JBA Urban Planning Consultants + TCW Consulting

Environmental Assessment Report
Part 3A Project Application

18-22 Sinclair Street, Wollstonecraft
Justinian House Redevelopment for a Medical Research Facility

Submitted to
Minister for Planning
On Behalf of Savills - Strategic Project Delivery

November 2007 ■ 07124

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Statement of Validity

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

Environmental Assessment prepared by

Name	Kathryn Werner
Qualifications	BSc(REM) MEnvMgt
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In respect of	Project Application

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.

Signature		
Name	Kathryn Werner	Andrew Wilson
Date	2/11/2007	

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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 Project Application for the construction of a medical research facility at Wollstonecraft in the North Sydney LGA.

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

Project outline

The proposed development involves the construction of a three-level medical research facility of approximately 3500 m^2 gross floor area, to accommodate the Sydney Melanoma Unit (SMU) and medical research professionals. The facility also includes:

- Two levels of basement parking accommodating 118 cars, 12 motorcycles and 10 bicycles;
- Consultation and treatment suites;
- Offices for medical practitioners;
- Offices for the Mercy Foundation, the fundraising arm of the Sisters of Mercy;
- 100 seat auditorium for visiting practitioners; and
- Research laboratory and biospecimen bank.

In addition:

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

The proposed facility is not intended to provide in-patient services. Patients requiring overnight treatment will be referred to other medical facilities in the area.

This Project Application does not include the demolition of existing structures or clearing of existing vegetation on the site as these have already been granted consent by North Sydney Council.

The program proposed by the proponents is to enable SMU to commence operations at the new facility by 1 January 2010 with construction completed by mid-2009. The demolition of existing structures already approved by Council is proposed to commence in early 2008.

The proponents

The SMU comprises a group of cancer researchers and clinicians drawn from Westmead Millennium Institute, Newcastle Mater and Royal Prince Alfred Hospitals. It is also a Clinical Unit of the Discipline of Surgery within the Faculty of Medicine of the University of Sydney. Currently, patient care and treatment is carried out at Royal Prince Alfred, Westmead, Royal North Shore and the Mater hospitals in Sydney and Newcastle. Administrative functions of the SMU are located in a commercial premises at North Sydney. The new medical research facility is proposed to consolidate the existing arrangements for accommodation of the SMU.

The new facility will also accommodate medical practitioners of the SMU who will consult with patients and tertiary students undertaking research, and the Sisters of Mercy who are part of St Vincents and Mater Health Sydney.

Construction of the new facility is being funded through a combination of a donation from a private benefactor to St Vincents and Mater Health Sydney (of $19 million), and a $6 million grant from the Commonwealth Department of Health and Ageing.

Savills – Strategic Project Delivery are project managing the proposed development on behalf of St Vincent's and Mater Health, Sydney.

The site and locality

The site is located opposite the Mater Hospital with frontages to Rocklands Road and Sinclair and Gillies Streets in Wollstonecraft. It is a rectangular parcel of land with an area of approximately 3500m^2. The site comprises part of the current legal parcel of Lot 1 DP 802791, and this is the subject of a subdivision process approved by Council to create a separate lot for the site.

The topography of the site and locality is characterised by relatively steep sloping terrain from the high point on the Pacific Highway 100m to the east of the site down to Balls Head Bay on Sydney Harbour 1km to the west of the site. The locality and frontages to the site are also characterised by tree lined streets.

The existing development surrounding the site is characterised by medium to high density residential and commercial development along the Pacific Highway corridor to the east, the Mater Hospital to the south, and the low to medium density residential development to the north and west.

The existing development on the site at this time comprises a decommissioned aged persons facility known as Justinian House which includes a 3-4 storey main building. Council has already granted consent to the demolition of existing structures and clearing of existing vegetation on the site.

Statutory planning considerations

On 20 August 2007, the Director-General of the Department of Planning, as delegate of the Minister for Planning formed the opinion that the construction of the medical research facility was of the type listed in Schedule 1, Group 7, Clause 19 of the State Environmental Planning Policy (Major Projects), was declared as a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies for the purposes of section 75B of that Act.

North Sydney LEP 2001 is the principal planning instrument applying to the site and locality. The site is zoned Residential C under the LEP with hospitals (including medical centres) and educational facilities being a permitted use.

The development is consistent with the objectives of the zone, and is generally consistent with the planning controls applying to the land under Council's LEP and DCP, with the exception of minor protrusions above the building height plane and a departure from the minimum landscaped area control.

These departures are considered reasonable in this case given that the proposed building is substantially within the existing building envelope, and delivers a better planning outcome in terms of a superior building that is more compliant with the controls.

Environmental Assessment

Our environmental assessment of the proposed medical research facility concludes as follows:

- The new facility will provide significant social and health benefits to NSW and Australia through the consolidation of clinical trials, research and consultation suites into a new single state of the art facility, and by also delivering financial savings which can be channelled into melanoma research.
- The site is suitable for the proposed development in being located in close proximity to other complimentary medical facilities, having good accessibility nearby public transport and arterial highway, having utility infrastructure available, and being of a size and configuration able to accommodate the facility, with no environmental constraints that are so sensitive as to preclude the development.
- The scale, bulk, height and setbacks of the proposed building are generally within the envelope of the existing building on the site.
- The form and architecture of the proposed new building has been designed to respond sympathetically to the existing character of the area, streetscape, and surrounding medical and residential developments.
- Landscaping is provided in a central courtyard and around the perimeter of the site in the building setbacks, and street trees are retained consistent with the character of the area.

- The proposed development will have no significant impact on nearby heritage buildings, and no significant additional impact on adjacent properties in terms of views, sunlight access or visual and acoustic privacy.
- The local road network has the capacity to accommodate traffic generated by the proposed medical research facility.
- A total of 118 car parking spaces are proposed on-site in the basement out of public view to meet the demands of the development and the requirements of Council's planning controls, thereby minimising any need for site users to park on surrounding residential streets. Delivery vehicles will be wholly accommodated on-site in the loading dock to minimise disruption to local traffic movements.
- The new facility is being designed to achieve a GreenStar rating of at least 4 stars under the Green Building Council of Australia's rating system to achieve a building with an efficient use of energy, water and materials, as well as a high level of internal amenity for occupants.
- A waste management plan is included in compliance with relevant health regulations and guidelines.
- A construction management plan will be prepared in conjunction with the builder prior to works commencing to manage the potential impacts of construction activities in accordance with relevant standards including site security and safety, noise and vibration, construction traffic, soil and water management, dust and construction waste, and community consultation.
- The development will comply with the Building Code of Australia's deemed to satisfy provisions, and in some instances, performance based measures.
- The proposal includes a Statement of Commitments on future actions by the proponent.

Given the planning merits above, the proposed development is justified and warrants the approval of the Minister for Planning.

1.0 Introduction

This 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 for approval of a project application for development of a medical research facility at 18-22 Sinclair Street, Wollstonecraft.

The Project Application for the Scheme includes:

- Construction of a new medical research facility, comprising 3533m^2 of medical research, consultation, education and ancillary office facilities, and 118 basement carparking spaces;
- Stormwater and infrastructure works;
- Landscaping; and
- Traffic improvements.

This report has been prepared by JBA Urban Planning Consultants Pty Ltd, for the proponent, Savills - Strategic Project Delivery and is based on architectural drawings prepared by Daryl Jackson Robin Dyke 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 issued for the project on 18 September 2007 under Part 3A of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report.

The report is structured as follows:

Section 1: Introduction to the project.

Section 2: Overview of existing site conditions

Section 3: Background, project team and approvals process.

Section 4: The current strategic and statutory planning framework and context applying to the site.

Section 5: Consultation undertaken for the project

Section 6: Description of the development project.

Section 7: Environmental Assessment of Project Application.

Section 8: Draft Statement of Commitments

Section 9: Conclusion.

The Appendices include the range of technical studies undertaken to inform the Project Application and its environmental assessment. These studies each address particular aspects of the Director General's requirements for the environmental assessment. 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.

2.0 Site Analysis

2.1 Site Location and Context

The subject site is a rectangular parcel of land that is located at Rocklands Road Wollstonecraft between Sinclair and Gillies Street.

