zoning decisions in the city.

Objectives of the 1(a) General Farming Zone

The objective of the 1(a) General Farming zone is:

to provide for an area with an open rural character comprising agriculture, other primary industries and development consistent with a rural location, and which includes some rural living opportunities that do not reduce the potential for productive primary industries.

Although the development in the concept plan is inconsistent with the objective of the zone, it is consistent with the land use table and Orange City Council's desired future character for the site, as articulated in the Orange Settlement Strategy, which will be used to inform the new comprehensive LEP for Orange.

In addition, as the site is a disused drive-in theatre that has fallen into disrepair, no productive primary industries will be displaced as part of this development. Current grazing on adjoining properties will not be affected by this development.

The concept plan has been prepared to create a low-scale medical precinct that complements its rural surroundings and adjacent heritage landscape, and will not prejudice the use of nearby properties for general farming purposes.

Heritage significance of the locality

The site is located in the vicinity of the Bloomfield Hospital, which is listed on the NSW Heritage Register as an item of State heritage significance. In addition, Bloomfield Hospital, specifically "Nymagee Lodge" (the main administration building); the entry gateway, Elm Avenue and grounds are listed in Schedule 8 of the Orange Local Environmental Plan 2000 as items of state and local significance (Heritage Study References M28 and L4).

The concept plan has been prepared to minimise any impacts of the proposed private hospital campus on the listed items, including their significance, curtilage and setting. It has also been designed to promote significant views to the heritage items from the private hospital campus.

This has been achieved through the provision of generous setbacks from Forest Road, providing complementary plantings along the boundaries of the site, limiting the development to two storeys generally (with a narrow projection of three storeys near the main entrance) and selecting materials that echo the colours and character of the historic buildings yet establish a contrast of contemporary construction techniques and application.

Orange Development Control Plan 2004

The Orange DCP provides guidelines on certain types of development throughout the local government area, as well as containing certain planning controls, including carparking rates applying to the site.

4.0 Concept Plan

4.1 Overview

The Concept Plan establishes the vision and planning and development framework which will be used by the consent authority to assess future development proposals within the Orange Private Hospital site. It articulates what Forest Road Syndicate Pty Ltd is seeking to achieve for future development and sets the broad parameters for the development of the site.

This section of the document establishes the key development objectives and outcomes that underpin the development of the Orange Private Hospital site and recommends strategies to achieve these outcomes. These strategies result in actions which are detailed in the Statement of Commitments

The Concept Plan vision for the site has been prepared by Cox Richardson Architects and is supported by technical studies which are appended to this report.

The Concept Plan is a blueprint for the future development of the Orange Private Hospital site. It demonstrates, through a series of strategies, how the components of the project can lead to the sustainable development of a mixed use precinct comprising medical, commercial, retail and residential uses.

The challenge of the Concept Plan is to address the environmental setting and challenges of the site in a way that creates a positive and sympathetic response to the local environment, including Broomfield, while at the same time providing important complementary healthcare services to western NSW.

4.2 Concept Strategies / Vision

The Orange Private Hospital Campus seeks to create a non-institutional health precinct that includes facilities ranging from a "traditional" private hospital, to accommodation for patients, carers and staff, and complementary amenities to support these users. Each of these components, namely hospital, medihotel, hostel/cancer care and residential, will complement each other, and the adjacent Bloomfield (Orange Base) Hospital.

Further, it will ensure Orange becomes a "Centre for Health Excellence", that attracts the highest quality practitioners to the facility, as well as patients from across rural and regional NSW.

Economic

Locating the proposed Orange Private Hospital across the road from the Bloomfield (Orange Base) Hospital will deliver important savings in travel time and costs for both practitioners and patients of the proposed private hospital.

Treatment services at the two facilities will be complementary, and it is expected up to 18 specialists will visit both hospitals each day. Patients who are unable to obtain a particular treatment at say the public hospital, would need to travel only across to the other side of Forest Road to receive that treatment, rather than having to commute into the centre of Orange, or perhaps even another town, thus building self-sufficiency in the provision of health care services to Orange and its local community. This will go on to deliver important cost savings to the Greater Western Area Health Service, which they can then direct into the treatment of patients and the recruitment and retention of staff.

Employment benefits associated with the new hospital are manifold. They range from short-term construction jobs for local tradespeople and businesses in Orange, to long-term professional roles for the up to 120 staff who are expected to work in the facility, once it becomes fully operational.

Community

The establishment of the new Orange Private Hospital will deliver important social benefits to the community of Orange.

The most important of these benefits is encouraging younger people to remain in, or return to rural centres such as Orange, for employment opportunities, rather than being forced to move to urban areas at the end of their educational career, due to the large number and broad range of job opportunities that will be available at the facility. Locating the facility so close to the Bloomfield Hospital will also encourage more learning and teaching experiences, and linkages between the institutions.

In addition, the complementary treatment services provided at the private hospital will provide an improved capability to improve the health of the Orange community and people using the Orange health services, in particular patients with higher-risk illnesses that would have necessitated travelling long distances for treatment.

A cancer resource centre is also proposed to be located on the site and will provide important respite to both the families of people suffering from cancer, and the patients themselves. This centre will be available to both public and private patients, and together with the proposed childcare centre, hostel and "medi-hotel", will minimise stress and inconvenience for all who are required to visit either the Public or Private Hospital.

Provision of a range of short- and long-term accommodation options within the precinct is a valuable way to attract and retain staff for both the public and private hospital, and provide important accommodation options for families whose loved ones require treatment.

The ancillary retail services located within the precinct will meet the day to day needs of residents and visitors to the precinct, as well as shops and services that are typically found in a hospital. Likely services provided in the facility include café, newsagent, florist and pharmacy.

Environment / sustainability

The proposed Private Hospital is designed to create a non-institutional form that minimises its impact on its local environment.

Each of the precincts of the campus sits in established landscaped grounds that complement the site itself and heritage form of the Bloomfield Hospital. The landscaped areas have been designed to minimise water use, with stormwater and precipitation to be collected and reticulated throughout the site according to the principles of water sensitive urban design.

In addition, the Hospital itself will include measures to minimise its water and energy use, and intends to obtain a building energy rating of 4.5 stars under the ABGR (Australian Building Greenhouse Rating) scheme, and the residential component expects to exceed the minimum BASIX targets applying to the development.

Initiatives proposed throughout the campus include:

- Utilising plantings to control thermal access to buildings;
- Maximising deep soil plantings;
- Reusing materials from the demolition of existing site elements in the new development wherever possible;
- Using energy efficient HVAC (heating, ventilation and air-conditioning) systems throughout all buildings;
- Using energy efficient lighting systems at all times; and

Selecting building materials according to their environmental performance. In addition, there are a multitude of environmental benefits associated with creating a self-contained precinct, adjacent to complementary facilities. These include reduced land take through the consolidation of functions and reduced carbon emissions associated with reduced travelling.

4.3 Urban Structure

The urban structure of the campus is based upon the creation of a network of publicly-accessible streets and open spaces. All of the open spaces are defined by the streets and the non-institutional buildings that comprise the campus, which contributes to a high degree of surveillance and public safety for patients, staff and carers who move around the site.

As noted above, the Campus is divided into four precincts as shown in **Figure 6** below:

- Hospital precinct, to the north east of the site, fronting Forest Road;
- Medi-Hotel precinct, to the south east of the of the site, also fronting Forest Road;
- Residential precinct, to the north west of the site; and
- Hostel/Cancer Care precinct, to the south west of the site.

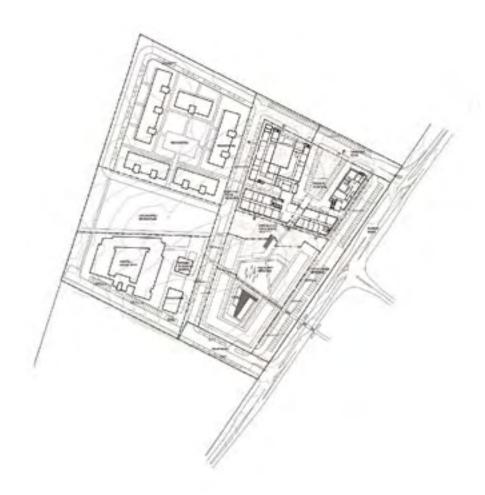


Figure 6 - Concept plan

4.4 Land use

The Campus is proposed to occupy the site of a drive-in theatre on Forest Road, approximately 3 km to the south of Orange. The drive-in theatre ceased operations in approximately 1984, although the existing buildings, screen and associated infrastructure remain on site. Significant areas of bitumen paving remain on site.

Land Use Mix

The Concept Plan seeks approval for the construction of the proposed Orange Private Hospital Campus, which will include the following uses):

- The Orange Private Hospital;
- 60 room "medi" motel;
- Short and medium term accommodation for hospital staff and students;
- Long term dwellings / apartments;
- Lodge / Hostel for patients and families of patients;
- Childcare facilities;
- Gymnasium;
- Ancillary retail activities;
- Internal roads and carparking; and
- Landscaping.

The development will be divided into four precincts, as shown in **Figure 6** above, with precincts comprising the private hospital, "medi-hotel" and ancillary services (including café/retail development) to be developed first. These precincts are discussed in greater detail at Sections 7 and 10 of this report.

The Concept Plan provides sufficient certainty in the location of each of the precincts on the site, and the land uses and building envelopes that comprise those precincts, while providing some flexibility to alter the layout of the precincts as opportunities arise. At the same time, the campus will retain its non-institutional character and human scale.

Dwelling Yield

The concept plan proposes residential development be located in the precinct to the north west of the site. The accommodation would be designed to complement the other medical uses being carried out on the site, and be accessed via the existing road reservation along the northern boundary of the site from Forest Road.

Depending on the final configuration, the residential precinct will comprise a mix of townhouses, apartments and courtyard homes. Some seniors' living units may also be incorporated. It is envisaged a large proportion of residents would be local or visiting staff associated with the public or private hospital. Up to 140 residents could be accommodated in the residential precinct by the time it is fully developed.

In addition, short stay/hostel accommodation will be provided in precinct 3 for patients requiring regular treatment, but not full time hospitalisation.

There are three options being explored in terms of dwelling configuration:

- 114 apartments; or
- 31 townhouses and 36 apartments; or
- 105 seniors' living units.

Any future development in this precinct will be subject to future Project or Development Applications.

In terms of impacts, the traffic assessment at Appendix G has assessed the traffic impacts of 114 apartments in this precinct, as this configuration is expected to generate the largest number of trips. Despite this, the traffic assessment has concluded that the local road network has sufficient capacity to accommodate residential development of this density in this precinct, in addition to the traffic likely to be generated by the remainder of the Private Hospital Campus and the Bloomfield Hospital.

Gross Floor Area

The concept plan for the Orange Private Hospital envisages a total gross floor area across the 6 hectare site of around 25,000 m², as shown in **Table 2** below.

Table 2 -	Gross floor	area of	Orange	Private	Hospital	Campus
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Precinct	Land use	GFA
Precinct 1	Hospital	8950 m²
Precinct 2	Medi-Hotel	3,119 m ²
	Medical Consulting Suites	825 m²
	Gymnasium and Rehabilitation	1,612 m ²
	Retail (internal)	150 m²
	External deck to retail	150 m ²
Precinct 3	Hostel / short stay accommodation	4,500 m ²
Precinct 4	Residential	5,500 m ²
Total		24,806 m ²

4.5 Open Space and Public Domain

The concept plan for the campus is focussed on creating a non-institutional hospital precinct in a landscaped environment that responds to the heritage listed Bloomfield Hospital, located opposite the site on Forest Road. The landscape concept plan for the campus by McGregor + Partners Pty Ltd is at **Appendix D**.

The design philosophy for the landscape of the project encompasses ecologically sensitive design through water management and species and material selection across the entire campus. The landscape design seeks to create a place that encourages and enhances health, recuperation and healing and facilitates positive sensory experience, for the diverse users of the site. It also seeks to become a place of comfort that allows the user to interact with and observe references to the landscape's life cycles and the site's contextual heritage, both natural and introduced. **Figure 7** below shows the overall landscape plan for the campus.



Figure 7 - Landscape plan for the Orange Private Hospital Campus

Parks

A series of specific landscape zones has been created across the site accommodate the wide range of uses and users. These key areas are described in the landscape architectural statement prepared by McGregor + Partners as follows:

Hospital health/productive gardens. These gardens use a range of productive and therapeutic species, such as fruit trees, herbaceous, aromatic and flowering plants that allow and promote direct interactive participation in the landscape by patients, carers, residents and visitors alike. Opportunities for quiet reflection are distributed throughout, which also link the Hospital and Medi-Hotel and make reference to the site's contextual heritage, both natural and introduced. A covered pedestrian bridge/path allows users to pass through and across the garden from the Hospital to the Medi-Hotel in inclement weather while preserving distant views of Mt Canobolas to the west.

Hospital gravel courtyard and shade/fern courtyard. The northern gravel courtyard is as an outdoor room that connects the building and landscape, establishing a relationship that adds to the overall connectivity of the built form and its landscape setting. A dense screen planting obscures the hospital services that are housed at the northern end of the courtyard. The southern shade/fern courtyard acts as an entry zone as well as outdoor seating area.

Medi-Hotel pool courtyard. This is a secluded central island floating in lush garden environment and is accessed from a single point on its eastern edge. A lawn area and sun deck with shower and seating area add to the amenity of the courtyard.

Medi-Hotel lawn courtyard. This is a flexible open green space area between the eastern and western wings of the medi-hotel. It allows passive recreation and amenity and serves as an outdoor cinema viewing room for films projected onto a screen that is integrated into the adjacent western building façade.

Medi-Hotel plaza. This is located between the health/productive gardens and the medi-hotel central lawn and establishes an important link between the two.

Central park/open green. This area provides a strong axial link between the residential and hostel precincts. It serves as a public open space for the entire development with its composition of individual fields serving as a unifying communal place.

Hostel communal courtyard and residential communal courtyard. These are outdoor rooms that provide flexible spaces and a diversity of active and passive experiences.

Species selection

The landscaping concept plan for campus seeks to establish a strong landscape identity for the site that is sympathetic with the remnant vegetation of the area while selective zones such as the Health/Productive Gardens and Forest Road tree planting make greater reference to the Bloomfield Hospital site.