The site currently forms part of an L-shaped parcel known as 18-22 Sinclair Road Wollstonecraft and is zoned Residential C under the *North Sydney Local Environmental Plan 2001.*

The site's locational context is shown at **Figure 1.**

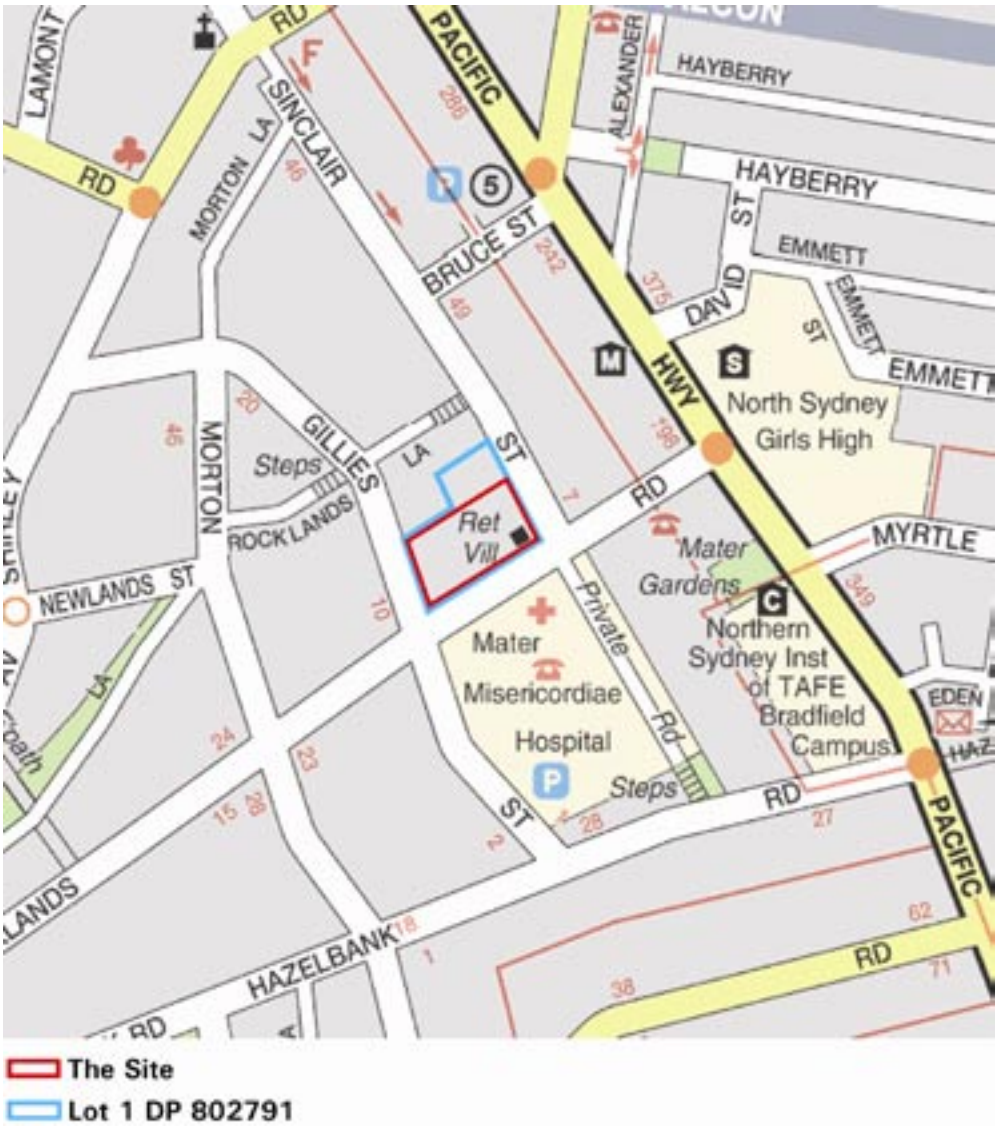

Figure 1 – Locality plan

The site is located in an area known as the "Upper Slopes" of Wollstonecraft. To the east of the site at the top of a ridge is the 4-6 lane Pacific Highway and large medical, commercial and tourist premises, while to the west of the site is the generally residential suburb of Wollstonecraft. Sydney Harbour some 2 km distant from the site to the west, and the CBDs of St Leonards and North Sydney are approximately 1 km from the site to the north and south respectively.

2.2 Site Description

The site of the proposed medical research facility forms approximately two thirds of Lot 1 DP 802791. Lot 1 DP 802791 has a total site area of 4,588m^2, while the site (the land subject of this Project Application) is rectangular in shape and has an area of around 3,541m^2.

North Sydney Council approved a subdivision of Lot 1 DP 802791 on 29 August 2007 to create a separate parcel for the site of the proposed medical research facility (see subdivision plan at **Figure 2)**. The applicant is in the process of registering the new parcel with the Land Titles Office.

Subdivision of the land was a condition of the transfer of ownership to St Vincents and Mater Health Sydney, and enables the Sisters of Mercy, who currently reside in the two cottages at 20 and 22 Sinclair Street to the north of the site, to retain ownership, use and control of the cottages.

The land is currently owned by Catholic Healthcare Services Limited. The purchase of the land by St Vincents and Mater Health Sydney Limited is expected to be finalised by 30 November 2007.

Figure 2 – Proposed subdivision plan

Site boundaries are as follows:

Frontage	Dimension
Sinclair Street (to the east)	45.82 metres
Rocklands Road (to the south)	82.165 metres
Gillies Street (to the west)	46.845 metres
Adjoining residential properties (to the north)	72.395 metres

Photographs of the site are at **Figure 3**, below.

Figure 3: Photographs of the site.
Top L: Corner of Rocklands Road and Sinclair Street (SE corner).
Top R: Corner of Rocklands Road and Gillies Street (SW corner).
Bottom L: Aerial link from 20 Sinclair Street to Justinian House (to be removed during demolition).
Bottom R: Northern boundary of the site viewed from Gillies Street.

2.3 Landform and Topography

Physical Context

The site has its primary frontage to Rocklands Road Wollstonecraft, which slopes reasonably steeply from the Pacific Highway in the east to Gillies Street in the west, with the topography beyond the intersection more undulating. The site slopes steeply from RL 87 on Sinclair Street to RL 77 on Gillies Street, and buildings to the east of the site are well elevated

Rocklands Road is an attractive tree-lined avenue, and together with the well-maintained street trees on the Gillies and Sinclair Street frontages to the site, provides a valuable contribution to the character of the area as well as important screening from traffic.

Residents of properties on the western side of Gillies Street have advised that water runs across Gillies Street during periods of high rainfall and into their properties. This stormwater will be captured and reused as part of the new development.

View corridors to Wollstonecraft and Sydney Harbour run from the east of the site along the northern boundary and Rocklands Road. These corridors provide a sense of connection to the harbour and beyond.

Vegetation

Vegetation on the site is limited to perimeter garden areas facing Sinclair Street and Rocklands Road. Most gardens are higher and separate from the ground floor level of the existing main building, and retained by brick walls, however some gardens are generally level with the ground floor.

A number of several small native trees, planted and self sown exotic palms, and understorey perennials are found in informal courtyards located across the site.

The site is partially screened by mature Camphor Laurel street trees on the Rocklands Road frontage, and limited plantings of less imposing (but mature) street trees on the Gillies and Sinclair Street frontages.

Geology and soils

As is common throughout the Lower North Shore, the site is close to a boundary of Ashfield Shale with the underlying Hawkesbury Sandstone.

Hawkesbury Sandstone is generally a medium to course grained quartz sandstone, with minor shale and laminate layers, while Ashfield Shale typically comprises black to dark grey shales and laminites. No major geological structures, such as dykes or faults, are indicated at the site. No rock outcrops, natural exposures or cuttings are present at or near the site.

Cut and fill is present on various parts of the site, most likely resulting from the construction of the previous Justinian House.