The use of native and endemic species will assist in reducing water requirements, as the plants are adapted to local conditions, while assisting in the invigoration of local flora and fauna communities. They will also achieve better growth and while minimising long term maintenance requirements, than most introduced species.

Street network

The campus will be accessed via two existing road reservations off Forest Road, opposite the heritage listed Bloomfield Hospital.

The Forest Road street frontage seeks to establish a harmonious interface between the proposed development and the existing 'heritage landscape' planting outside the Bloomfield Hospital. This will be achieved through the creation of a sympathetic planting of *Quercus palustris* with an understorey planting of native groundcovers and grasses along the Forest Road boundary of the site.

At-grade carparking will be located within the site boundary along the Forest Road street frontage. This parking will be screened by the Forest Road plantings, and set in decomposed granite to allow easy pedestrian movement to and from the building edge.

The principles of water sensitive urban design have been applied across the site, in particular in the management of stormwater runoff from streets and hard surface areas. Landscape bioswales are located along the street network to filter and retain as much water as possible within the site, while also collecting runoff from building roof areas. Bioswales will be planted native aquatic grasses and sedges to allowing maximum bio filtration.

Pedestrian Connections

Pedestrian links traverse the site, encouraging patients, staff and carers to explore the numerous parks and areas for quiet reflection.

The majority of links are wheelchair accessible, and covered walkways and bridges between buildings have been designed to maintain views to the rural areas beyond while providing protection during unfavourable weather conditions. Pedestrian links are landscaped in such a way for all runoff to be collected in bioswales, and redistributed across the site as irrigation.

4.6 Water Cycle Management

The site of the Orange Private Hospital Campus is generally flat, with the centre of the site partially covered by bitumen, a remnant of its former use as a drive-in theatre. The outer areas of the site remain grassed, and a number of structures associated with the former use remain on site.

The western grassed-area of the site includes two drainage lines: a shallow one extending approximately north-west from two concrete water tanks near the centre of the site, and a second in the south-west corner which forms a moderately deep gully. These lines drain into the adjoining land to the west, where any runoff collectes in a series of farm dams.

The concept plan proposes a number of measures to reduce water consumption across the Orange Private Hospital Campus site, primarily through the adoption of water sensitive urban design (WSUD) principles. Initiatives proposed include:

- Using water efficient fixtures and fittings in all bathrooms and kitchen areas;
- Water metering;
- Harvesting of rainwater and stormwater; and
- Incorporating on-site wastewater treatment to provide for non-potable uses on site.

Adopting the principles of WSUD enables drainage pipes and systems that avoid surface infiltration to be minimised, and extensive networks of bioswales and wetlands to be created to harvest, treat and slow the discharge of runoff into the stormwater system.

Measures adopted across the campus include:

- Biotope/bioswales with native planting to internal central road, external boundary road and parking areas;
- Biotope/bioswales in communal, hostel and pool courtyards;
- Permeable and semi permeable pedestrian surface materials to be used in gardens and parking bays across the site to minimise stormwater run off and maximise filtration;
- First flush roof water from buildings is to be directed to filtration biotopes/ bioswales; and
- Clean roof water from buildings is to be collected into storage tanks and reused across the site.

The movement of stormwater across the site will be managed through the adoption of water sensitive urban design principles.

In addition, the use of potable water across the campus will be minimised through:

- Bathroom and kitchen areas in commercial and hospital buildings fitted with water efficient fixtures and fittings including waterless urinals;
- Residential buildings exceeding BASIX water targets; and
- Water metering and leak detection for major water users.



Figure 8 - Stormwater management plan

4.7 Access and Transport

The site has a frontage of 300m to Forest Road, which forms the eastern boundary of the site. Two existing road reserves, which run off Forest Road, adjoin the site: Finneran Road, adjacent to the northern boundary, and Kemp Road, which is adjacent to the southern site boundary. Access to the former drive-in on the site was via Kemp Road.

External Road Network

As shown in **Figure 9** below, vehicular access for the proposed development is off Forest Road via the two existing road reservations located adjacent to the northern and southern site boundaries. Vehicular access arrangements will be integrated with the future "sea-gull treatment" intersection of the Bloomfield Hospital access off Forest Rd, make provision for all turning movements at the southern driveway, while the right-turn movement from the northern driveway is prohibited.

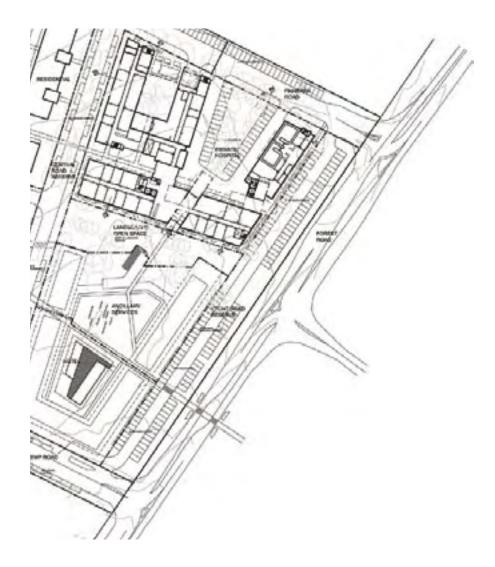


Figure 9 - Access to the site

Currently, Forest Road in the vicinity of the sites is classed as a regional road, and is constructed to a two-lane rural road standard with a sealed carriageway approximately 6.5m wide between edge lines with a 500mm bitumen shoulder on each side. The section of Forest Rd in the vicinity of the Private Hospital Campus is subject to a speed limit of 80km/h, but is otherwise devoid of traffic and parking controls.

Internal Road Network

Access into the site will be as follows:

- The northern (Finneran Road) access will be used primarily as access for the Private Hospital and Residential Precinct, particularly by traffic travelling from the north.
- The southern (Kemp Road) access will be used primarily as access for the hotel/restaurant, hostel and childcare centre, particularly by traffic travelling from the south. It will be used by all vehicles departing the site with a destination to the south.

Vehicular access for heavy and commercial vehicles will be primarily via the Finneran Road access.

Vehicle movement within the site will be managed by a signage.

On-site carparking

A total of 480 parking spaces for private vehicles will be provided across the site, and the quantum has been informed by the rates in Chapter 15 – Carparking in the Orange Development Control Plan 2004.

As a substantial proportion of the users of the ancillary facilities on site will be drawn from patients, visitors and staff of the public and private hospital, rather than persons making unique trips to the site, fewer carspaces have been provided than as recommended in Council's DCP. This is discussed in greater detail in **Appendix G**.

Public Transport

Although the site is not currently serviced by public transport, it is recognised as being of central importance, given the location of the site on the periphery of the Orange urban area. As part of the construction of the new Bloomfield Hospital, discussions are underway with local bus companies to provide a bus service which will connect the area with central Orange.

The proposed bus service would access the Bloomfield Hospital via the new entrance on Forest Road. It is prudent for the proponents of the Private Hospital to join these discussions to enable the bus to service both hospital facilities.

Pedestrian and Bicycle Facilities

A series of interconnected recreation areas, surrounded by dual use pathways is are located in the vicinity of the site. In addition, there is a sealed pathway that leads out of town past Bloomfield Hospital and joins Gosling Creek Reserve, which is suitable for both pedestrian and bicycle access. The Campus will provide suitable links into this network.

To facilitate pedestrian movement between the two hospitals, a pedestrian refuge will be constructed in Forest Road, approximately midway between the southern access driveway serving the Orange Private Hospital and the access driveway serving the Bloomfield Hospital.

4.8 Built Form

This concept plan establishes built form that is for the campus responds to the heritage significance of the Bloomfield Hospital site, on the opposite side of Forest Road. This includes providing generous setbacks and landscaped areas between the proposed buildings and Forest Road, and ensuring all buildings kept at a low scale and have a non-institutional character.

The campus concept plan is at Figure 10 below.

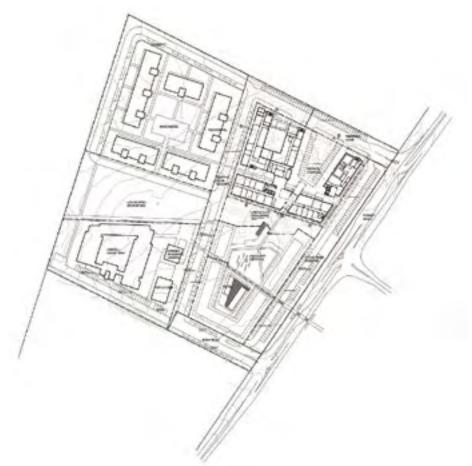


Figure 10 - Campus concept plan

Further, the design creates a strong sense of address to Forest Road, while delivering a health precinct with a clear central gathering space or heart.

Hospital and ancillary buildings fronting Forest Road are setback 24 metres from the road, and are predominantly two storey, with a narrow three storey section adding variation to the streetscape and to define the entry to the hospital's internal and external spaces.

This edge of the site is reinforced by street trees and planting that also reinforces the existing trees on the east side of Forest Road. The hospital and short stay functions are grouped on the Forest Road edge with good public access while higher density housing associated with the health precinct is located to the west of the site. In this way currently permissible uses are located near the road and residential uses adjacent to future residential areas.

A central plaza is located close to the Forest Road edge between the hospital and short stay accommodation and a large 'village common' is proposed to the east of the plaza extending the open space throughout the site to the west view axis.

Materials and finishes for all structures across the site will include rendered masonry, pre-finished metal cladding, glazed window systems, and metal mesh screens and sun shading devices, in keeping with the commitment to deliver environmentally sustainable design buildings with high amenity for users.

Significant areas of the site are dedicated to open space, in the form of pedestrian walkways and areas for quiet relaxation or more active pursuits. At-grade carparking for staff and visitors will be distributed throughout the site to meet demand, and will integrated into the landscape through framing with native plantings.

4.9 Indicative Project Staging

The Orange Private Hospital Campus has been divided into four precincts: private Hospital Precinct, Medi-Hotel Precinct, Hostel/Cancer Care precinct and Residential precinct.

Project applications for the Private Hospital and Medi-Hotel precincts are at Sections 7 and 10 of this report.

Subsequent project applications will be lodged for the Hostel/Cancer Care precinct and Residential precinct.

Construction of the new Private Hospital will not be affected by the construction of the Orange Bloomfield hospital.

4.10 Infrastructure

Lincolne Scott has conducted an assessment of the availability of infrastructure and utilities to service the Orange Private Hospital Campus. A copy of this assessment is at **Appendix J**.

Water

The campus will be connected to the recently upgraded water infrastructure located in Forest Road immediately to the east of the site. This connection will be used to provide fire fighting and potable water services to each building.

Sewer

The site will be connected to the council sewage system which is located in Forest Road, adjacent to site. Gravity drainage will be used throughout the site.

Electricity

The site will be supplied with electricity via the existing Country Energy network from Forest Road. A network of new substations shall be located throughout the site to distribute power to each building.

Street lighting shall be provided to the roadways and open spaces and pedestrian networks will also be lit. Light pollution will be minimised through luminaire selection where appropriate.

Gas

Natural gas will be supplied to the site by extending and augmenting the existing 160mm PE Alinta main which runs along the footpath of Forest Road, to the east of the site.

Telecommunications

Telecommunications services for the site will be provided via a new connection to the existing network, located in Forest Road. A network of underground conduits and pits shall be provided throughout the site suitable to facilitate the installation of both copper and fire services.

5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Concept Plan proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs).

In accordance with the requirements of the Director General this Part of the Environmental Assessment addresses the suitability of the site for the proposed Concept Plan, and implications of the proposed land uses.

The draft Statement of Commitments complements the findings of this section.

5.1 Director General's Environmental Assessment Requirements

Appendix A provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Key matters addressed in this report include:

- Built form and urban design;
- Relationship to the Bloomfield Hospital and heritage landscape;
- Traffic; and
- Social impacts.

5.2 Justification for the project

The concept plan facilitates the development of a new private hospital, medihotel, hostel and long term accommodation and associated community facilities, opposite the site of the new Orange Base Hospital on Forest Road.

The concept plan is consistent with Orange City Council's vision for the area, as Council's endorsement of the Orange Settlement Strategy was accompanied by a recommendation that:

'Planning commence immediately to define the feasibility of, and urban form for, establishing a hospital "suburb" within Land Unit 11.....as indicated in the Structure Plan.'

Further, the concept plan for the new private hospital, medi-hotel and associated facilities will reinforce Orange's role as a "Centre for Health Excellence", in providing a diverse range of high quality health care to service Orange and Western NSW generally.

The location is considered appropriate as the existing Orange Base Hospital is to be relocated to the Bloomfield site, directly opposite the site on Forest Road. Currently, the Orange public and private hospitals are located 2.5 km apart, in the centre, and on the eastern fringe of the city of Orange, respectively.

In addition, Australia's largest healthcare property trust, Australian Unity Investments, has publicly announced that it has purchased the land, and will purchase the hospital, medi-hotel and other buildings, once construction is completed. Completing development of the private hospital campus is therefore a priority of Australian Unity Investments.

It is envisaged that some of the existing medical practitioners in Orange may relocate their primary consulting rooms from existing medical facilities in the Orange CBD to the new hospital. These practitioners are likely to include those based at the existing day surgery facility in Orange. However, it is expected

that the majority of the general practitioners and specialists currently practicing in Orange will retain rooms in the CBD, and attend surgery or visit patients in both the public and private hospitals on an as-required basis. Travelling times for these practitioners between the public and private hospitals will be significantly reduced when compared to the existing situation, as the two hospitals will be located in close proximity.

The development proposed in the concept plan is therefore justified and should be supported by the Minister for Planning

5.3 Built Form and Urban Design

Introduction

The built form and urban design of the proposed Orange Private Hospital Campus has been expressly designed to respond sympathetically to the rural character of the landscape and close proximity to the heritage-listed Bloomfield Hospital. In addition, the design seeks to deliver a "non-institutional" built form that encourages a relaxing and non-confrontation atmosphere, which is essential for a medical precinct.

As shown in the architectural plans at **Appendix B**, the campus is divided into four distinct but complementary precincts. Each precinct comprises a single building, or series of buildings, in a highly landscaped environment that has been designed according to the principles of water sensitive urban design (WSUD). A network of slow-speed streets and paved and gravel paths for pedestrians and bicycles provides level access to each of the networks.

Building heights across the campus are predominantly two-storey, with a narrow three-storey section used to define the principal entry to the hospital, as shown in **Figure 11** below.



Figure 11 - Image of the built form

Materials and finishes

The forms and elevation treatments of the new development will, although simple, are articulated to reflect the buildings' functions and create a human scale and non institutional character.

Materials and finishes include rendered masonry, pre-finished metal cladding, glazed window systems, and metal mesh screens and sun shading devices. In addition, landscape construction will utilise recycled materials and will use materials with low embodied energy.

The materials palette used is simple, utilising natural materials that are apt for their contextual setting and character and in harmony with the proposed architecture. The materials selected also seek to echo the colours and character of the historic buildings yet establish a contrast of contemporary construction techniques and application.

Relationship to existing landscape setting

Buildings in the hospital and medi-hotel precincts are set well back from the Forest Road boundary to respect the heritage landscape setting of the locality. New plantings of advanced *Quercus palustris*, interspersed with a native understorey will complement the mature formal avenue of *Q. palustris* and *Populus deltoides* planted in late 1930's early 1940's, at the entrance to the Bloomfield Hospital site.

The design of the Forest Road street frontage establishes a harmonious interface between the proposed development and the Bloomfield Hospital while minimising the impact on the existing Forest Road curtilage and the significant views to and from the Hospital. The existing 'heritage landscape' plantings on the eastern edge of Forest Road will be maintained and enhanced as a result of the Campus development.

A break in the tree planting adjacent to the central Health/Productive Gardens will allow permeability into the Hospital site and maintain distant views to Mt Canobolas. A low screen planting will also be planted along the entire Forest Road site boundary to help consolidate the frontage.

Carparking, as identified in the Traffic and Parking Report, prepared by John Coady Consulting Pty Ltd at **Appendix G**, is proposed along the Forest Road street frontage. This parking will be framed on the eastern edge by the planting of *Q. palustris* and native understorey groundcovers and grasses and to the west by native trees set in decomposed granite to allow easy pedestrian movement to and from the building edge. At selective points, biotopes/bioswales planted with native aquatic grasses and sedges will capture stormwater runoff from the carpark and road surface areas slowing the water flow and allowing greater biofiltration.

Relationship to new Bloomfield Hospital

All new buildings on the Private Hospital site will be set back a minimum of 24 metres from Forest Road, in a landscaped setting, thus ensuring the impact on the development of the new Bloomfield (Orange Base) Hospital will be minimised.

Views to the hospital will be maintained through a break in the tree planting will be made adjacent to the central Health/Productive Gardens to allow permeability into the Hospital site and maintain distant views to Mt Canobolas. In addition, low-scale buildings will ensure the built form of the public hospital is not compromised.

The new Bloomfield Hospital has been designed to complement the heritage buildings that will be retained on the site, and aims to respect the original layout of the facility. The predominant built form of the Hospital is three storeys, while the main entrance to the hospital building is two storeys.

The design of the Orange Private Hospital Campus will complement the Bloomfield (Orange Base) Hospital.

The Bloomfield Public Hospital to the east of the site is listed on the NSW State Heritage Register because of its high historic 'associative and aesthetic significance'. The hospital and environs is also listed as a heritage item in the Orange LEP 2000. A Conservation Management Plan was prepared in 2006 by the NSW Government Architects' Office. The CMP notes that although the Bloomfield Hospital is 'generally relatively free of defined edges', 'the trees near and on the boundaries of the site provide screening of the buildings and activities of the Hospital from all the surrounding roads' and 'remain a major characteristic of the site'. This is clearly visible from the private hospital

campus site, particularly Forest Road which is lined with a mature formal avenue of *Quercus palustris* and *Populus deltoides* planted in the late 1930's early 1940's. These form a prominent visual and physical boundary to the existing Bloomfield Public Hospital.

To reinforce the heritage values of the Bloomfield site, the concept plan for the private hospital campus has been prepared with the express intention of establishing a clear and harmonious interface between the two sites, and to respect and preserve the existing curtilage and any significant views to or from Bloomfield Hospital.

In addition, sympathetic plantings of *Quercus palustris* along Forest Road will complement and balance with the existing significant historic planting of *Quercus palustris* and *Populus deltoides*. The health benefits of the landscape setting will be reinforced through health/productive gardens throughout the site.

A southern gateway for Orange

The main hospital building will provide an important statement to signify the gateway to Orange's medical precinct, thus reinforcing the City's vision of creating a centre of medical excellence.

The design of the building is centred upon creating a sophisticated yet low-scale "health precinct", rather than a traditional "institutional" building. The new building will be predominantly two storey, with a small three-storey section adding variation to the streetscape and to define the hospital's main entry. A small plaza complements the entry statement to the building, while providing shelter for patients, staff and carers as they make their way inside.

The medi-hotel building provides the gateway to Orange City from the south. The port cochere located on the south east corner is a welcome gesture to both residents and visitors to Orange. It also signifies the southern entry to the campus medi-hotel providing shelter to visitors staying in the precinct.

5.4 Social & Economic Impacts

Location

The new Orange Private Hospital will be ideally located, opposite the new Orange Base Hospital, on the site of the former Bloomfield Mental Hospital. Only 3 km to the south of Orange, via a direct and unencumbered road, colocating the two medical facilities presents numerous benefits for patients, staff, administrators and carers to utilise the complementary medical, social and ancillary services of the two facilities.

Both public and private patients will have access to the services in both facilities, and practitioners will also treat patients at both locations. Certain patients are currently too ill to travel the large distance between the two facilities – this will no longer be a concern, and thus afford these patients an opportunity for treatment that was not previous available.

To facilitate improved access to the medical precinct, Greater Western Area Health Service has commenced discussions with public transport providers in Orange to introduce a new bus route to the site. The bus will convey patients, staff and carers to the two hospitals, with pick-up and drop-off points located near the entrance of the public hospital; this in turn provides easy access to the private hospital via the new pedestrian refuge on Forest Road.

Local walking and bicycle trails will also be extended to connect to both hospitals, providing an important opportunity for recreation and exercise for users of the site, as well as persons travelling directly from Orange.

As noted in section 3.1 of this report, the Orange Settlement Strategy, endorsed by Council 2004, noted that although the site currently has a rural

character, it is expected to be converted to residential uses in the medium-long term. However, following the exhibition of the Strategy, Orange City Council specifically recommended that:

'Planning commence immediately to define the feasibility of, and urban form for, establishing a hospital "suburb" within Land Unit 11.....as indicated in the Structure Plan.'

In addition, the Settlement Strategy identified other growth areas to the south of Orange for future urban development in the vicinity of the site.

Linkages to Bloomfield Hospital and other medical precincts

The City of Orange benefits from a vibrant community of local medical practitioners who have played a vital role in building the area's reputation as a centre of health excellence.

As discussed above, locating the private hospital opposite the new public hospital will ensure a continued improvement of private services that will augment and complement the public services. In particular, advanced procedures and equipment that are not available at the public hospital will be provided at the private hospital. This will deliver significant savings in travel costs, and minimise discomfort, for patients that would otherwise need to travel from the public hospital to the Orange CBD for treatment.

Currently, medical specialists have practices in the centre of Orange, as well as practices at the public or private hospital (or both). This situation is not expected to change following the opening of the new Orange Base Hospital or the Private Hospital. However, it is estimated that Orange specialists spend approximately one hour each day travelling between their practices and the current public and private hospitals. As there are at least 18 specialists visiting the two hospitals each day, this saving in travel time equate to an additional specialist servicing the City; this is vital given the shortage of medical practitioners in regional areas.

5.5 Heritage Impacts

European heritage

The concept plan for the new Orange Private Hospital has been developed with the clear intention of complementing and respecting the existing Bloomfield Hospital and heritage landscape, which is located opposite the site, on the eastern side of Forest Road. This is also discussed in detail at **section 5.3** above.

It has also been prepared to minimise any detrimental impacts on Bloomfield that are associated with the construction and operation of the private hospital campus. Indeed, the augmentation of the vehicular access points into Bloomfield, additional sympathetic plantings along Forest Road and the creation of view corridors to the site will assist visitors, patients and staff of the two hospitals to further appreciate the heritage significance of Bloomfield.

Aboriginal heritage

It is understood the site and the locality is significant to local Aboriginal communities, and a camp was established near to the site in the early twentieth century. Extensive surveys undertaken as part of the flora and fauna assessment for the concept plan (refer **Appendix K**), did not locate any Aboriginal or European relics.

However, should any Aboriginal or European Relics be unexpectedly discovered during works associated with the concept plan, all excavations or disturbances in the area will stop immediately and the Heritage Council of NSW and NSW National Parks and Wildlife Service shall be informed immediately.

5.6 Traffic Impacts

A detailed assessment of the impacts of the proposed Private Hospital Campus was conducted by John Coady Consulting Pty Ltd (refer **Appendix G**). The assessment considers the current traffic conditions in the vicinity of the site, traffic impacts associated with the proposed private hospital development, as well as the proposed Bloomfield (Orange Base) Hospital, which is located opposite the site on Forest Road, as shown in **Figure 12**.

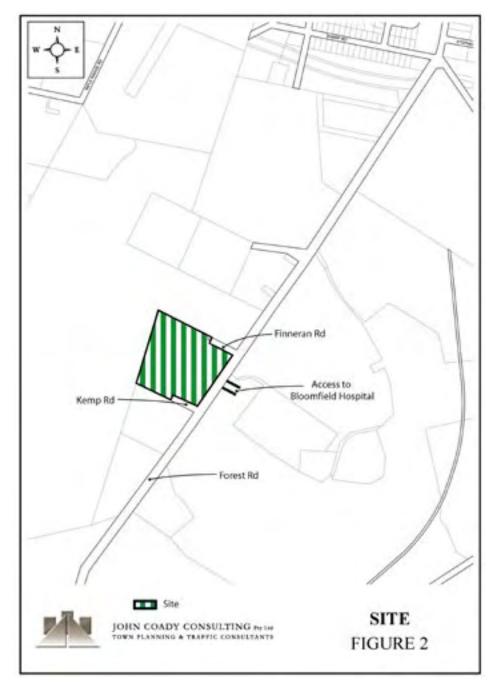


Figure 12 - Relationship of the site to Bloomfield Hospital

Existing traffic conditions

Forest Road forms the eastern boundary of the site. Forest Road in the vicinity of the sites is classed as a regional road, and is constructed to a two-lane rural road standard with a sealed carriageway approximately 6.5m wide between edge lines with a 500mm bitumen shoulder on each side. The section of Forest Rd in the vicinity of the Private Hospital Campus is subject to a speed limit of 80km/h, but is otherwise devoid of traffic and parking controls.

Road reservations form the northern and southern boundaries of the site: Finneran Road (to the north) and Kemp Road (to the south). These roads were used for access to the former drive-in theatre on the site.

According to automatic traffic count data for Forest Road provided by Orange City Council, the average daily traffic flows on Forest Road in the vicinity of the proposed development site are in the order of 6,500 vehicle trips per day (vtph), and grew at an average annual rate of 3.9% in the period 1998 to 2005. The AM peak hour traffic flows are in the order of 520 vtph and grew at an annual rate of 3.0% per annum between 1998 and 2005; PM peak traffic flows are in the order of 600 vtph and grew at an annual rate of 3.7% between 1998 and 2005.

Projected traffic generation

The Orange Private Hospital Campus is proposed to be developed on the site of a former drive-in theatre, approximately 3 km to the south of Orange on Forest Road, opposite the current Bloomfield Hospital. The Bloomfield Hospital is proposed to be redeveloped to become the new Orange Base Hospital. Traffic generated by both of the hospitals will create some impact upon the local road network.

The traffic assessment conducted by John Coady Consulting Pty Ltd has reviewed likely traffic generation from the proposed private hospital campus using the formulae incorporated in the RTA traffic guidelines, in conjunction with an assessment of likely users of the various facilities within the campus. Projected traffic generation from the campus is shown in **Tables 3 and 4** below.

Table 3 - Projected traffic generation from the proposed Orange Private Hospital Campus

		AM Peak			PM Peak		
	IN	OUT	TOTAL	IN	OUT	TOTAL	
Private Hospital	40	10	50	20	80	100	
Hotel/ Motel	5	35	40	35	5	40	
Childcare centre	10	10	20	10	10	20	
Hostel	30	10	40	5	25	30	
Maggie Centre (cancer day centre)	5	5	10	5	5	10	
Residential	10	60	70	60	10	70	
TOTAL	100	130	230	135	135	270	

Table 4 - Projected commercial traffic generation from the Orange Private Hospital Campus

	Daily vehicle trips	Peak hour vehicle trips	Total
Vans and small rigid vehicles	36 trips per day	12 per hour	48 trips per day
Medium rigid vehicles	10 trips per day	4 per hour	14 trips per day

Of these trips, it is assumed that 98% will be travelling to and from the north of the site (towards the City of Orange), with only 2% travelling to the south of the site.

Access into the site from Forest Road will be managed as follows:

Access into the site from Forest Road will be as follows:

- The northern (Finneran Road) access will be used primarily as access for the Private Hospital and Residential Precinct, particularly by traffic travelling from the north.
- The southern (Kemp Road) access will be used primarily as access for the hotel/restaurant, hostel and childcare centre, particularly by traffic travelling from the south. It will be used by all vehicles departing the site with a destination to the south.

Analysis the impact of this additional traffic on Forest Road, as well as the projected additional traffic to be generated by the Bloomfield Hospital, has shown intersections in the vicinity of the site will continue to perform satisfactorily, and average vehicle delays reasonable, once both developments are wholly operational.

Augmentation of intersections

To ensure intersections in the vicinity of the site perform satisfactorily and safely once both the public and private hospitals are operational, vehicle access into the site will be integrated into the proposed "sea-gull treatment" of the intersection for access into the Bloomfield Hospital. This is shown in Figure 13 below.



Figure 13 - Proposed access arrangements to Orange Private Hospital Campus

In addition, all turning movements into the site will be via the southern driveway, and the right-turn movement from the northern driveway is prohibited.