2.4 Existing Development

Existing Land Use Zoning

The site is zoned Residential C according to the *North Sydney Local Environmental Plan 2001* (NSLEP), as shown in the zoning map at **Figure 4**. Development for the purposes of hospitals (including medical centres), aged care facilities and educational facilities are permitted uses in the zone.

The site is located within the "Upper Slopes" of the Waverton/ Wollstonecraft area as identified in the North Sydney Development Control Plan 2002 (NSDCP 2002).

Figure 4 – Zoning map from North Sydney Local Environmental Plan 2001

Existing Site Development

Prior to August 2007, an aged persons facility, known as Justinian House and owned and managed by Catholic Healthcare, was operating on the site, providing hostel accommodation for up to 80 persons. The facility is 2-6 storeys in height and of brick, concrete and steel construction.

An application for demolition of Justinian House was lodged with North Sydney Council on 20 August 2007 and approved on 10 October 2007.

Vehicle access to Justinian House was limited to a long loading dock/driveway off Gillies Street along the northern boundary, two vehicle crossings off Rocklands Road to accommodate vehicles parked at-grade, and a further driveway used for carparking off Sinclair Street.

The main pedestrian access to the facility was via an entrance foyer towards the centre of the Rocklands Road frontage.

Justinian House was originally constructed in 1971 to provide hostel accommodation for nurses undergoing training at the nearby Mater Hospital. In 1986 it was converted to an aged care facility providing low care (hostel) accommodation for potentially up to 80 persons.

Due to commonalities in ownership, the building is currently linked to the cottage at no 20 Sinclair Street to the north, by an overhead bridge. This link will be removed as part of the demolition of the main building, and the cottages will have independent utility services.

Existing Transport Network

The site is ideally located in terms of proximity to important road, rail and bus networks. It is located less than 200 metres from the Pacific Highway which is served by numerous local and regional bus services, and three railway stations (Wollstonecraft, Waverton and North Sydney, one of the busiest on the CityRail network) are approximately 1 km distant. Sydney buses travel on Rocklands Road en route to Wollstonecraft station and the Pacific Highway, with a bus shelter constructed by North Sydney located on the Rocklands Road frontage to the site.

Sinclair and Gillies streets convey local traffic through Wollstonecraft, providing an alternative north-south route to the Pacific Highway.

Rocklands Road conveys one lane of traffic in each direction, and has some kerbside parking, while Sinclair and Gillies Streets provide one traffic and one parking lane in each direction.

The main vehicle entrance to the Mater Hospital is located on Rocklands Road opposite the eastern portion of the site, thus forming a four-way intersection at the corner of Sinclair Street and Rocklands Road.

Physical Infrastructure

The site is currently serviced by electricity, natural gas, water and waste water. Overhead powerlines are present along all street frontages.

North Sydney Council have constructed a bus shelter on the Rocklands Road frontage of the site. This bus shelter will be protected during demolition and construction works, and will remain in place when the new facility is operating.

An electricity substation is located on the Gillies Street frontage to the site, which is expected to remain in place following the development. Energy Australia has advised that the switchboard within the substation is to be upgraded prior to the commencement of construction works.

2.5 Surrounding Development and Land Use

Development in the vicinity of the site is generally residential in character, as discussed below and shown in the photographs at **Figure 5**.

Recent development applications in the vicinity of the site include a clinic associated with the Mater Hospital, to be located approximately 150 metres distant from the site on Gillies Street. Recent redevelopment of residential properties in the area is not evident.

To the north

To the north of the site is a mix of detached dwelling houses and medium density residential flat buildings zoned Residential C. Immediately adjoining the site of the proposed medical research facility to the north on the Sinclair Street frontage are detached dwelling houses.

The two single-storey dwellings fronting 20 and 22 Sinclair Street which are owned and occupied by the Sisters of Mercy have recently been subdivided from the site into two separate lots. Ownership, use and control of these lots remains with the Sisters of Mercy.

Development on the western side of Sinclair Street is comprised of generally single dwellings, while the eastern side of Sinclair Street comprises medium density residential development in the form of residential flat buildings and town houses.

To the east

Land to the east of the site on the opposite side of Sinclair Street is zoned Residential B and C in the North Sydney Local Environmental Plan 2001, and contains 3-9 storey residential flat buildings (including the heritage-listed former Mater Misericordiae Maternity Hospital). Further east, on the Pacific Highway, are 3-12 storey commercial, retail, tourist and medical premises are zoned Mixed Use.

To the south

To the south of the site on the opposite side of Rocklands Road is the main Mater Hospital campus, including its primary pedestrian and vehicle entrance. That site is zoned Special Uses-Hospital. Adjacent to the Hospital on the corner of Gillies Street is a large heritage-listed dwelling house, zoned Residential B. The recently approved Mater Clinic will be located in a new facility adjoining the Mater Hospital on its western frontage (at 3-9 Gillies Street).

State Transit bus no 265 travels along Rocklands Road as part of its journey from McMahons Point to Greenwich and Lane Cove, and a bus shelter constructed by North Sydney Council is located on the Rocklands Road boundary to the site.

To the west

To the west of Justinian House on the opposite side Gillies Street are medium density townhouses that are also zoned Residential C. Further to the west is a mix of detached dwelling houses and medium density residential development.

Three 1-2 storey dwelling houses face Gillies Street (including one that adjoins the site) are used by Sisters associated with St Vincents and Mater Health Sydney for residential purposes.

The recently approved Mater Clinic is located on Gillies Street to the south-west of the site on land currently zoned Residential C.

Figure 5 – Development in the vicinity of the site.
Top L: Cottages adjoining the site to the north at 20-22 Sinclair Street.
Top R: Residential flat building to the east of the site.
Bottom L: Mater Hospital opposite the site to the south.
Bottom R: Residential development adjoining the site to the west.

3.0 Background

3.1 Objectives of the Proposal

The key objective of this proposal is to create a world-class medical research facility to accommodate the functions of the Sydney Melanoma Unit, a Clinical Unit of the Discipline of Surgery within the Faculty of Medicine at the University of Sydney. SMU treats approximately one third of all melanoma patients in NSW.

In addition, the development of the new facility seeks to:

- Collocate the functions of the SMU (which are currently dispersed between four hospitals in Sydney and Newcastle) into a single facility, which will deliver important cost savings that can be channelled into research;
- Deliver a building that is sympathetic to its surrounding environment, while functioning as a sophisticated medical research facility;
- Facilitate research into melanoma and conduct clinical trials associated with melanoma research, to reduce the impact of the disease world-wide;
- Accommodate the world's largest biological bank of melanoma specimens, which is managed by the SMU to create new and innovative treatments for current and future melanoma patients; and
- Conduct in-house and remote education programs for specialists in the field of melanoma research.

3.2 Consideration of Alternatives

Needs of Sydney Melanoma Unit

The development of the proposed medical research facility has been made possible through Australia's largest ever donation to a single cause, together with a grant from the Commonwealth Department of Health and Ageing. Without that funding, the Sydney Melanoma Unit would continue to be accommodated in a commercial premises in North Sydney and three separate hospitals.

Consolidating of the treatment of patients with melanoma into a research-oriented clinical facility, together with resources to procure research material and on-site laboratories, more patients in clinical trials will receive cutting-edge treatment to ensure better outcomes. It will also deliver important financial savings to the SMU which will lead to more funds being channelled into research.

Locating the facility in such close proximity to the existing Mater Hospital and foreshadowed Mater Clinic, patients of the proposed new medical research facility will benefit from access to one of Sydney's most sophisticated medical precincts. Treatment for melanoma patients will be shared between the proposed new facility and the existing Mater Hospital – for example the Hospital will provide necessary in-patient facilities, while participation in clinical trials and consultation with practitioners will take place in the new facility.

Providing treatment facilities at the new facility will benefit complementary medical practices through the build up of knowledge and research into melanoma, and the hosting of seminars at the new facility.

Closure of Justinian House

Closure of the former aged persons facility has been foreshadowed since 2004. Standards of aged care have been improving, and the existing building, which was extensively serviced by lifts and stairs to six floors, was in need of a significant upgrade to be made compliant with NSW and Federal government standards.