On-site parking

Parking for private vehicles will be provided across the site, and the quantum has been informed by the rates in Chapter 15 – Carparking in the Orange Development Control Plan 2004.

A total of 480 spaces will be provided, which is distributed across the site as shown in Table 5 below.

Table 5 - Allocation of onsite carparking for the Orange Private Hospital Campus

Land use	Number of car spaces
Private Hospital (Main building and Cancer Care Facility)	150 spaces
Ancillary Service Precinct	30 spaces
Hotel	65 spaces
Childcare Centre	5 spaces
Hostel	25 spaces
Cancer Resource Centre	5 spaces
Sub total	280 spaces
Residential	200 spaces
Total	480 Spaces

As discussed at **Appendix G**, in some instances fewer carspaces have been provided on site than has been specified in Council's DCP. This is because a substantial proportion of the patrons of many of the campus facilities will be drawn from patients, visitors and staff of the public and private hospital, rather than persons making unique trips to the site.

Despite this, it can be concluded that the parking provision incorporated in the Orange Private Hospital development proposal is adequate such that the proposed development has no unacceptable parking implications.

Pedestrian access

Pedestrians will move within the site via the network of formed paths and low-speed roads. The majority of the paths are accessible for persons with mobility difficulties, and many provide protection from the elements during periods of inclement weather.

Safe access into the site from the Bloomfield Hospital will be via a pedestrian refuge constructed in Forest Road, approximately midway between the southern access driveway serving the Orange Private Hospital and the access driveway serving the Bloomfield Hospital. The location of the pedestrian refuge is shown in **Figure 12** above.

This location was chosen because:

- It is separated from access driveways where motorist attention can be distracted by turning manoeuvres; and
- It will utilise the existing centre median in Forest Road, which will be converted to a pedestrian refuge.

To ensure this is the safest and most effective way for pedestrians to move between the hospitals, the effectiveness of this refuge will be reviewed once the two hospitals are operating.

In addition, the site is surrounded by dual use pathways that lead out of town past Bloomfield Hospital and joins Gosling Creek Reserve, which is suitable for both pedestrian and bicycle access. The Campus will provide suitable links into this network.

Emergency access

Emergency vehicles accessing the site will use the existing road reserves into the site off Forest Road.

Although the private hospital will not generally accept patients arriving in ambulances in emergency situations, some patients may be transported to the facility from another hospital via ambulance. In those instances, ambulances will access the hospital will do so via the porte cochere off Finneran Road, which has direct access into the hospital lobby. General parking will be restricted in that location so access for emergency vehicles is not restricted.

5.7 Ecological Impacts

FloraSearch has conducted an assessment of the impacts of the proposed Private Hospital Campus on local flora and fauna assessment (refer **Appendix K**).

Specifically, FloraSearch conducted searches for flora and fauna species listed under the NSW *Threatened Species Conservation Act 1995* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), as well as detailed assessment of habitat and non-protected species on the site and adjoining properties. The assessment has been carried out in accordance with the draft Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (December 2004), prepared by the (then) Department of Environment and Conservation.

From their observations of remnant old growth trees, FloraSearch determined that the original plant community on the site was an association of Ribbon Gum *Eucalyptus viminalis* and Apple Box *Eucalyptus bridgeiana*. Much of the original native vegetation has been almost completely eliminated from the site as a result of previous uses, and ground cover is dominated by introduced grass and herb species, often growing through cracks in the existing bitumen surface. No threatened flora species, populations or communities were found on the site.

Fauna on the site was limited to two amphibians, one reptile, 23 birds and three mammals. All but three of the fauna were native species. One threatened bird species (Superb Parrott *Polytelis swainsonii*) was located in woodland adjoining the site.

Assessments of significance under section 5A of the *Environmental Planning* and Assessment Act 1979 were conducted for six plant and animal species whose occurrence on the site could not categorically be excluded by surveys and habitat value assessment, and the Superb Parrot. Species assessed were: Barking Owl, Regent Honeyeater, Koala, Eastern Bent-wing Bat, Narrow Goodenia and Silky Sawinson Pea. These assessments showed the Orange Private Hospital Campus is highly unlikely to have a significant impact on any threatened flora or fauna species. In addition, no matters requiring action under SEPP 44- Koala Habitat Protection, or referral under the EPBC Act were identified.

The report identifies the most significant trees on or adjacent to the site as Trees 57, 67 and 87 and suggests that these trees are representative of the remnant vegetation retained during former development of the site. The aboricultural audit of existing trees conducted by Tree Wise Men Australia Pty Ltd (refer **Appendix L**) makes recommendations to protect these trees during construction of the campus.

Tree 87, Apple Box, *Eucalyptus bridgesiana* is located just outside the site, on the Forest Road boundary. It is proposed this tree be retained, however as it is adjacent to the proposed new intersection and associated road works to be carried out as part of the Bloomfield Public Hospital redevelopment, it will require protection during these works.

To protect these trees, the following measures were recommended by Tree Wise Men Australia Pty Ltd:

- Primary and critical root zones be implemented;
- Construction (cut, compacted fill or trenching) to be restricted in PRZ and CRZ (primary and critical root protection zones);
- Non-permeable surfaces be minimised around trees' PRZ; and
- Trees be maintained in groups where ever possible.

5.8 Ecological Sustainable Development

The proposed Concept Plan for the Orange Private hospital demonstrates a commitment to designing and developing a high quality, environmentally sustainable design that will showcase excellence in planning and urban design.

A number of ESD initiatives will be incorporated into the development as outlined in the ESD Report prepared by Advanced Environmental (**Appendix I**). In short, the development aims to achieve:

- A projected 4.5 Star ABGR status for the hospital and commercial part of the development; and
- BASIX water and energy reduction targets for the residential component;
- The principles within the BASIX will be applied to the other habitable facilities on site such as the motel, short stay hostel etc.

In order to achieve these benchmarks the proponent will commit to the following sustainability initiatives, including:

- Energy efficient mechanical system design:
 - efficient heating, cooling and ventilation systems (HVAC);
 - improved air quality, providing as much fresh air as possible whilst balancing the energy efficiency of air conditioning systems;
 - CO2 control and censors for hospital and commercial components;
 - Tenant exhaust risers for the removal of air pollutants from printing and photocopy area for the commercial
 - Passive design initiatives to encourage thermal comfort;
 - Efficient heat rejection with cooling systems designed to operate at a minimum of 6 cycles of concentration, with alternative means of heat rejection to also be explored.
- Efficient lighting system design:
 - Energy efficient fittings have the added benefit of reducing heat input and load on the HVAC;
 - Appropriate zoning within buildings to allow only necessary lighting to be used in off peak periods;
 - Appropriate lighting levels and minimisation of "flicker" effects.
 - Electrical sub metering and energy monitoring.

- Water Efficiency:
 - Use of water-efficient fittings including waterless urinals in public toilets;
 - Installation of water metering and leak detection;
 - Efficient drip irrigation for landscaped areas;
 - Installation of a fire test water system for collection and re-use of water.
 - Investigation of potential for rainwater capture.
- Good building planning, site planning and on-going building management
- The use of environmentally sustainable and low emission building materials
- Best practice construction techniques.

It is considered that with the implementation of ESD initiatives as described in **Appendix I**, that the buildings within the Concept Plan will become an example of "Australian Best Practice" in Green Design.

5.9 Cumulative Impacts

Cumulative impacts associated with the Bloomfield (Orange Base Hospital) are addressed earlier in this report:

- Social impacts Section 5.4; and
- Operational traffic Section 5.6.

Impacts associated with demolition of the existing structures of the site, and construction of the new campus, will be addressed in detailed construction management plans which will be prepared in association with Project Applications for each of the precincts on the site.

5.10 Contamination and Geotechnical

Environmental Investigation Services (EIS) was commissioned to undertake a Phase 1 Preliminary Environmental Investigation (Phase 1 Investigation) of the site (refer **Appendix H**). The purpose of the Phase 1 Investigation was to assess the likelihood of contamination of the subsurface soils in relation to the suitability of the site for the proposed land use. The Phase 1 Investigation was undertaken generally in accordance with the *Guidelines for Consultants Reporting on Contaminated Sites NSW EPA 1997* and SEPP 55.

Historical Use, Ground Conditions and Potential Receptors

A search, carried out by EIS, of aerial photos, Council's records, Land Title searches, WorkCover Database Records, NSW EPA Records, indicates the following:

- The site has been in use as a drive in movie theatre since at least 1969;
- Prior to 1969 the site was used for agricultural purposes; and
- There are no recorded notices listed on the NSW EPA CLM register and WorkCover have no records for underground storage tank licences issued for the site.

With regard to potential receptors, EIS consider that the main potential receptors are likely to include:

- Gosling Dam, located approximately 1000m to the south of the site;
- Site visitors, workers and adjacent property owners, who may come into contact with contaminated soil and/or be exposed to contaminated dust arising from construction activity; and
- Future site occupants.

Method of Investigation

Fourteen sampling locations were identified for this preliminary environmental site investigation. The sampling method showed:

- No specific potential contaminant resources were identified by the available site history; and
- The distribution of contamination is expected to be associated with imported potentially contaminated fill material and is therefore likely to be random.

Results of site investigation

EIS determined through their assessment and sampling that the potential for widespread contamination of the site is relatively low. This conclusion is based on the following observations:

- With the exception of agricultural use prior to 1970 the site history does not indicate any significant potentially contaminating use of the site, or adjacent sites;
- Laboratory testing did not indicate the presence of quantifiable concentrations of OC/OP pesticides, TPH / BTEX, PAHs, PCBs or asbestos in the samples analysed;
- The results for heavy metals analysis were all considered to be within background concentrations; and
- The borehole logs did not indicate the presence of widespread fillings of the site apart from a thin layer of gravel associated with the carpark.

EIS recommend that normal good engineering site management practice, including run-off control and dust suppression be implemented during earthworks and construction. An appropriate Occupational Health and Safety Plan should also be prepared so that construction workers are prepared should contaminants be encountered at the site.

Geotechnical

A Geotechnical Investigations Report has been prepared by Jeffery and Katauskas and is included at **Appendix E**. The purpose of the investigation was to obtain geotechnical information on subsurface conditions as a basis for comments and recommendations on earthworks, retaining walls, footings and pavements during construction.

Whilst the exact levels of the proposed buildings are not determined on the Concept Plan drawings, given the gentle slope of the site only minor earthworks and regarding to a maximum of about 1-2 metres are anticipated. In summary, there are no geotechnical conditions which will pose any adverse impacts on this development. The subgrade consists of silty clays to depths varying between 1.5 to 5.5m over Basalt Andersite. Ground water exists at varying depths of 2.9 to 3.5m.

The development's pavements will consist of hard stand surfaces constructed on compacted natural and fill materials. The buildings will all be above ground, and founded on pad foundations. There are no basements and hence no requirements for dealing with ground water and the shoring of excavations.

Construction of earthworks, retaining walls, footings and pavements during construction are to be in accordance with the recommendations in the report, as reflected in the Statement of Commitments.

5.11 Construction Impacts

Staging

The Orange Private Hospital Campus has been divided into four precincts: private Hospital Precinct, Medi-Hotel Precinct, Hostel/Cancer Care precinct and Residential precinct.

Project applications for the Private Hospital and Medi-Hotel precincts are at Sections 7 and 10 of this report.

Subsequent project applications will be lodged for the Hostel/Cancer Care precinct and Residential precinct.

Construction management

Impacts associated with the construction of the Orange Private Hospital Campus will be addressed in detailed construction management plans which will be prepared in association with Project Applications for each of the precincts in the campus. The construction management plans will be lodged for approval prior to the issue of construction certificates.

Particular impacts to be addressed include noise, vibration and dust, erosion and sediment control, management of demolition waste and demolition and construction traffic.

Phase 1 Preliminary Environmental Investigation conducted by EIS (refer **Appendix H**) found there was little evidence of contamination or hazardous materials on the site. However, any suspect fill, sub-surface structures or unusual conditions discovered during earthworks are reported immediately to EIS to allow for suitable management of potential contamination issued and any hazardous Building Materials will be removed from the site by a licenced contractor and disposed of in an appropriate manner.

Erosion and sediment control

Impacts associated with the construction of the Orange Private Hospital Campus will be addressed in detailed construction management plans which will be prepared in association with Project Applications for each of the precincts.

However, it is envisaged that the detailed construction management plans will require the provision of silt fences along strategic points of the site, and the construction of at least one sediment collection pond to collect and treat runoff, as appropriate.

Best practice construction management processes will be employed on each stage, and on the site overall, to control soil erosion during construction. These measures will be in accordance with currently accepted principles, as described in Managing Urban Stormwater (EPA NSW) and Soil Erosion and Sediment Control (The Institution of Engineers, Australia). Specific measures may include, but not necessarily limited to, the following:

- Silt Fences with or without diversion banks, to prevent runoff containing silt from leaving the site. These will remain in place until permanent erosion control measures are established.
- Turfed Strips behind all kerbing to control soil washing onto roadways.
- Sediment Basins collecting the runoff diverted by silt fences and diversion banks.
- Sediment Filters across the flow path to all inlets. These may consist of straw bales, rock-filled geo-fabric tubes, geo-fabric over gully gratings, and/ or gravel filters.
- Construction exits located at the boundary of each precinct. These consist
 of shaker trays to dislodge mud from truck wheels; and hose down points,
 to allow washing of soil from vehicles. The runoff from hose down points is
 directed towards sediment basins.
- Grassing or other forms of temporary surface treatment to all exposed areas, until landscaping or permanent surfacing is installed and becomes established.
- Inspection of erosion and sediment control measures after each rain event, clean and repair as required.

In addition, all vehicles leaving the site with fill will pass over a shaker grid for construction traffic. This will be regularly maintained.

Following construction, all exterior surfaces within the development will be treated to prevent soil erosion. This will include a mix of hard and soft landscaping to areas not covered by roads and parking areas.

5.12 Services and Infrastructure

A Building Services Statement prepared by Lincolne Scott is included at **Appendix J**. The report describes the existing provision of infrastructure and services to the site, and the proposed infrastructure to support the eventual development of the site in accordance with the Orange Private Hospital Concept Plan. The findings are summarised below. Additional requirements for each Project Application component (hospital and motel/commercial buildings) are discussed at **Section 8.7** and **Section 11.7**.