Further, the number of residents at Justinian House has been declining over recent years, as more older people remain in their own homes as they before moving directly into nursing homes (high care facilities) when their health has significantly deteriorated. Justinian House was not equipped or accredited to provide such a high level of care to its residents, and thus was not able to provide accommodation for the frail aged.

All residents of Justinian House have been accommodated in other facilities located on Sydney's northern region.

Evolution of Design

Design of the new facility has evolved significantly since it was first considered by the SMU and St Vincents and Mater Health, Sydney in May 2007.

A series of design options were originally presented to SMU, each differing in terms of the location of the principal building entry, circulation patterns and building massing.

The preferred option established the key driver of a SMU clinical floor located on the mid level (level 2) with a street entry from Sinclair Street.

Key features of this scheme included:

- A building of two wings;
- Central landscape zone;
- Physical connection to Mater Hospital via an overhead bridge; and
- Main entry from Sinclair Street.

After further consideration of the project scope, budget and critical functional relationships, substantial modifications were undertaken to respond to stakeholder critique. This involved a review of the general arrangement of the principal SMU clinical floor and the inclusion of certain high cost functional components of the brief.

A new or developed concept option was structured around a more centralised garden court that facilitated a consolidated floor plate for the SMU clinical operations. This development of the plan responded to issues of organisational communication and connectivity, eliminating the perception of isolated zones of the building. This scheme also deleted the Day Procedures Unit and the bridge connection to the Mater Hospital, delivering a new scheme comprising:

- Central focal outdoor space;
- Consolidated Clinical treatment floor;
- No overhead bridge to Mater Hospital; and
- Main entry from Sinclair Street.

This scheme was endorsed by St Vincents and Mater Health, Sydney on 11 September 2007.

3.3 Environmental Assessment and Approvals Process

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) of the SEPP, is declared to be a project to which Part 3A applies.

In accordance with Section 75D of the EP&A Act, and Clauses 6 and 8 of the Major Projects SEPP, on 26 July 2007 JBA Urban Planning Consultants on behalf of Savills - Strategic Project Delivery Australia requested that the Minister:

- Declare the Justinian House Redevelopment project to be a Major Project subject to Part 3A of the EP&A Act; and

- Issue the Director General's environmental assessment requirements for the Project Application.

On 20 August 2007, in accordance with Section 75F of the EP&A Act, the Director General of the Department of Planning formed the opinion that the development was of the kind described in Schedule 1, Group 7, Clause 19 of the Major Projects SEPP and was a project to which Part 3A of the Environmental Planning and Assessment Act applies.

On 18 September 2007, the Director General's Environmental Assessment requirements for the project were issued. A copy of the requirements and authorisation to lodge a Project Application is included in **Appendix A.**

This report constitutes the Study addressing the Director General's Requirements for the Environmental Assessment Report (EAR) for the Project Application for the site.

3.4 Project Team

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

Proponent	St Vincents and Mater Health Sydney Limited.
Project Director	Savills - Strategic Project Delivery (Aust) Pty Ltd
Urban Planning	JBA Urban Planning Consultants
Architects/Landscape	Daryl Jackson Robin Dyke
Quantity Surveyors	McCredie Richmond & Partners
Geotechnical	Douglas Partners
Mechanical and Electrical Engineering	Unow Lai Enginuity Pty Ltd
Ecologically Sustainable Development	Unow Lai Enginuity Pty Ltd
Hydraulic and Fire Services	Warren Smith & Partners Pty Ltd
Traffic and Transport	Colston Budd Hunt & Kafes
Noise	Bassett Consulting Engineers
Lift access	George Floth Pty Limited
Landscape	Urban Forestry Australia
Waste	Hyder Consulting
BCA	Steve Watson & Partners
Access	Accessibility Solutions
Contamination	Heggies Pty Ltd
Dangerous Goods	Premier Engineering
Structural	SCP Consulting

4.0 Planning Framework and Context

4.1 Strategic Planning

The Metropolitan Strategy Context

The proposed new medical research facility is located in the northern Sydney suburb of Wollstonecraft, in the North Sydney local government area. The draft Inner North Subregional Strategy, which interprets the Metropolitan Strategy for Sydney: City of Cities at a subregional level, was released for public comment on 11 August 2007. It introduces key directions and actions for North Sydney which the proposed new medical research facility will assist North Sydney Council to deliver those directions and actions.

The site is strategically located within the "Global Economic Corridor", halfway between the North Sydney global city and the St Leonards strategic centre, and less than 200 metres from the Pacific Highway strategic corridor. The proposed medical research facility brings significant, high level jobs to an area that is well-serviced by public transport, while reinforcing the medical and education character of the Wollstonecraft and St Leonards area. Since the development is located on the site of a decommissioned aged care facility, it does not affect the potential supply of local housing stock.

Further, the proposed medical research facility is consistent with the State Innovation Strategy, prepared by the Premier's Council on Science, Innovation, Economic Development and Trade, which acknowledges that "sectors such as ... medical research play(s) a key roles in the NSW economy". Indeed, the Subregional Strategy estimates that, historically, annual rates of return from Australian health and research development were $5 for every $1 spent.

The proposed medical research facility is consistent with the Metropolitan Strategy for Sydney and the draft Inner North Subregional Strategy.

GreenStar Rating

The proposed medical research facility is to accommodate the functions of the current Sydney Melanoma Unit, which are located in temporary and disperse locations across Sydney. As well as enabling the streamlining of administrative functions, collocation of the research activities will result in reduced energy and water use, as well as land take.

The proponents of the proposed medical research facility have committed to achieving at least a 4-star Greenstar rating for the facility.

The Greenstar rating considers the holistic impact the facility will have on the environment and addresses matters related to the construction and operation of the facility such as management, indoor environment quality, energy, transport, water, materials, land use and ecology, emissions, and innovation.

For example, the facility will be design to maximise natural light, while minimising solar heat gains. This will both, reduce the energy consumption of the lighting and air conditioning while improving the indoor environment quality of the occupants. Energy usage will also be minimised by the use of energy efficient equipment and lighting and will be managed by a state of the art building management system, which will monitor the energy consumption. Considerable spaces for waste sorting and recycling, as well as, bicycle facilities have also been included.

In terms of minimising water use, rain water from the roof will be collected and used within the building, air conditioning systems will be designed to minimise the need for cooling towers, water efficient irrigation is proposed and meters will be installed to monitor water use. Efforts will also be made in selecting material to reduce VOCs and lifetime environmental impacts and costs associated with the development.

4.2 Statutory Planning

Overview of Planning Instruments Applying to the Site

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy No 11 – Traffic Generating Developments;
- State Environmental Planning Policy No 55 – Remediation of Land;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- North Sydney Local Environmental Plan 2001; and
- North Sydney Development Control Plan 2002.

Key Planning Controls

The key planning controls applying to the redevelopment of Justinian House for the purposes of a medical research facility are set out in **Table 1** below:

Table 1 – Key Planning Controls

Instruments Controls	Standard/Development Control	Proposed Development	Comp-liance
SEPPs			
SEPP (Major Projects) 2005	Proposed development is a Major Project which requires the approval of the Minister for Planning under Part 3A of the EP&A Act.	Part 3A Application is lodged.	Yes
SEPP 11 (Traffic generating developments)	The Roads and Traffic Authority is made aware of, and given an opportunity to make representations of, certain types of traffic-generating development.	The medical research facility is not a traffic generating development.	Yes
SEPP 55 (Remediation of Land)	Consent authority must consider whether the land is contaminated, and if so, whether it is suitable or can be remediated and made suitable for the proposed use.	The site is not contaminated, however a small number of hazardous materials will be used in the operational phases of the development.	Yes
SREPs			
SREP (Sydney Harbour Catchment)	Consent authority must consider whether the development will affect Sydney Harbour or its foreshores.	The subject site is not within part of North Sydney that is required to be considered pursuant to SREP (Sydney Harbour Catchment) 2005.	Yes
North Sydney LEP 2001			
Zone	Residential C (refer to **Figure 4**)		
Residential C – Permissible Land Uses	Hospitals (includes medical centres), educational institutions (amongst other uses)	Hospitals (medical centres) and educational facilities are permitted in the Residential C zone.	Yes