Electricity

All buildings on the site shall be supplied from the local Country Energy network from Forest Road. A series of substations shall be located throughout the site to distribute power to each building. All electrical reticulation, both high voltage and low voltage will be installed underground.

Communications

The site is capable of being connected to the local telecommunications network in Forest Road. A network of underground conduits and pits shall be provided throughout the site suitable to facilitate the installation of both copper and fire services.

Sewage

The sewage infrastructure, recently upgraded, located adjacent to Forest Road shall be used for sewage disposal from the development. The council sewage system shall be extended to supply the new development. The sewage system from the development shall reticulate via gravity drainage within the site. A network of sewer pipe lines and manholes shall be installed throughout the site to service all buildings.

Water Supply

The water infrastructure located within Forest Road, which has been recently upgraded, shall be used to derive supply of water to the development.

The council water system shall be extended throughout the site to provide fire fighting and potable water services to each building.

Site Water Harvesting

It is proposed to provide an on site rain water harvesting system. The system shall incorporate underground tanks to store roof collected water. A system of pipe and pumps shall be utilised to distribute harvested water to non potable services such as landscape watering, toilet flushing and urinal flushing.

Gas

A 450 metre extension/upgrade along Forest Road footpath with a 160mm PE Alinta main will be required to supply the estimated load for the development.

The natural gas energy system shall be extended throughout the site to provide gas services to each building. This process with Alinta has begun and is in the application stage.

Stormwater

Stormwater flows will be managed using the principles of water sensitive urban design.

5.13 Consultation

Since the announcement of the relocation of the Orange Base Hospital to the Bloomfield Site, the proponents of the Private Hospital Campus have been actively informing the community of Orange, and Orange City Council through local media, of the proposed development.

Further, presentations have been made to the following agencies:

- Health Committee of Orange City Council;
- Western Area Health Service;
- Private Hospital Division of the NSW Department of Health; and
- Cancer Care (Western NSW group).

There has also been consultation with CanAssist, the cancer patients support group.

In addition, expert consultants' reports have been prepared following discussions with:

- Orange City Council (town planning, parks, heritage and infrastructure);
- Roads and Traffic Authority (Parkes office);
- Local telecommunications and infrastructure providers (eg Alinta, Telstra, Country Energy); and
- Orange field Naturalist and Conservation Society (Flora and Fauna).

5.14 Environmental Risk Analysis

Approach

The Environmental Risk Analysis at **Table 6** for Orange Private Hospital Concept Plan has been adapted from Australian Standard AS4369:1999 Risk Management and environmental risk tools developed by other organisations. The Environmental Risk Assessment establishes a residual risk by reviewing the 'significance of environmental impacts' and the 'ability to manage those impacts'.

The significance of environmental impacts assigned a value between 1 and 5 based on:

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

Significance of	Manageability of Impact						
Impact -	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple		
1 - Low	6 (Medium)	5 (LowMedium)	4 (Low/Medium)	3 (Low)	(Low)		
2 - Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	(Low)		
3 - Moderate	B (High/Modium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)		
4 - High	9 (Hgh)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	(Low/Medium)		
5 - Extreme	10 (High)	9 (High)	d (High/Medium)	y (High/Medium)	6 (Medium)		

Figure 14 - Environmental Risk Matrix

Table 6 - Environmental Risk Assessment

					I			
	lsubizeR tasqml	4 (low/medium)			4 (low/medium)			
Risk Assessment	Manageability of Impact	7			2			
Risk Ass	Significance together	2			2			
Proposed Mitigation Measures		 The hospital precinct has been designed to respect and complement the heritage listed Bloomfield Hospital. The built form is limited to two storeys, with a small 3-storey projection. 	 Hospital buildings have been set back at least 24 meres from Forest Road to minimise impacts on the "heritage landscape". 	 Materials selected echo the colours and character of the historic buildings yet establish a contrast of contemporary design. 	 Forest Road has sufficient capacity to accommodate traffic from both the proposed private hospital precinct and Bloomfield (Orange Base) Hospital. 	 Access into the private hospital precinct will be via two entrances off Forest Road. The northern (Finneran Road) entrance will primarily access the hospital and residential precincts, and the southern (Kemp Road) entrance will primarily service the medi-hotel and hostel. 	 The existing intersections of Kemp/Forest and Finneran/Forest Roads will be upgraded, and a pedestrian refuge installed on Forest Road midway between Kemp and Finneran Roads. 	 Public transport to the site will be available by the proposed bus route to the Bloomfield Hospital.
Potential Environmental Impact		Impact on heritage significance of Bloomfield Hospital	and Einis on Forest Road		Increased traffic on Forest Road			
Phase		+ U O			+			
Item		Heritage			Transport and access			

	Residual Impact	5 (low/medium)				2 (Iow)	
Risk Assessment	Vanageability to the state of t	2				1	
Risk Ass	Significance together	т				1	
Proposed Mitigation Measures		 The private hospital will provide complementary health, social and residential facilities to Orange and Western NSW. 	 Medical procedures carried out at the Private Hospital will complement the services provided at Bloomfield Hospital, and thus will attract a wider range of medical professionals and allied health workers to the City. 	 Locating a private hospital in close proximity to the Bloomfield Hospital will minimise travelling time for practitioners, patients and carers who are required to visit both facilities. 	 Practitioners are expected to retain consulting rooms in the Orange CBD, as well as practice at both the public and private hospitals. 	 Assessments of likely impacts from the proposed Private Hospital Campus have indicated it is highly unlikely to have a significant impact on any threatened flora or fauna species. 	 Significant trees on or adjacent to the site will be protected during construction.
Potential Environmental Impact						Impact on flora and fauna on the site	
Potential Environn						Impact fauna oi	
Phase		+ U O				+ O O	
ltem		Social and economic	E Dacis			Ecology	

Summary

The environmental risk analysis illustrates that there are no anticipated high residual risks associated with the project. The balance of the potential impacts identified are categorised as low or as low/medium residual impact. One item is listed as having low/medium residual impact:, namely social and economic impacts of the development.

The key recommendations for mitigation of all impacts include:

- Ensure a high quality built form that respects the heritage significance of the Bloomfield Hospital and Forest Road landscape;
- Implement traffic improvements to manage traffic associated with the new Bloomfield (Orange Base) Hospital and private hospital campus;
- Manage construction impacts to minimize impacts on local flora and fauna including mature trees; and
- Encourage medical specialists practicing at the new Bloomfield (Orange Base) Hospital and private hospital to retain consulting rooms in the Orange CBD, as well as in each of the hospitals.

5.15 Suitability of the site

As discussed above, the development of a private hospital campus on the site of the former drive-in theatre on Forest Road, Orange will provide a valuable social, economic and medical resource that will deliver significant benefits to the community of the City of Orange and western NSW generally.

The site is located opposite the Bloomfield Hospital (the former Orange Mental Hospital), which is listed on the NSW State Heritage Register. The Landscape features including entry gateway, Elm Avenue and grounds are also listed in the Orange LEP as heritage items of local significance.

Bloomfield Hospital is to be redeveloped as the new Orange Base Hospital. Contracts is progressing, with a contract signed in December 2007 between NSW Health and the Pinnacle Consortium for works associated with the redevelopment, including the new base hospital, tertiary mental health facilities, cancer radiation therapy and oral health facilities.

The site has been extensively modified as a result of its previous uses for grazing, and most recently, as a drive-in theatre. Remnant mature trees are found along the boundaries of the site, and on adjoining lands. A flora and fauna assessment has advised that the proposed concept plan will have any significant impacts on threatened or endangered flora or fauna species.

The proposed concept plan is not inconsistent with the objectives of the 1(a) General Farming Zone, and the development of the hospital, medi-hotel (motel), hostel accommodation and consulting rooms (where ancillary to a hospital) are permitted uses within the zone. The land was also identified in the Orange Settlement Strategy for the establishment of a new hospital "suburb".

The development proposed in this Concept Plan would be able to be completed in a manner which is consistent with relevant NSW Planning and Environmental legislation.

6.0 Draft Statement of Commitments

Table 7 - Draft Statement of Committments

Subject	Commitments	Timing
Staging	Project/Development Applications will be lodged for each precinct.	
Construction & Waste Management	A construction and waste management plan will be prepared to address traffic, noise and waste management issues associated with the construction of the Campus. In addition, retained vegetation will be protected during construction:	Prior to the issue of construction certificate
	 Primary and critical root zones be implemented; 	
	 Construction (cut, compacted fill or trenching) to be restricted in PRZ and CRZ (primary and critical root protection zones); 	
	 Non-permeable surfaces be minimised around trees' PRZ; and 	
	Trees be maintained in groups where ever possible.	
Heritage	Surveys have found no evidence of any Aboriginal or European relicts on the site. However, should any Aboriginal or Historical Relics be unexpectedly discovered, all excavations or disturbances in the area is to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 145 of the <i>Heritage Act</i> 1977	During construction
ESD	The Proponent commits to compliance with the NSW Government Building Sustainability Index, targeting:	Prior to the issue of occupation certificate
	 A projected 4.5 Star ABGR status for the hospital and commercial part of the development; and 	
	 BASIX water and energy reduction targets for the residential component. 	

Subject	Commitments	Timing
Services	Electricity Supply All electrical works shall be carried out in accordance with the relevant Australian Standards and the Country Energy requirements.	Prior to the issue of construction certificate
	Communications The telecommunications installation shall be carried out in accordance with the relevant Australian Standards and the local distributor's requirements.	
	Sewage The system shall be designed to comply with all Orange Council requirements, Australian Standards and applicable NSW codes.	
	Water Supply The system shall be designed to comply with all Orange Council requirements, Australian Standards and applicable NSW codes.	
	Gas The system shall be designed to comply with Alinta's requirements.	
Contamination	Prior to the commencement of construction, to ensure the site can be made suitable for the uses proposed:	During Construction
	 A Hazardous Building Material Survey is undertaken by an appropriately qualified consultant; 	
	 All hazardous Building Materials are removed from the site by a licenced contractor and disposed of in an appropriate manner; 	
	 A clearance report of any Hazardous Materials is obtained from a licenced contractor or consultants; 	
	 Any fill imported onto the site for filling or landscaping purposes is certified to be free of contamination; and 	
	 Any suspect fill, sub-surface structures or unusual conditions discovered during earthworks are reported immediately to EIS to allow for suitable management of potential contamination issued. 	

Subject	Commitments	Timing
Geotechnical	Development for the purpose of earthworks, retaining walls, footings and pavements during construction of the project is to be in accordance with the findings and recommendations of the Geotechnical Investigation prepared by Jeffery and Katauskas (October 2007). Should conditions be encountered during construction that is not anticipated by the approved report, a suitably qualified geotechnical consultant shall be engaged on site to supplement the findings and recommendations of the approved report.	During Construction
Ongoing site maintenance	A management plan will be prepared to ensure any undeveloped parts of the Orange Private Hospital site are regularly maintained and kept in a safe and tidy manner. This would include appropriate installation of security fencing and regular mowing / slashing of grassed areas.	Ongoing

7.0 Private Hospital Project Application

This Project Application relates to the construction of a private hospital within the proposed Orange Private Hospital Campus. The Campus development is discussed in detail in the Concept Plan at section 4.0 of this report.

The proposed Private Hospital includes:

- Construction of a new private hospital complex, comprising 24,656 m² of in-patient, operating, pathology, cancer care and pharmacy facilities, medical consultation suites, and 180 at-grade carparking spaces;
- Stormwater and infrastructure works;
- Road improvements; and
- Landscaping.

This report complements the Concept Plan for the private hospital campus at section 4.0 of this report. It should also be read in conjunction with the information contained within and appended to this report.

This Project Application is structured as follows:

- Section 7.0: Introduction to the Project.
- **Section 7.1:** Overview of existing site conditions.
- Section 7.2: Relevant planing instruments and controls applying to the site.
- Section 7.3: Description of the development proposal.
- Section 8.0: Environmental assessment of the Project Application.
- Section 9.0: Draft Statement of Commitments.

7.1 Site Description

The proposed Private Hospital is located on the north-east portion of the Orange Private Hospital Campus, on Forest Road, Orange.

The Hospital's locational context is shown at Figure 15 below.

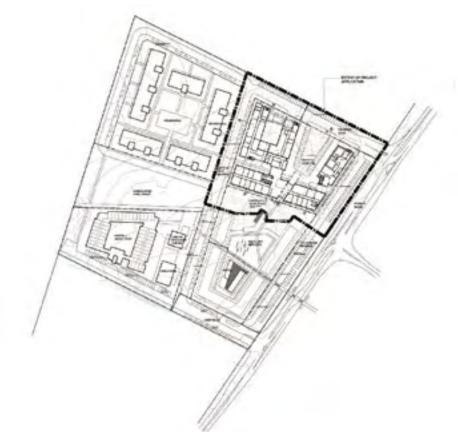


Figure 15 - Locality plan

The site occupies approximately one quarter of the former Orange drivein theatre site, and has its eastern frontage to Forest Road. Finneran Road forms the northern boundary of the site, with Crown Land used by the Orange Agricultural Institute for research purposes located to the north of the site.

The Campus's central internal road forms the western boundary of the site, with the residential precinct and grazing land further to the west.

To the south of the site is the proposed Medi-Hotel (which is discussed in detail in **section 10** of this report), with buildings associated with a former post office and privately-owned cleared land beyond.

Bloomfield Hospital is located to the east of the site, on the opposite side of Forest Road.

7.2 Relevant Planning Instruments & Controls

As discussed in section 3.4.6 of the concept plan, the site is zoned 1(a) General Farming under Orange Local Environmental Plan 2000.

Development for the purposes of the hospital and medical consulting rooms (where ancillary to the hospital) are permitted in the zone.

In addition, the following key state and regional planning instruments apply to development on the site, and are discussed in detail in section 3.4 above:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy 55: Remediation of Land; and
- Draft State Environmental Planning Policy 66: Integration of Land Use and Transport.

7.3 Description of Development Proposal

7.3.1 Landuse Distribution

The hospital precinct comprises a series of linked buildings containing the following functions, as shown in Table 8 below.