Instruments Controls	Standard/Development Control	Proposed Development	Compliance
Clause 14 Consistency with aims and objectives	The particular objectives of this zone are to encourage the provision of a range of residential accommodation, including dwelling-houses, duplexes, attached dwellings and apartments, in proximity to transport and other services.	The development is consistent with the zone objectives in that it is in close proximity to transport and similar services.	Yes
Clause 16 Residential zone objectives	(a) a range of dwelling types; (b) amenity for residents of new and existing dwellings, and (c) buildings which are compatible with their immediate context, and (d) development that promotes the character of the neighbourhood, and (e) to avoid carriage development	The development is compatible with buildings in its immediate context and is sympathetic to, and promotes the character of the neighbourhood.	Yes
Clause 17 Building heights	An apartment building in the residential C zone must not be erected in excess of 12 metres in height	The development is generally in accordance with the 12 metre height limit, however the upper parapets at levels 3 and 4 on the Rocklands Road frontage project slightly beyond the height limit.	Partial
Clause 18 Building height plane	BHP commences at 3.5 metres above existing ground level, and projected at an angle of 45 degrees, at all points from each of the boundaries of the site	The development is generally in accordance with the building height plane, however it protrudes slightly on the Rocklands road frontage at levels 3 and 4.	Partial
Clause 20 Landscaped area	Lot sizes over 900 sq m, 60% of lot to be landscaped	45% (including 33% deep soil planting), however this is an increase of 66% over the previous development on the site.	No

Instruments Controls	Standard/Development Control	Proposed Development	Comp-liance
Clause 39 Excavation of land	(1) Excavation objectives The specific objectives of the excavation of land controls are to: (a) retain existing vegetation and allow for new substantial vegetation and trees, and (b) minimise the adverse effects of excavation on the amenity of neighbouring properties, and (c) minimise excavation and site disturbance so as to retain natural landforms, natural rock faces, sandstone retaining walls and the like and to retain natural water runoff patterns and underground water table and flow patterns, and (d) ensure the structural integrity of adjoining properties. (2) Excavation controls Development that includes excavation must not be carried out unless: (a) the development is in accordance with and promotes the objectives in subclause (1), and (b) land stability of the site and adjoining land is preserved, and (c) the natural drainage patterns of the land and catchment will not be disrupted, and (d) adverse effects on other properties are avoided or minimised.	The development will include two levels of basement carparking, excavated 3-10 metres below existing pavement levels. Maximum vegetation cover will be retained during construction. Impacts on neighbouring properties will be minimised through the use of retaining walls, shoring and natural temporary batters. Stormwater will be captured, treated and removed from the site. Dilapidation surveys will be carried out for adjoining properties.	Yes
Clause 50 Development in the vicinity of heritage items	A statement of heritage impact on the heritage item and its curtilage may be required by the consent authority.	The development is sympathetic to heritage items in the vicinity.	Yes
North Sydney DCP 2002			
Carparking	Maximum carparking requirements: Medical centres (outside town centres) 4 spaces / 100m2 Motor cycles: minimum 1 space for every 10 cars or part there of. Car parking and loading spaces to be designed and located in accordance with AS2890.1 and AS1428.2.*	The development provides 118 carparking spaces, 12 motorcycle spaces and 10 bicycle spaces, for a GFA of 3533m^2. 3 accessible spaces provided on basement level 1.	Yes

Instruments Controls	Standard/Development Control	Proposed Development	Compliance
Traffic Guidelines for Development	Council may require a Traffic Management Plan to be submitted for Health and Community Services (Medical Centres, Hospitals)	Traffic report submitted at Appendix K.	Yes
Waverton/ Wollstone-craft Area Character Statement – The Upper Slopes	Hospital development on the Mater Hospital land or school development on the Bradfield College land is residential in scale, similar to attached dwellings and smaller apartment buildings - with bulk and scale of larger buildings broken down into a number of elements.	The development is more sympathetic the surrounding residential environment, and is a lesser scale to the former Justinian House. The façade of the development is articulated to break the building into a number of elements, and materials selected means the building is responsive to a human scale.	Yes
Contaminated Land	Council may require a preliminary investigation of potential for site contamination to be undertaken for proposed to be used for residential, educational, recreational, child care or hospital purposes	The site has not been used for a contaminating activity.	Yes
Entrances and Exits	Entrances and exits cater for the disabled and are clearly visible from the street and convey a sense of address.	Entrances at level 1 and level 2 are accessible.	Yes
Accessibility	A path of travel is continuous, relatively straight and does not incorporate any obstacle preventing safe access by people with disabilities, having regard for AS 1428.1, 1428.2, 1428.3, and 1428.4.	Internal paths will comply with AS1428.1.	Yes
	All signs and symbols including their location, size, and illumination are designed to be understood by all users, including those with sensory disabilities.	Signs and symbols to be in accordance with BCA and DDA.	Yes
	Design which considers the hearing impaired (specifications relating to hearing augmentation are found in Australian Standard 1428.2).	Auditorium to include hearing augmentation and be consistent with the BCA.	Yes

5.0 Consultation

The proposed development of a new medical research facility has been subject of significant discussions with the Wollstonecraft community, North Sydney Council, the Department of Health as well as the Sydney Melanoma Unit and the Mater Hospital. Their input has lead to important refinements to the scheme over time.

North Sydney Council

Savills - Strategic Project Delivery and St Vincents and Mater Health Sydney Limited met with North Sydney Mayor Genia McCaffery on 25 June 2007 and held a formal Pre-Application meeting with Council's senior planning staff on 12 July 2007. This consultation process considered the nature and form of the new medical research facility itself, as well as potential planning strategies. A further meeting was held with Council's planner and traffic engineer on 20 August 2007 in regards to the demolition of Justinian House.

No substantial negative comments were received from Council on the design, parking and traffic strategies presented. The Gillies Street service entry was discussed and no negative comments were given.

Following consultation with Council, the Savills - Strategic Project Delivery and St Vincents and Mater Health Sydney Limited agreed to separate the original single development application into three separate applications:

- Subdivision of 18-22 Sinclair Street into three separate parcels (to be determined by North Sydney Council);
- Demolition of the existing Justinian House (to be determined by North Sydney Council); and
- Construction of the medical research and development facility (to be determined by the Minister for Planning).

In addition, on 22 August 2007, letters were sent to the Mayor of North Sydney, all Councillors and the Chair of the local precinct providing an update on the project and offering to meet to discuss this project in greater detail. To date, no councillors or the Precinct have taken up this offer.

Wollstonecraft Community

Savills - Strategic Project Delivery and St Vincents and Mater Health Sydney Limited have to date held two information sessions for Wollstonecraft residents.

Residents within a 100-200 metre radius of the site were letterboxed in early July, inviting them to attend a community consultation session 25 July 2007 in the current premises of SMU a short distance from the site at North Sydney. A dedicated internet site with feedback form was also established to enable residents to be kept informed of progress on the new facility.

Issues raised in this meeting focused on:

- Impacts of demolition of Justinian House and construction of the new facility including timing, traffic, noise and vibration;
- Management of existing stormwater runoff;
- Impact on local parking availability of new facility; and
- Medical features of the new facility.

The local community was also formally notified of the lodgement of the application for demolition of Justinian House by North Sydney Council. Residents making enquiries were informed of the process being undertaken by Savills - Strategic Project Delivery and St Vincents and Mater Health Sydney Limited, and encouraged to participate in any consultation sessions associated with the project.

The second community consultation session was held with residents at SMU on 9 October 2007. Issues raised in this meeting comprised:

- Timing of demolition of Justinian House and construction of the new facility;
- Hours of operation and medical features of the new facility;
- Cumulative traffic impacts from developments in the vicinity;
- Stormwater saving initiatives; and
- Provision of an aerial link to the Mater Hospital.

Agencies, other authorities and groups

As part of considering the electrical, water and telecommunications arrangements for the new facility, consultation with relevant utilities has occurred. In particular, Umow Lai Enginuity Pty Ltd has consulted with Energy Australia and the capacity and future needs of the existing substation on the site.

St Vincents and Mater Health Sydney Limited has discussed the proposed medical research facility with both Northern Sydney Health and the Private Health Care Branch of the NSW Department of Health (copies of correspondence at **Appendix U**).

In regards to matters of interest to the Private Health Care Branch, due to the evolution of the design and function of the new facility, no procedures requiring sedation or the infusion of chemotherapy agent will be undertaken in the new facility, and thus there is no licence provision required for the development.

Itemised health-related impacts of the proposed development that were raised by Northern Sydney Health are addressed in this Environmental Assessment Report.

JBA Urban Planning Consultants has discussed the proposed redevelopment with the NSW Heritage Office. Any potential impacts on heritage items in the vicinity of the site are addressed at Section 7.4 of this Environmental Assessment Report.

No contamination has been found on the site, and no significant noise impacts are anticipated during construction or operation of the facility. Sections 7.6 and 7.9 of this report address comments provided by the NSW Department of Environment and Climate Change on the Director-General's Environment Assessment Requirements.

6.0 Description of the Development Project

The section provides a detailed description of the proposed development, which comprises the following:

- Construction of a new medical research facility over four levels;
- Basement carparking for 118 vehicles, 12 motorcycles and 10 bicycles;
- Associated landscaping and site works.

Architectural drawings and photomontages of the proposed development, prepared by Daryl Jackson Robin Dyke Architects and landscape plans prepared by Daryl Jackson Robin Dyke Architects are submitted under a separate cover.

The proposed development consists of a single building with a floorplate of 1594 m^2 and gross floor area of 3533 m^2. An existing Energy Australia Substation with a footprint of 22 m^2 is also located on the site.

Activities to be carried out in the building include medical research and consultation, education and administration.

6.1 Planning and Design Principles

Daryl Jackson Robin Dyke Architects have provided the following planning and design principles for the proposed development:

Design approach

- Delivery of a significant pedestrian entry statement with associated landscaping at the corner of Sinclair Street and Rocklands Road;
- Clear building circulation patterns that minimise extensive corridor systems and closed interiors, yet create a series of discrete and semi-private zones in which patients and staff undertake consultation and research;
- Extensive landscaped spaces including a central landscaped court and external landscaped precincts, which are connected with, and provide important light to the interior; and
- Delivery of a flexible floor plate to accommodate medical consulting suites and scientific and academic research in an inviting and stimulating environment.

Built form

- The building is generally over three levels plus rooftop plant and two levels of basement carpark. The building fits generally within the 12 metre height limit at both the Gillies Street and Sinclair Street frontages.
- Setbacks from each of the boundaries are determined by the building height plane controls, and extensively landscaped. The existing driveway along the northern boundary has been retained and is softened with perimeter planting.
- The building is broken down into smaller components to create a building of varied expression and heights.
- The built form is generally grounded and where the lowest level is raised above Gillies Street, and landscaped terraces are provided to mask the exposed face of the basement carpark.
- The rooftop plant room is held within the building height plane, although there is limited projection from mechanical ducts and cowls associated with the laboratory fume cupboard. There are no projections associated with the lift, beyond the rooftop plant room.
- The roof form comprises low pitched metal deck roofing and concrete decks with parapets to minimise vertical projections. Skylights and clerestory windows are used to admit natural light and provided a varied roof form.

6.2 Numeric Overview

Table 2 provides a summary of key development information relating to the proposal.

Table 2 – Key development information

Component	Proposal
Site area	3,541 m2
Landscaped area	1,617 m2
Gross floor area	3,533 m2
Height	12 metres (3 storeys plus basement and rooftop plant)
Carparking	118 spaces

6.3 Land Use and Floor Space

The development is a six level building, including two levels of basement carparking and the plant on top floor. Level 2 provides the principal entry to the site from the corner of Rocklands Road and Sinclair Street.

Vertical Arrangement

Level 4

- Central plant for exhaust, chillers and air handling plant
- Hydraulic plant and boilers
- Emergency generator

Level 3

- Sydney Melanoma Unit administration
- NSW Melanoma Network offices
- Specialist dermatology suite

Level 2

- Main reception
- Six (6) consultation suites
- Patient lounge
- Executive offices and clinician lounge
- Clinical trials research offices and consultation suite

Level 1

- Conference and education centre
- Academic research offices
- Database and server room
- Wet laboratories
- Mercy Foundation offices
- Storage and Support spaces including delivery dock

Level B1

- 55 carparking spaces
- 6 motorcycle spaces
- 10 bicycle spaces and change facilities
- Main electrical switchboard

Level B2

- 63 carparking spaces
- 6 motorcycle spaces
- Rainwater reuse tank

6.4 Building envelope

The building is constructed to the 12 metre / 3 storey height limit applying to the site.

The building is stepped in line with the sloped topography of the site, providing three habitable floors (including the principal entry to the building) at the eastern (Sinclair Street) frontage of the site, and two habitable floors at the western (Gillies Street) frontage of the site.

Building setbacks at **Table 3** below are determined using the building height plane and topography of the site, and are as follows:

Table 3 – Building setbacks

Boundary setback	Distance
North (dwellings)	6,400mm
East (Sinclair Street	5,200mm
South (Rocklands Road)	7,500mm
West (Gillies Street)	Varies, but podium edge is 6,200mm from boundary.

Table 4 provides proposed building materials and façade treatment for the development.

Table 4 – Buidling materials and façade treatment

Component	Detail
Construction materials	Pre-cast concrete panels, metal deck roofing
Façade treatment	Masonry brickwork, stone and copper cladding, frameless and aluminium framed glazing
Vegetation	The Rocklands Rd/Sinclair St corner will be the visual focus, comprising Livistonia palms and native gully species. Plantings will reinforce existing species while providing important shading and cover along all boundaries. Internal courtyard will be deep-soil planted to permit the establishment of large trees.

6.5 Landscaping

A landscape plan prepared by Daryl Jackson Robin Dyke Architects is submitted under a separate cover. A landscape design statement has also been provided.

The landscape design seeks to create an interface between the building and its urban surroundings that presents a non-institutional and welcoming environment. Existing streetscapes adjacent to the building are upgraded, and a landscape character derived from moist gully vegetation, commonly found in the Lower North Shore has been created.

Key features of the landscape plan are the internal courtyard on the northern face of the building, and the main entry feature at the corner of Sinclair Street and Rocklands Road. A rainwater collection system has been incorporated within the site that will be connected to an irrigation system for the landscaping.

Plant species have been selected from the North Sydney Council list of indigenous species.

In total, 45% of the site will be landscaped (including 33% as deep soil planting). This includes boundary landscaping, the internal courtyard and plantings on rooftops.

6.6 Access

Car, motorcycle and bicycle access

Car, motorcycle and bicycle access to the carpark has been located off Rocklands Road.

A total of 118 carparking spaces (including three disabled spaces on level B1) has been provided in the two basements. Accommodation for 12 motorcycles and 10 bicycles is also provided.

Delivery vehicles

Delivery vehicles will access the delivery dock on the northern boundary of the site via the existing driveway off Gillies Street.

Pedestrians

The principal pedestrian access to the building (to level 2) is via an at-grade entry at the corner of Sinclair Street and Rocklands Road.

A secondary access is located further west on Rocklands Road, into level 1. This entrance is internally connected to the reception area of the building via a lift and passageways.

Access to levels 1-3 (and basements B1 and B2) is also available via an internal staircase and lift.

Construction vehicles

Construction vehicles will enter and leave the site in a forward manner, via Rocklands Road.

6.7 Stormwater Management Works

A Stormwater Concept Plan for the site comprises the following components:

- Roof and gutter collection with downpipes to collection pits at ground level;
- Surface runoff collection via graded ground levels to collection pits;
- Underground piping;
- On-site detention basin;
- Rainwater collection tank;
- Discharge flow inhibitors; and
- Discharge into Council stormwater system.

6.8 Utilities

Augmentation of existing utilities is not anticipated as a result of the proposed development. However, the existing EnergyAustralia LV switchboard located within the substation chamber will be upgraded to accommodate the new supply, and an application has been made to Energy Australia for the said works to be carried out at the earliest available opportunity.