Table 8 - Land use distribution for private hospital

Private Hospital- main building	Area (m²)
Inpatient Unit - 60 Beds and staff/ support areas	2,230
Administration unit	325
General Support (food/linen/waste)	680
Operating Unit (4 theatre) + CSSD	1,715
Medical Imaging (inc. radiology)	1,000
Pathology	1000
Medical Consulting Suites (x 20)	2,000
Pharmacy	250
Total	8,950
Cancer Care facility	Area (m²)
Cancer Care	1400

Cancer Care facility	Area (m²)
Cancer Care	1400

Approximately 180 at-grade carparking spaces are located on the eastern and northern boundaries of the precinct, off the northern access road into the site.

Remaining areas will be extensively landscaped, following the principles of water sensitive urban design.

7.3.2 Road hierarchy / layout, access and carparking

As discussed in the Traffic and Parking Report, prepared by John Coady Consulting Pty Ltd at Appendix G, vehicle access into the hospital precinct will be via Kemp Road, off Forest Road, the southern boundary of the private hospital campus. Traffic exiting the hospital will do so via Kemp Road or Finneran Road, which forms the northern boundary of the site.

Access into the site will be controlled by the proposed upgrade to the Forest Road intersections serving both the Bloomfield (Orange Base) Hospital and Orange Private Hospital developments.

Once inside the campus, delivery vehicles will access the hospital via the loading dock off Finneran Road. They will depart the site via Finneran Road.

Internal roads sit within the robust landscape and provide a low speed environment that facilitates simple, clear and legible access to all site facilities. Signage will used to direct traffic around the site.

Pedestrian access into the hospital will be via the foyer on the ground level of the hospital. Access into the cancer care facility will be via the eastern frontage of that building. Pedestrian movements around the precinct provide access to internal and external spaces across the site and campus. Pedestrian links will be made accessible while providing some weather protection, are therefore suited to the wide range of users.

Access to the Bloomfield Hospital is via the formed path to the Forest Road boundary of the site, and a pedestrian refuge is to be constructed at the centre median of Forest Road to provide safety for pedestrians.

7.3.3 Landscaping areas

The hospital precinct will be extensively landscaped, according to the principles of water sensitive urban design.

The Forest Road frontage will complement and enhance the existing "heritage landscape" through additional plantings of *Quercus palustris* and native groundcover. Carparking areas will be softened by landscaping treatments interspersed by bioswales to collect any stormwater on the site.

8.0 Environmental Assessment

8.1 Director General's Requirements

Appendix A provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Key matters addressed in this Project Application are:

- Urban design and built form;
- Relationship to the Bloomfield Hospital and heritage landscape; and
- Traffic.

8.2 Relevant Planning Instruments and Guidelines

This Project Application is submitted under Part 3A of the Environmental Planning and Assessment Act 1979, and complements the Concept Plan for the development of the Orange Private Hospital Campus which is discussed in detail in section 10 of this report.

Major Projects SEPP identifies development that is of state significance. Clause 6 of the Major Projects SEPP provides that development, that in the opinion of the Minister for Planning is development of a kind referred to in Schedule 1 (Classes of Development), is declared to be a project to which Part 3A of the EP&A Act applies.

On 20 June 2007, pursuant to Clause 6 of the Major Projects SEPP, the Minister for Planning, formed the opinion that the proposed development meets the criteria in Schedule 1, Group 7, Clause 18 of the SEPP, having satisfied himself that the development is a "hospital" with a capital investment value of more than \$15 million.

Subsequently, on 18 July 2007 the Director General's Environmental Assessment Requirements for the project were issued.

As discussed in Sections 3.3 and 3.4 above, the site is zoned 1(a) General Farming in the Orange Local Environmental Plan 2000. Development for the purposes of a hospital and medical consulting rooms (where ancillary to a hospital) are permitted uses in the zone.

8.3 Social & Economic Impacts

The new Orange Private Hospital will deliver significant health, social and economic benefits to the community of Orange and western NSW.

Primarily, the Private Hospital will cement Orange's position as a centre of health excellence, through the strong physical and professional relationship between the public and private hospital, on either side of Forest Road, just outside the city of Orange.

Despite the private hospital relocating to the new site on Forest Road, general practitioners and specialists will continue to treat patients in the Orange CBD, however they will also treat patients at the new Bloomfield (Orange Base) Hospital opposite the side on the eastern side of Forest Road. Although this will deliver significant time savings for practitioners as they move between hospitals, a particularly important consideration in emergencies, it will also

ensure patients who prefer to visit their local GP at that rooms in the Orange CBD will not be disadvantaged.

Indeed, the time saved in travelling between the two hospitals is equivalent to employing an additional specialist to service the local community – thus delivering an important saving for the NSW Department of Health.

Medical facilities at the new private hospital have been deliberately selected to complement and augment those services to be provided at the Bloomfield Hospital. In particular, higher risk patients, and patients requiring particularly complex procedures, will be able to access services at the private hospital, which will not be available at the Bloomfield Hospital.

The private hospital will also provide a vital alternative to travelling long distances to Sydney or other regional centres for treatment, providing important comfort to both patients and their families.

8.4 Heritage Impacts

The development of the Orange Private Hospital has been undertaken with upmost respect to minimise impacts upon the heritage-listed Bloomfield Hospital, and its curtilage, located opposite the site on the eastern side of Forest Road.

As discussed in section 5.5 above, the design of the Forest Road streetscape associated with private hospital seeks to establish a harmonious interface between the proposed development and the Bloomfield Hospital while minimising the impact on the existing Forest Road curtilage and the significant views to and from the Hospital.

Further, the existing "heritage landscape" planting of *Quercus palustris* and *Populus deltoides* on the eastern edge of Forest Road will not be impacted upon by the development. Rather, it will be enhanced through the creation of a sympathetic planting of *Quercus palustris* along the eastern site boundary to create a coherent language to Forest Road frontage.

All structures associated with the private hospital will be well set back from Forest Road, and at-grade carparking in the setbacks well screen by sympathetic plantings of *Quercus palustris* and native understorey. A break in the tree planting will be made adjacent to the central Health/Productive Gardens to allow permeability into the Hospital site and maintain distant views to Mt Canobolas.

8.5 Traffic Impacts

As discussed in section 5.6 above and in the Traffic and Parking Assessment by John Coady Consulting Pty Ltd at **Appendix G**, the local traffic network has capacity to accommodate the traffic generated by the proposed development of the Orange Private Hospital.

Together with an analysis of current traffic patterns, and despite additional traffic expected to be generated by the proposed Bloomfield Hospital, the existing road network (primarily Forest Road in the vicinity of the site), has capacity to accommodate the additional traffic.

However, to effectively control traffic movements into the two new hospitals, the intersections with Forest Road are to be modified using a "sea gull" treatment. Traffic entering the private hospital will be directed to the existing northern southern road reservation into the site (Finneran Road), and egress from the site will be limited to left-out from the same road, or the southern road reservation (Kemp Road). In addition, the existing median in Forest Road will be converted to a pedestrian refuge for added safety for pedestrians crossing between the two hospitals.

In addition, internal traffic movements will be controlled via clear signage.

A total of 180 at-grade parking spaces will be provided for the private hospital, located along the boundaries of the precinct. This level of parking is consistent with the Orange Development Control Plan 2004 for hospital and other associated uses.

8.6 Construction Impacts

Impacts associated with the construction of the new Orange Private Hospital will be carefully managed to minimise construction impacts on the heritage listed Bloomfield Hospital, heritage landscape of Forest Road or unnecessarily disrupt traffic on local roads.

Particular impacts to be addressed include noise, vibration and dust, erosion and sediment control, management of demolition waste and demolition and construction traffic.

Phase 1 Preliminary Environmental Investigation conducted by EIS (refer **Appendix H**) found there was little evidence of contamination or hazardous materials on the site. However, any suspect fill, sub-surface structures or unusual conditions discovered during earthworks are reported immediately to EIS to allow for suitable management of potential contamination issued and any hazardous Building Materials will be removed from the site by a licenced contractor and disposed of in an appropriate manner.

In addition, as recommended in the arboricultural assessment carried out by Tree Wise Men Australia Pty Ltd (refer **Appendix L**), existing significant vegetation on site will be protected during construction works. Measures to be employed during works include:

- Construction within CRZ and PRZ to be restricted;
- Certain trees to be transplanted where possible;
- Trees be retained in groups where possible; and
- Non-permeable surfaces around PRZs be avoided.

8.7 Services and Infrastructure

A Building Services Statement prepared by Lincolne Scott is included at **Appendix J**. The report describes the overall provision of infrastructure and services for the Concept Plan and details that satisfactory arrangement are available or are capable of being made available Specific details relating to the hospital Project Application are summarised below:

Mechanical Services

Detailed outline of the likely mechanical services systems is provided in **Appendix J**. Overall, the chosen system will be designed in accordance with:

- Building Code of Australia
- AS1668.1 1998 and AS1668.2 1991
- Orange City Council Requirements
- Applicable Health Guidelines
- AS3666
- AS3000

Electrical Services

Features of the electrical services system for the hospital include:

- The building will be supplied through the Country Energy network. The hospital shall utilise power factor correction equipment.
- Sub mains cabling will be run in electrical risers to service the building and distribution boards shall be provided with energy metering and monitoring facilities.
- A standby diesel generator system shall be provided to the building to support critical medical areas during the event of a mains power failure.
- Retail tenancy spaces will be provided with separately metered electrical supplies.
- The building shall be provided with high efficiency light fittings utilising T5 fluorescent lamps which will significantly reduce the electrical consumption when compared to T8 light fittings. Time schedule and photo electric control shall be utilised. T8 type lamps shall only be used in clinical areas where colour corrected illumination is required for medical purposes.
- Additional electrical services shall include:
 - General landscape lighting provided to the site will be controlled by photoelectric cells and time switches.
 - Emergency and exit lighting will be provided throughout the building.
 - A conventional lightning protection system.
 - Electro-medical earthing systems shall be provided to all patient and procedure areas.
 - UPS systems for critical operating theatre equipment

Communication Services

Features of the hospital communication system will include:

 Telecommunications backbone cabling will be provided throughout the building from the Building Distributor to the lifts, data logging systems, fire control centre, security equipment and BMS equipment.

Fire Services

Features of the fire services system will include:

- An automatic sprinkler system will be provided throughout the building.
- An automatic sprinkler system will be provided throughout the building.
- A fire fan control panel will be provided and interfaced with the fire indicator panel to enable automatic operation of the smoke control systems in a fire condition.
- An emergency warning and intercommunication system will be provided throughout the building.
- Fire hydrants will be provided throughout the building.
- Fire hose reels will be provided throughout the building.
- The number and location of fire extinguishers within the building will comply with AS 2444, the BCA and any alternative building solution.

Gas, Water and Sewage

New service connections shall be made to the gas, water and sewage mains on the site, and be extended to the building. Services shall be sized to provide the required capacity to service the building.

Rainwater run-off shall be collected from all roofed areas and will discharge into the site rainwater harvesting system and overflow to the site stormwater system.

The sanitary plumbing and drainage shall consist of a combination of drainage and fully vented modified systems connected to the Orange Council sewer main. All vents shall terminate to atmosphere.

Trade waste treatment shall be provided to any lot which generates trade waste. The treated trade waste shall drain to the sanitary drainage system.

All sanitary fixtures and tap ware will be minimum AAAA rated.

As discussed in the landscape architectural report by McGregor + Partners at **Appendix D**, stormwater will be controlled through the adoption of water sensitive urban design principles to utilise and enhance the natural site conditions and to direct stormwater surface flows into and through constructed ecologies. The use of drainage pipes will be minimised, with all components of the design proposal including buildings, roads, car parking, open space and associated infrastructure being integrated within an overall stormwater concept.

Where possible, road, car parking and pedestrian zone stormwater runoff will be directed into landscape bioswales/biotopes to filter and retain as much stormwater as possible within the site. In addition, the landscape will receive runoff from most of the building roof areas, which will be directed to designated on site storm water detention tanks, where it will be stored for future use in irrigation, toilet flush and laundry requirements.

8.8 Urban Design

The Orange Private Hospital has been designed to complement the heritage values of the Bloomfield Hospital to the east of Forest Road, while at the same time creating a "health precinct", rather than a traditional "institutional" building.

The private hospital is made up of a series of linked pavilions, comprising the hospital, cancer care facility, ancillary retail uses and medical suites.

Ancillary uses such as the hospital florist, newsagent, café are located in a small pavilion style buildings across the plaza from the main hospital building. This small pavilion is associated with related rehabilitation and health functions such as medical suites and a gymnasium. By grouping these functions around a small plaza, a sheltered north facing gathering space has been created.

The main building itself consists of three thin "fingers" creating a defined edge to Forest Road, the entry plaza to the south east, and to the new street to the north west of the hospital.

The main entry and consulting suites are placed on the plaza to activate this space and provide a clear point of entry to the facility.

A cancer care centre is proposed on the Forest Road edge which provides the opportunity for a separate entry and distinctive identity if required.

Service and loading functions for the precinct are located on the north eastern edge of the main private hospital building.

Operating theatres and beds are all located together on the upper levels furthest from Forest Road for amenity, privacy, as well as operational efficiency.

8.9 Cumulative Impacts

The development of the new Orange Private Hospital will deliver important cumulative health benefits to the community of Orange and western NSW. As well as benefits associated with the collocation of complementary health facilities in the Forest Road precinct, additional health practitioners and services will be attracted to the area.

In addition, cumulative benefits associated with the development of the public and private hospitals in close proximity to each other include:

- Improved convenience, and reduced travelling time for patients, practitioners and carers who need to utilise both facilities;
- Access to a broad range of complementary medical services at the two facilities; and
- Introduction of public transport links to the precinct, which may not have been feasible if only a single hospital was to be developed.

It should also be recognised that despite the private hospital locating on the Forest Road site, local medical specialists will continue to retain their consulting rooms in the Orange CBD. This will provide important flexibility and convenience for patients would prefer to visit their GP in the centre of Orange.

As discussed in **section 8.5** above, local traffic intersections, particularly at Forest Road, will continue to perform satisfactorily, despite the anticipated additional traffic generated by the two hospitals. However, to ensure the intersections perform safely, the intersections are to be augmented and a pedestrian refuge installed between the accesses to the two hospitals.

8.10 Ecological Sustainable Development

Despite the proposed Orange Private Hospital having intensive energy use due to the need for stringent control on its internal environment, the hospital is to be designed to minimise its use of energy and water. In fact, the hospital is being designed to achieve a 4.5 Star ABGR rating.

In addition, the extensive landscaping of the precinct has been designed using the principles of water sensitive urban design.

As noted in the ESD Initiatives Report prepared by Advanced Environmental (refer **Appendix I**), there are significant benefits to adopting ESD principles to new developments. To meet the targeted 4.5 ABGR rating, initiatives proposed in the hospital include:

- Energy efficient building and system design;
- Energy monitoring;
- Efficient lighting system design;
- Extensive use of daylight where possible;
- Use of water-efficient fittings and water metering;
- Good risk management;
- Best practice construction techniques;
- Best practice management and planning; and
- The use of environmentally sustainable and low emission building materials.

In addition, the feasibility of the following items is being investigated further by the design team:

- Inclusion of on-site cogeneration to reduce carbon emissions; and
- On-site blackwater and stormwater management.

McGregor + Partners have adopted the following ESD principles in landscape design for the private hospital precinct (refer **Appendix D**):

- Consideration of walking facilities and wheelchair facilities;
- Water recycling and water sensitive design initiatives;
- Specification of salvaged, recycled and reclaimed materials wherever possible;
- Designing for simple, efficient maintenance; and
- Selecting native and endemic plant species with the goal of both improving biodiversity and ecological communities and achieve minimal irrigation requirements once established.

Further, adoption of water sensitive urban design principles to utilise and enhance the natural site conditions means that stormwater surface flows can be directed into and through constructed ecologies. The use of traditional drainage pipes and systems that avoid surface infiltration has been minimised and all components of the design proposal including buildings, roads, car parking, open space and associated infrastructure have been integrated within an overall stormwater concept. This includes the use of bioswales/biotopes, wetlands and other constructed ecologies, which can detain and retain stormwater onsite, thus significantly reducing demand for potable water on site.

9.0 Draft Statement of Commitments

9.1 Construction Management

A detailed construction management plan will be prepared that addresses the following matters:

- Noise, particularly impacts on the Bloomfield Hospital;
- Vibration and dust;
- Erosion and sediment control;
- Management of demolition waste; and
- Demolition and construction traffic.

Construction activities will be carried out to minimise impacts on vegetation to be retained, through:

- Primary and critical root zones be implemented;
- Construction (cut, compacted fill or trenching) to be restricted in PRZ and CRZ (primary and critical root protection zones); and
- Non-permeable surfaces be minimised around trees' PRZ.

9.2 Heritage

Should any evidence of any Aboriginal or European relicts be unexpectedly be discovered on the site, all excavations or disturbances in the area is to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 145 of the *Heritage Act* 1977.

9.3 **ESD**

The Proponent commits to deliver of a high quality, environmentally-friendly development; a rating of 4.5 Star ABGR status for the hospital and commercial part of the development is targeted.

9.4 Hazardous Materials

Once proponents and/or operators of the medical facilities on the campus have been appointed, and the designs and uses of each of the facilities have been refined, the proponent commits to approaching the NSW EPA to ascertain whether or not a licence to generate or store hazardous waste on site is required.

Should a licence under the POEO Act be required, it will be obtained prior to the issue of an occupation certificate for each of the medical facilities.

9.5 Infrastructure and Services

Communications, Gas, Water and Sewer

- The proponent commits that Electrical, Communications, Gas, Water and Sewage services will be provided in accordance with the requirements of the relevant service authority and other requirements including:
 - Orange Council
 - Alinta

- Country Energy
- local telecommunications provider
- Relevant Australian Standards
- Building Code of Australia
- NSW Health Guidelines
- National Plumbing Code
- NSW Plumbing and Drainage Code of Practice
- NSW Fire Brigade
- The proponent commits to providing a range of water efficient measures including
 - Rainwater run-off shall be collected from all roofed areas and will discharge into the site rainwater harvesting system and overflow to the site stormwater system.
 - All sanitary fixtures and tap ware will be minimum AAAA rated.

Mechanical Services

The mechanical services will designed in accordance with:

- Building Code of Australia
- AS1668.1 1998 and AS1668.2 1991
- Orange City Council Requirements
- Applicable Health Guidelines
- AS3666
- AS3000.

Fire Services

- The fire sprinkler system will comply with AS 2118.1, the BCA and any alternative building solution.
- The smoke detection system will comply with AS 1670.1, AS 1668.1, the BCA and any alternative building solution.
- The fire fan control system will comply with AS 1668.1, the BCA and any alternative building solution.
- The emergency warning and intercommunication system will comply with AS 1670.4, the BCA and any alternative building solution.
- The fire hydrant system will comply with AS 2419.1, the BCA and any alternative building solution.
- The fire hose reel system will comply with AS 2441, the BCA and any alternative building solution.
- The number and location of fire extinguishers within the building will comply with AS 2444, the BCA and any alternative building solution.

10.0 Medi-Hotel Project Application

This Project Application relates to the construction of a Med-Hotel within the proposed Orange Private Hospital Campus. The Campus development is discussed in detail in the Concept Plan at section 4.0 of this report. A Project Application for the construction of the Orange Private Hospital is at **section 7.0** of this report.

The proposed Medi-Hotel precinct includes:

- Construction of a new medical-hotel comprising 60 rooms and 20 consultation suites;
- 70 at-grade carparking spaces;
- 100-seat restaurant/café;
- Ancillary retail premises;
- Stormwater and infrastructure works;
- Road improvements; and
- Landscaping.

This report complements the Concept Plan for the private hospital campus at section 7.0 of this report. It should also be read in conjunction with the information contained within and appended to this report.

This Project Application is structured as follows:

Section 10.0: Introduction to the Project.

Section 10.1: Overview of existing site conditions.

Section 10.2: Relevant planing instruments and controls applying to the site.

Section 10.3: Description of the development proposal.

Section 11.0: Environmental assessment of the Project Application.

Section 12.0: Draft Statement of Commitments.

10.1 Site Description

The proposed Medi-Hotel is located on the south-east portion of the Orange Private Hospital Campus, on Forest Road, Orange.

The Medi-Hotel's locational context is shown at Figure 16 below.

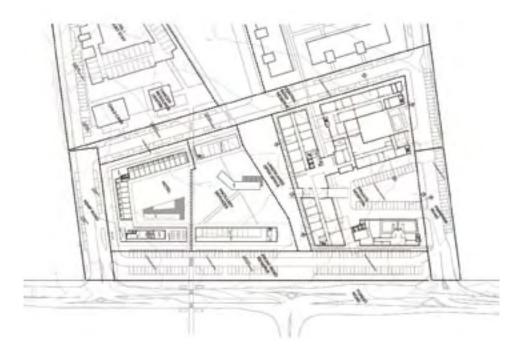


Figure 16 - Locality plan

The site has an area of approximately 8,492 m² and occupies approximately one quarter of the former Orange drive-in theatre site, and has its eastern frontage to Forest Road. The proposed Private Hospital Precinct forms the northern boundary of the site, with Finneran Road and Crown Land used by the Orange Agricultural Institute for research purposes beyond.

The Campus's central internal road forms the western boundary of the site, with the residential precinct and grazing land further to the west.

To the south of the site is Kemp Road, the southern access into the Campus, and buildings associated with a former post office and privately-owned cleared land beyond.

Bloomfield Hospital is located to the east of the site, on the opposite side of Forest Road.

10.2 Relevant Planning Instruments & Controls

As discussed in section 3.4.6 of the concept plan, the site is zoned 1(a) General Farming under Orange Local Environmental Plan 2000.

Development for the purposes of motels, hospitals, medical consulting rooms (where ancillary to the hospital) and restaurants are permitted in the zone.

In addition, the following key state and regional planning instruments apply to development on the site:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy 55: Remediation of Land; and
- Draft State Environmental Planning Policy 66: Integration of Land Use and Transport.

10.3 Description of Development Proposal

10.3.1 Landuse Distribution

The Medical-Hotel precinct comprises a series of buildings and civic plaza containing the following functions, as shown in **Table 9** below.

Table 9 - Land use distribution in medi-hotel precinct

Land use	Area	
Medi-hotel (including restaurant/café)	3119 m ²	
Medical consulting suites	825 m ²	
Gym and rehabilitation	1612 m ²	
Retail	150 m ²	
External deck area	150 m ²	
Total	5,856 m ²	

Approximately 70 at-grade carparking spaces are located adjacent to the medi-hotel, with a port cochere and patient drop-off area at the south-western corner.

A civic plaza will be created between the two wings of the building, which will be extensively landscaped following the principles of water sensitive urban design.

10.3.2 Road hierarchy / layout, access and carparking

The southern access road (Kemp Road) forms the southern boundary of the precinct, and also provides the main vehicle access to the medi-hotel.

Access to the medi-hotel from the northern entry to the campus will be via the internal road network, part of which forms the northern boundary of the site.

Sixty five at-grade carparking spaces are located along the perimeter of the medi-hotel, and a port cochere is at the south-western corner of the facility provides a convenient drop-off facility for private and medical vehicles.

Pedestrian access into the medi-hotel will be via the port cochere on the south east corner of the site. Access into the medical suites and rehabilitation areas will be via separate entries at the northern part of the building.

10.3.3 Landscaping areas

The medi-hotel precinct will be extensively landscaped, according to the principles of urban design.

The boundaries of the precinct will be planted with species that complement the existing "heritage landscape", and a central plaza and pool will be created between the two wings of the building.

11.0 Environmental Assessment

11.1 Director General's Requirements

Appendix A provides a detailed summary of the individual matters listed in the Director General's Environmental Assessment Requirements (DGRs) and / or identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Key issues addressed for the medi-hotel include:

- Social and economic impacts;
- Heritage impact; and
- Traffic and parking.

11.2 Relevant Planning Instruments and Guidelines

This Project Application is submitted under Part 3A of the Environmental Planning and Assessment Act 1979, and complements the Concept Plan for the development of the Orange Private Hospital Campus which is discussed in detail in section 4.0 of this report.

Major Projects SEPP identifies development that is of state significance. Clause 6 of the Major Projects SEPP provides that development, that in the opinion of the Minister for Planning is development of a kind referred to in Schedule 1 (Classes of Development), is declared to be a project to which Part 3A of the EP&A Act applies.

On 20 June 2007, pursuant to Clause 6 of the Major Projects SEPP, the Minister for Planning, formed the opinion that the proposed development meets the criteria in Schedule 1, Group 7, Clause 18 of the SEPP, having satisfied himself that the development is a "hospital" with a capital investment value of more than \$15 million.

Subsequently, on 18 July 2007 the Director General's Environmental Assessment Requirements for the project were issued.

As discussed in Sections 3.3 and 3.4 above, the site is zoned 1(a) General Farming in the Orange Local Environmental Plan 2000. Development for the purposes of a hospital, hotel and medical consulting rooms (where ancillary to a hospital) are permitted uses in the zone.

11.3 Social & Economic Impacts

The medi-hotel is a unique healthcare facility that delivers a friendly approach to patients together with an inclusive environment for the local community.

Medi-hotels are a Scandinavian concept, and are common in Denmark and Sweden. However, there are few examples of this concept in NSW – this unique facility will complement Orange's position as a centre of health excellence. It will provide 80 rooms for long and short term accommodation for out-patients of the hospital, which will be complemented by places for family, patients and professional staff to gather and meet, providing a place of escape from a typically sterile hospital environment.

The medi-hotel will particularly benefit patients who live distant to Orange and would otherwise be reluctant or unfit to travel long distances for ongoing medical treatment as an out-patient. Not only will the medi-hotel provide

assisted accommodation for patients, but it will enable families and carers to also remain close during periods of treatment.

The café/restaurant will provide a place for staff, patients and visitors to both the public and private the hospital, together with travellers to the hotel, to obtain light refreshments, without having to commute into the Orange CBD. Patrons will have the option of consuming their meals either inside the café/restaurant, or eating in the sheltered green space and civic plaza located between the two building wings.

A pool is to be located in the central courtyard of the precinct, which will provide welcome respite to patients, staff and visitors to the area in warmer months. At other times of the year, the area will be used for quiet reflection and relief.

11.4 Heritage Impacts

The medi-hotel is located on the western side of Forest Road, Orange, opposite the new Bloomfield (Orange Base) hospital. The Bloomfield Hospital is situated in a "heritage landscape", and an imposing avenue of trees is formed along the along Forest Road.

As discussed in **section 5.5** above, the design of the Forest Road streetscape associated with medi-hotel seeks to establish a harmonious interface between the proposed development and the Bloomfield Hospital while minimising the impact on the existing Forest Road curtilage and the significant views to and from the Hospital.

Further, the existing "heritage landscape" planting of *Quercus palustris* and *Populus deltoides* on the eastern edge of Forest Road will not be impacted upon by the development. Rather, it will be enhanced through the creation of a sympathetic planting of *Quercus palustris* along the eastern site boundary to create a coherent language to Forest Road frontage.

The medi-hotel is set back 24 metres from the Forest Road boundary to ensure views to the Bloomfield Hospital and heritage landscape are protected. The eastern boundary of the precinct contains on-street parking combined with a landscaped edge that creates a strong treed edge that responds to the existing row of significant trees fronting the Bloomfield Hospital site.

The medi-hotel is two storeys in height, ensuring the heritage landscape is complemented and enhanced.

11.5 Traffic Impacts

As discussed in **section 5.6** above and in the Traffic and Parking Assessment by John Coady Consulting Pty Ltd at **Appendix G**, the local traffic network has capacity to accommodate the traffic generated by the proposed development of the medi-hotel and ancillary uses including a restaurant/café.

Together with an analysis of current traffic patterns, and despite additional traffic expected to be generated by the proposed Bloomfield Hospital, the existing road network (primarily Forest Road in the vicinity of the site), has capacity to accommodate the additional traffic.

Traffic into the medi-hotel will primarily be via the existing southern road reservation (Kemp Road) into the site, which will be enhanced by the proposed upgrade to the intersections with Forest Road which will be modified using a "sea gull" treatment. In addition, the existing median in Forest Road will also be converted to a pedestrian refuge for added safety for pedestrians crossing between the two hospitals.