A diesel generator will be installed in the facility to provide capacity for 36 hours' supply in the event of a supply breakdown. The generator will provide power on mains failure to biospecimen bank freezers, selected laboratory lighting and power circuits, sprinkler pumps, carpark exhaust, lifts, communications racks and associated mechanical services.

The development will be connected to local stormwater, water, sewerage, communications and gas services, via existing services running adjacent to the site.

6.9 Site Management

Security

Security and emergency procedures for the facility (once operational) will be managed through a the implementation of a Communications Management System and Emergency Management Plan.

Access into the carpark will be controlled through a boom gate located 25 metres within the site, providing sufficient space for four cars to queue.

Security for staff of the facility working outside standard hours will be managed by ensuring perimeter doors are locked after hours and a security firm will undertake regular patrols of the area.

Waste Management

Handling and storage of waste during the operational phase would be managed internally, but waste removal will be integrated with waste removal services for the Mater Hospital which are overseen by the SV&MHS waste contract.

Clinical and medical wastes will be stored in secured areas before being disposed of by specialist contractors and transported for treatment or incineration.

General waste will be stored on level 1 adjacent to the loading dock and lifts. Access would be from Gilles Street. Provision will be made throughout the building for the sorting of waste into recyclables, organics, comingles and general waste.

6.10 Project Staging and Construction Management

Construction of the proposed development will occur in a single stage. It will commence immediately following demolition of the existing structures on the site (which has already been approved by Council). Construction of the new facility is expected to be completed by mid-2009.

Access for construction vehicles will be via Rocklands Road, and all construction materials will be stored on site.

Hoardings, erosion and sediment control measures, site fencing and tree and root protection zones installed as part of the demolition and will be retained throughout the construction process, to ensure the site remains safe at all times. However, one additional tree, located near the corner of Sinclair Street and Rocklands Road, has been subject of additional inspection and is proposed to be removed during the construction phase of the development.

Construction of the basements will require part of the site to be excavated. This will result in the installation of temporary shoring, batters and permanent retaining walls across the site. Some existing retaining walls will be removed and replaced during this process.

The existing bus shelter on Rocklands Road, and Energy Australia Substation on Gillies Street, will be retained and protected throughout the construction process. Two existing vehicle cross-overs on Rocklands Road will also be removed and gutter crossings made good.

It is anticipated some excavated materials will be able to be reused on site; remaining waste materials will require disposal at appropriate landfills.

A detailed construction management plan will also be prepared by the successful contractor to address all construction and waste impacts of the proposal.

7.0 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).

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

7.1 Director General's Environmental Assessment Requirements

Table 5 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.

Table 5 – Director General's Environmental Assessment Requirements

Director General's Requirements	Location in Report/ Application
The Environmental Assessment (EA) must include:	
1) an executive summary.	Page ii
2) a description of the proposal and related matters including: ▪ textual and diagrammatic articulation of the proposal; ▪ description of the existing environment and suitability of the site; ▪ various components and stages of the project as relevant; and ▪ related subdivision of the site.	Section 6.0
3) justification for the project and alternatives considered;	Section 3.2 &7.7
4) project objectives;	Section 3.1
5) a consideration of all relevant NSW State Environmental Planning Policies, applicable planning instruments and relevant legislation, including justification of any proposed variations from these;	Section 4.0 & 7.3
6) an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below;	Section 7.0
7) a draft Statement of Commitments, outlining commitments to public benefits, environmental management, mitigation and monitoring measures with a clear identification of who is responsible for these measures if and where relevant; and	Section 8.0
8) a signed statement from the author of the EA certifying that the information contained in the report is neither false nor misleading	Statement of Validity

Key issues to be addressed The Environmental Assessment must address the following key issues for both construction and operation, including proposed minimisation and mitigation measures where relevant:	
▪ Built Form and Design – Design, height, bulk and scale of the proposal in relation to the surrounding streetscape, including proposed building materials, shading and visual impact. Interface with surround residential area. Any potential for a 'wind tunnel' effect to be generated by the design.	Section 7.3
▪ Heritage - A Statement of Heritage Impact should be prepared in accordance with NSW Heritage Office guidelines and include an assessment of the relationship between the proposed new development and the heritage buildings in the vicinity.	Section 7.4
▪ Transport, Traffic & Access – Forecast traffic generation by the proposal and ensuing traffic impacts. Proposed car, pedestrian, bicycle and public transport access to the site, including management of traffic during construction and provisions for parking for staff and visitors. Also proposed emergency evacuation and public access.	Section 7.5
▪ Noise – Any anticipated noise from the development or associated plant or equipment and predicted impacts on any sensitive receivers.	Section 7.6
▪ Air quality – Any anticipated dust impacts from construction of the proposal on sensitive receivers. Any potential for emissions from the research facility.	Section 7.8
▪ Site contamination – Whether there is any potential for existing contamination of the site prior to commencement of construction and remediation plans.	Section 7.9
▪ Ecologically Sustainable Development – Detail any proposed measures for reduction of water or energy usage, usage of raw materials or waste production.	Section 7.10
▪ Waste management – Proposed mechanisms for safe removal of medical waste.	Section 7.11
▪ Utilities Infrastructure – Address existing capacity, constraints and requirements of the development for sewerage, water, waste disposal, wastewater treatment, recycled water, gas, electricity, telephone, sewerage and easements for services in consultation with relevant agencies.	Section 7.12
Consultation requirements During the preparation of the Environmental Assessment, you should consult with the relevant Local or State government authorities, service providers, community groups and other stakeholders. In particular, you must consult with: ▪ Agencies, other authorities and groups: ▪ North Sydney Council; ▪ NSW Health (including Private Health Care Branch); ▪ NSW Heritage Office; ▪ all utility providers; and ▪ the Department of Environment and Climate Change (if any noise impacts or site contamination are anticipated). Public Document all community consultation undertaken to date and discuss the proposed strategy for undertaking community consultation. This should include any contingencies for addressing any issues arising from consultation and an effective communications strategy. The consultation process and the issues raised should be described in the Environmental Assessment.	Section 5.0

7.2 Site Suitability

The site is considered suitable for the proposed development of a new medical research facility for the following reasons:

- It is located opposite the existing Mater Hospital and in close proximity to the foreshadowed Mater Clinic with landuse synergies;
- It will enable the SMU to consolidate its research and treatment facilities into a single building, delivering significant cost savings that can be redirected into melanoma research;
- There are excellent public transport links to the site from across the metropolitan area;
- Existing utility services are available to accommodate the new facility;
- The area can benefit from a new development that will improve the aesthetics, including maintaining the existing "avenue" character of Rocklands Road while delivering an attractive building that responds positively to the existing medical and residential neighbourhood;
- The site is large enough to accommodate the proposed facility, the design of which responds to the controls within the North Sydney LEP and DCP for the site;
- Adjoining properties are compatible with the proposed development;
- There are no alternative sites available to accommodate the SMU; and
- There are no significant environmental constraints to preclude redevelopment.

7.3 Built Form and Design

This section of the report provides an assessment of the proposed medical research facility and its interface with the surrounding streetscape. Daryl Jackson Robin Dyke architects has prepared an Architectural Design Statement for the project, which is included at **Appendix C**. In particular, this section provides an assessment of the following:

- Size, scale, height and form of the medical research facility;
- Building façade design and visual impact;
- Overshadowing;
- Views;
- Visual privacy;
- Wind impacts; and
- Landscaping.

Height, bulk and scale of the proposal

The existing structure on the site comprises a decommissioned aged persons facility of brick and tile construction. The facility is designed in a series of half-levels, with up to six storeys (peaking at RL 98 near the Sinclair Street frontage), stepping down along the site to a single storey structure comprising a small swimming pool, at RL 84.5 at Gillies Street.

Informal carparking for the facility was provided on a driveway along the northern boundary of the site, accessed from Gillies Street.

Much of the bulk of Justinian House was shielded from pedestrian view by significant street trees and landscaping along the permitter of the site.

Development consent was obtained from North Sydney Council on 10 October 2007 for the demolition of Justinian House.

The proposed development involves:

- Construction of a medical research facility over six levels, including two levels of basement carparking and one level of rooftop plant and equipment; and
- Landscaping of internal courtyards and perimeter.