Internal traffic movements within the Private Hospital Campus to the medi-hotel will be controlled via clear signage.

A total of 65 at-grade carparking spaces are to be provided for the medi-hotel and restaurant/café. This figure has been informed by the rates provided in the Orange Development Control Plan 2004, which provides rates for carparking provision for certain types of development.

The level of carparking provided is less than the rate suggested in the DCP. This is because the vast majority of all users of the medi-hotel and ancillary facilities will be existing users of the Orange Private Hospital Campus and Bloomfield (Orange Base) Hospital, rather than unique visitors to the site, and/or persons who will not have accessed the site via private vehicle.

11.6 Construction Impacts

Impacts associated with the construction of the new medi-hotel will be carefully managed to minimise construction impacts on the heritage listed Bloomfield Hospital, heritage landscape of Forest Road or unnecessarily disrupt traffic on local roads.

Particular impacts to be addressed include noise, vibration and dust, erosion and sediment control, management of demolition waste and demolition and construction traffic.

Phase 1 Preliminary Environmental Investigation conducted by EIS (refer **Appendix H**) found there was little evidence of contamination or hazardous materials on the site. However, any suspect fill, sub-surface structures or unusual conditions discovered during earthworks are reported immediately to EIS to allow for suitable management of potential contamination issued and any hazardous Building Materials will be removed from the site by a licenced contractor and disposed of in an appropriate manner.

In addition, as recommended in the arboricultural assessment carried out by Tree Wise Men Australia Pty Ltd (refer **Appendix L**), existing significant vegetation on site will be protected during construction works. Measures to be employed during works include:

- Construction within CRZ and PRZ to be restricted;
- Certain trees to be transplanted where possible;
- Trees be retained in groups where possible; and
- Non-permeable surfaces around PRZs be avoided.

11.7 Services and Infrastructure

A Building Services Statement prepared by Lincolne Scott is included at **Appendix J.** The report describes the overall provision of infrastructure and services for the Concept Plan and details that satisfactory arrangement are available or are capable of being made available. Specific details relating to the medi-hotel Project Application are summarised below:

Mechanical Services

Detailed outline of the likely mechanical services systems is provided in **Appendix J**. Overall, the mechanical systems chosen have been designed to be the most appropriate, efficient systems, employing the latest technologies available and designed in accordance with:

- Building Code of Australia;
- AS1668.1 1998 and AS1668.2 1991;

- Orange City Council Requirements;
- Applicable Health Guidelines;
- AS3666; and
- AS3000.

Electrical Services

Features of the electrical services system for the motel and commercial components include:

- The building will be supplied through the Country Energy network. Sub mains cabling will be run in electrical risers to service the building and distribution boards shall be provided with energy metering and monitoring facilities.
- Each retail/commercial tenancy will be provided with a separately metered electrical supply.
- The medi-hotel shall incorporate a "keytag" room access control system which will restrict power usage of a room, including air conditioning, unless it is occupied.
- All buildings shall be provided with high efficiency light fittings utilising T5 fluorescent lamps which will significantly reduce the electrical consumption when compared to T8 light fittings. Time schedule and photo electric control shall be utilised.
- General landscape lighting provided to the site will be controlled by photoelectric cells and time switches.
- Emergency and exit lighting will be provided throughout the building.
- A conventional lightning protection system will be provided for the building.

Communication Services

Telecommunications backbone cabling will be provided from the Building Distributor throughout the medi-hotel.

Fire Services

Features of the fire services system will include:

- A fire detection and alarm system will be provided throughout the medi-hotel.
- Fire hydrants will be provided throughout the building. The fire hydrant system will be served by an electric fire pump and standby diesel fire pump. The hydrant system water supply is from the Orange City Council water mains to supply. A fire brigade booster assembly will be provided.
- Fire hose reels and fire extinguishers will be provided throughout the building.

Gas, Water and Sewage

New service connections shall be made to the gas, water and sewage mains on the site, and be extended to the building. Services shall be sized to provide the required capacity to service the buildings.

Rainwater run-off shall be collected from all roofed areas and will discharge into the site rainwater harvesting system and overflow to the site stormwater system.

The sanitary plumbing and drainage shall consist of a combination of drainage and fully vented modified systems connected to the Orange Council sewer main. All vents shall terminate to atmosphere.

Trade waste treatment shall be provided to any lot which generates trade waste. The treated trade waste shall drain to the sanitary drainage system.

All sanitary fixtures and tapware will be minimum AAAA rated.

The need for traditional stormwater infrastructure will be minimised through the use of water sensitive urban design principles. A centralised water management strategy that interfaces with the architectural, hydraulic and civil aspects of the development integrates stormwater design throughout the site. Where possible, road, carparking and pedestrian zone stormwater runoff is directed into landscape bioswales to filter and retain water across the site. In addition, runoff from roof areas will be directed into the landscape via defined bioswale/biotope areas where it will be "polished" and cleaned as it bio filtrates through the soil profile.

Stormwater runoff will be stored in detention tanks and be used to meet some future irrigation, toilet flushing and laundry needs.

11.8 Urban Design

The medi-hotel and ancillary services buildings act as a landmark building defining the southern edge of the city of Orange. It has been designed to be integrated into the public domain that is the Forest Road Hospital Precinct.

The medi-hotel building is the gateway to Orange City from the south. A port cochere is located on the south east corner creates a welcome gesture to both residents and visitors to Orange. It also signifies the entry to the medi-hotel and provides shelter to visitors staying in the precinct. The rolling floor plane that lifts to form the port cochere aims to create a non institutional building that is both inviting and iconic.

The buildings comprising the medi-hotel precinct form a ribbon that wrap the south east corner of the precinct, creating a sheltered private green space and civic plaza focused toward the hospital building. A civic plaza is located between the two wings, and is orientated to the north to optimise solar access. A pool courtyard is also located within the precinct, providing relief to users during warmer months. A lawn area and sun deck with shower and seating area are located adjacent to the pool, and complete the relaxed courtyard setting.

Perimeter streets define the medi-hotel and ancillary services precincts, and also form pedestrian and vehicular view corridors to green spaces. Further, the civic plaza has a covered walkway which visually and physically links the ancillary services to the hospital building.

All buildings in the precinct are two storeys in height and are well set back from Forest Road. Landscaped and screened at-grade carparking spaces are located in the setback between the medi-hotel and Forest Road.

The materials used in the construction of the medi-hotel and ancillary services precinct are natural and minimal in their selection. They consist of timber, insitu concrete, clear glazed window systems and steel or similar roofing. These materials, coupled with the building orientation and use of environmentally sustainable design will create a building that has an effective internal environment and human scaled exterior.

The drop off zone for the medi-hotel provides for a safe and sheltered area where patients and guests can be set down. From this under cover location the guests can gain sheltered access to the hospital.

The medi-hotel restaurant is located close to the ancillary services. This facility is able to both provide for the medi-hotel and offer an additional destination for the precincts as a whole.

11.9 Cumulative Impacts

The development of the new medi-hotel and ancillary facilities as part of the Orange Private Hospital will deliver important cumulative health, social and economic benefits to the community of Orange and western NSW. As well as benefits associated with the provision of a unique medical / accommodation facility adjacent to the new Bloomfield (Orange Base) and Orange Private hospitals, additional health practitioners and services will be attracted to the area.

In addition, cumulative benefits associated with the development of the medi-hotel, in close proximity to the public and private hospitals in close proximity include:

- Enabling patients requiring out-patient care, together with their families and carers, to stay in close proximity to their practitioners;
- Minimises stress and potential health impacts associated with travelling long distances for ongoing treatment;
- Provision of a café/restaurant to provide refreshments for patients, staff and carers using both the public and private hospitals, without needing to travel into the Orange CBD;
- Additional accommodation options for travellers and visitors to Orange; and
- Further enhancing Orange's reputation as a centre for health excellence through the creation of a new, purpose-built complementary health precinct.

As discussed in **section 5.6** above, local traffic intersections, particularly at Forest Road, will continue to perform satisfactorily, despite the anticipated additional traffic generated by the medi-hotel and private hospital. However, to ensure the intersections perform safely, the intersections are to be augmented and a pedestrian refuge installed between the accesses to the two hospitals.

11.10 Ecological Sustainable Development

The new medi-hotel has been designed to minimise the use of water and energy, both internally and externally. The ancillary retail part of the development is also targeted to achieve a 4.5 star ABGR rating.

As noted in the ESD Initiatives Report prepared by Lincolne Scott (refer **Appendix I**), there are significant benefits to adopting ESD principles to new developments. Initiatives proposed for the medi-hotel include:

- Significant NW-SW exposure; appropriate shading would alleviate thermal comfort issues, reduce glare and mitigate cooling demand on any airconditioning systems installed;
- Day lighting: The provision of natural light to a substantial portion of the building;
- Appropriate façade design; adequate shading for each façade;
- Daylight Glare Control: Providing fixed external or operable internal shading to reduce the glare from direct sunlight through the façade;
- External Views: The site layout seeks to maximise occupants' external views;

- Internal Noise Levels: Façade and services designs seek to provide internal noise levels within the recommended value stated in the Australian Standards; and
- Light Pollution: External lighting will be designed to minimise light pollution to the night sky and surrounding buildings.

In addition, building materials selected are based on minimal environmental impact, including:

- Low Embodied Energy Materials and Practices;
- Climate responsive material selection;
- Low Emission Materials: Use of low Volatile Organic Chemicals (VOC) paints, carpets, and sealants;
- Formaldehyde Minimisation: Low emission formaldehyde composite wood products are targeted for the building;
- PVC Minimisation: PVC minimisation is targeted through specification of alternatives to PVC for pipes, cable conduits, finishes etc;
- Sustainable Timber: The use of Forest Stewardship Council (FSC) certified or recycled timber is recommended for the development; and
- Insulation: Materials that do not contain ozone depleting substances in material or manufacture are targeted for the project.

In addition, the feasibility of the following items is being investigated further by the design team:

- Inclusion of on-site cogeneration to reduce carbon emissions; and
- On-site blackwater and stormwater management.

McGregor + Partners have adopted the following ESD principles in landscape design for the private hospital precinct (refer **Appendix D**):

- Consideration of walking facilities and wheelchair facilities;
- Water recycling and water sensitive design initiatives;
- Specification of salvaged, recycled and reclaimed materials wherever possible;
- Designing for simple, efficient maintenance; and
- Selecting native and endemic plant species with the goal of both improving biodiversity and ecological communities and achieve minimal irrigation requirements once established.

Further, adoption of water sensitive urban design principles to utilise and enhance the natural site conditions means that stormwater surface flows can be directed into and through constructed ecologies. The use of traditional drainage pipes and systems that avoid surface infiltration has been minimised and all components of the design proposal including buildings, roads, car parking, open space and associated infrastructure have been integrated within an overall stormwater concept. This includes the use of bioswales/biotopes, wetlands and other constructed ecologies, which can detain and retain stormwater onsite, thus significantly reducing demand for potable water on site.

12.0 Draft Statement of Commitments

12.1 Construction Management

A detailed construction management plan will be prepared that addresses the following matters:

- Noise, particularly impacts on the Bloomfield Hospital;
- Vibration and dust;
- Erosion and sediment control;
- Management of demolition waste; and
- Demolition and construction traffic.

Construction activities will be carried out to minimise impacts on vegetation to be retained, through:

- Primary and critical root zones be implemented;
- Construction (cut, compacted fill or trenching) to be restricted in PRZ and CRZ (primary and critical root protection zones); and
- Non-permeable surfaces be minimised around trees' PRZ.

12.2 Heritage

Should any evidence of any Aboriginal or European relicts be unexpectedly be discovered on the site, all excavations or disturbances in the area is to stop immediately and the Heritage Council of NSW shall be informed in accordance with Section 145 of the *Heritage Act* 1977.

12.3 ESD

The Proponent commits to deliver of a high quality, environmentally-friendly development,; a rating of 4.5 Star ABGR status for the ancillary retail part of the development is targeted.

12.4 Services

Communications, Gas, Water and Sewer

- The proponent commits that Electrical, Communications, Gas, Water and Sewage services will be provided in accordance with the requirements of the relevant service authority and other requirements including:
 - Orange Council
 - Alinta
 - Country Energy
 - Local telecommunications provider
 - Relevant Australian Standards
 - Building Code of Australia
 - NSW Health Guidelines

- National Plumbing Code
- NSW Plumbing and Drainage Code of Practice
- NSW Fire Brigade
- The proponent commits to providing a range of water efficient measures including
 - Rainwater run-off shall be collected from all roofed areas and will discharge into the site rainwater harvesting system and overflow to the site stormwater system.
 - All sanitary fixtures and tap ware will be minimum AAAA rated.

Mechanical Services

The mechanical services will designed in accordance with:

- Building Code of Australia
- AS1668.1 1998 and AS1668.2 1991
- Orange City Council Requirements
- Applicable Health Guidelines
- AS3666
- AS3000.

Fire Services

- The smoke detection system will comply with AS 1670.1, AS 1668.1, the BCA and any alternative building solution.
- The fire hydrant system will comply with AS 2419.1, the BCA and any alternative building solution.
- The fire hose reel system will comply with AS 2441, the BCA and any alternative building solution.
- The number and location of fire extinguishers will comply with AS 2444, the BCA and any alternative building solution.

13.0 Conclusion

The proposed Orange Private Hospital Campus provides an opportunity to capitalise on Orange's position as a rural centre of health excellence by creating a sophisticated and multi-faceted health precinct that complements the new Bloomfield (Orange Base) Hospital, located opposite the site on Forest Road.

The Campus will contain a private hospital, unique "medi-hotel", short- and long-stay accommodation options, and a range of ancillary services, all of which will be readily accessible to both public and private patients in western NSW.

The development of the Private Hospital Campus will also complement the resolution made by Orange City Council that "planning commencing immediately to define the feasibility of, and urban form for, establishing a hospital "suburb" ... as indicated in the Orange Settlement Strategy Structure Plan".

Forest Road Syndicate Pty Ltd requests therefore that the Minister approve the Concept Plan for the proposed Orange Private Hospital campus, and Project Applications for the construction of the Orange Private Hospital and medi-hotel.