A summary of the existing and proposed development is at Table 6 below:

Table 6 – Existing and proposed development on the site

Building component	Existing development m^2	Proposed development m^2	Difference m^2	% change
Site area	3,541	3,541	0	0
Built area	2,319	1,638	(-681)	29% decrease
Floor space ratio	1.4:1	1.1		29% decrease
Gross floor area	4,985	3,533	1,452	29% decrease
Driveways	261	308	47	17% increase
Landscaped area	961 (27%)	1,617 (46%)	656	66% increase
Planted areas	784 (22%)	1,198 (33%)	414	51% increase
Deep soil planting	784	896	112	14% increase

As discussed in the Architectural Design Statement prepared by Daryl Jackson Robin Dyke Architects at **Appendix C**, the new facility delivers an architectural form that responds to the statutory controls for the site, the character and topography of the local environment, as well as the functional demands of SMU.

The building envelope is set by the 45 degree building height plane and 12 metre height limit across the site, which effectively creates setbacks and perimeter landscaped areas along the boundaries of the site.

The proposed building is of a similar scale to the existing structure on the site. It has fewer projections beyond the 12 metre height limit and building height plane than the existing structure. The rooftop plant roof is held within the height plane, although there are limited projections from some mechanical exhaust ducts and cowls (associated with the laboratory fume cupboard exhaust flues) and parapets on the Rocklands Road frontage. Having the lift service only the three main levels of the facility means the central lift shaft does not protrude further beyond the plant room.

The existing development projects beyond the 45 degree building height plane on all sides; the proposed building complies with the 12 metre height limit, with the exception of parapets on the Rocklands Road frontage. These projections are obscured by the existing mature Camphour Laurel street trees, thus minimising their impact. The existing building's projection beyond the height plane on the north-western boundary of the site at Gillies Street has been reduced in the proposed building.

The building form is traditionally grounded and generally follows the topography of the site, exploiting the 10 metre fall from Sinclair to Gillies Street, where landscaped terraces are provided to mask the exposed face of the basement carpark. The landscaped podium provides a compressed base to the upper level of the building, while creating a new landform for the site.

The increased building setbacks and articulated façades, coupled with fewer projections from the existing building envelope controls will deliver a built form that is significantly less bulky and more sympathetic to the community than the existing aged care facility. It is also consistent with the existing large buildings to the east and south of the site, and is not out of character with the area.

Building façade design and visual impact

The exterior of the building has been designed to respond sympathetically to the surrounding environment, in both material selection and composition. **Figure 6** below shows preliminary elevations and materials for the development. Detailed architectural images are at **Appendix C**. These images show how the palette selected creates a distinct and identifiable presence for SMU, while maintaining a human scale that responds to nearby properties. It also complements and will blend sympathetically to the strong avenue of Camphor Laurel street trees that provide a strong visual impact along Rocklands Road.

The facility was deliberately designed not to create a "clinical", institutional or commercial presence, rather one that enables neighbours, visitors and patients to visually connect with the building.

The composition of the façade of the building has been chosen to respond to adjacent residential development. Indeed, the combination of a range of masonry brickwork and small-medium sized windows, with limited large windows and curtain walls, presents a more traditional building that would often be found in a residential zone.

Underpinning the overall approach to the exterior façade is a system of brick "snap" tiles that are embedded in pre-cast concrete panels. This material is non-reflective and provides a contemporary response to the face brickwork found on adjacent residential buildings. Materials will be coloured to complement general brickwork, and will include orange, ochre and deep red. Black may be used to highlight some features.

Table 7 – Selected building components

Building component	Existing	Proposed
Building façade characteristics		
Construction materials	Masonry walls, concrete, steel	Pre-cast concrete panels, metal deck roofing
Façade treatment	Red brick	Masonry brickwork, stone and copper cladding, frameless and aluminium framed glazing
Landscaping		
Vegetation	Existing perimeter gardens comprising small, native trees, planted and self-sown exotic palms and understorey perennials.	The Rocklands Rd/Sinclair St corner will be the visual focus, comprising Livistonia palms and native gully species.
	Internal courtyards consist of tree ferns, small palms, exotic perennials and potted shrubs.	Plantings will reinforce existing species while providing important shading and cover along all boundaries.
		Internal courtyard will be deep-soil planted to permit the establishment of large trees.

Figure 6 – Palette of proposed building materials showing building façades.
Top: Façade and proposed building materials on Gillies Street elevation.
Centre: Façade and proposed building materials on Rocklands Road elevation.
Bottom: Façade and proposed building materials on Sinclair Street elevation.

Solar Access & Overshadowing

Careful consideration of the potential building envelope for the site, created by the 12 metre height limit and 45 degree building height plane, the form of the new building has been kept to a similar scale to the existing aged persons facility, as shown in the envelope modelling of the existing and proposed developments shown at **Figure 7** below.

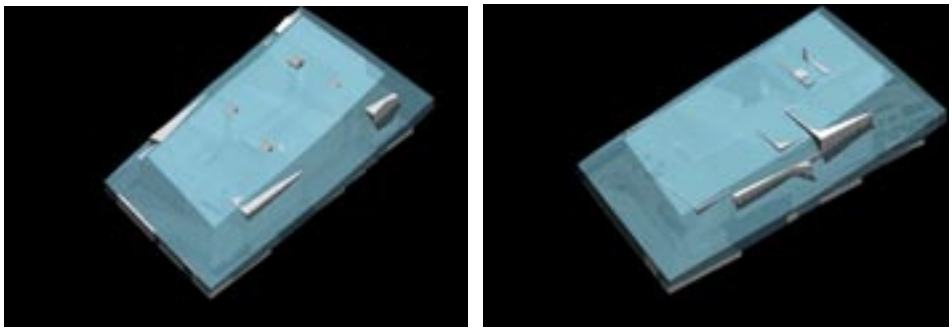

Figure 7 – Building envelopes in relation to current planning controls
L: Envelope of existing development. R: Envelope of proposed development.

Slight rooftop protrusions along the Rocklands Road frontage have created an additional shadow on Gillies Street at 9am on 22 June (refer to **Figure 8**); the proposal reduces shadow impacts at most times elsewhere. Overshadowing at midday on 22 June affects only Rocklands Road, which is generally overshadowed by the existing street trees. Late afternoon shadows extend only to the vehicle entry to the Mater Hospital, opposite the site.

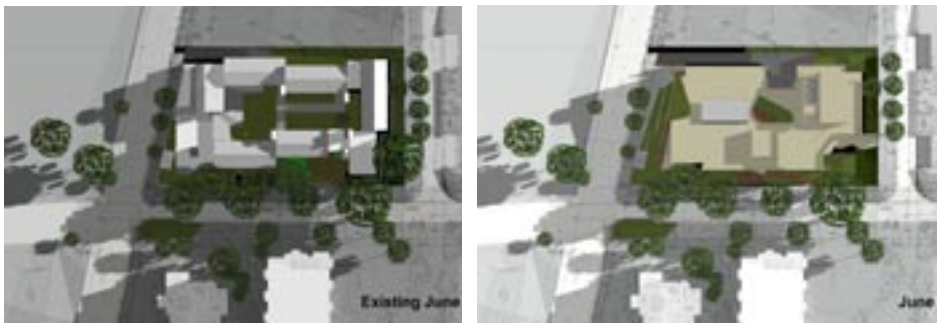

Figure 8 – Overshadowing impacts of current and proposed development
L: Shadow impact of existing development.
R: Shadow impact of proposed development at 9am on 22 June

Views

The proposed development does not materially affect the view from adjacent properties, as the height of the new facility is no higher than the existing development and with fewer projections. Views along the northern boundary of the site are improved through the removal of the existing overhead bridge linking the former aged persons facility and no 20 Sinclair Street.

Visual privacy

To minimise overlooking of adjacent properties, the number and shape of windows has been reduced in comparison to the existing building, particularly on the northern boundary.

Perimeter landscaping has also been increased, to provide important improvements to privacy for residents in medium density developments to the east and west of the site. Plantings of bamboo have been introduced along the northern boundary of the site, to introduce screening for neighbouring residents.

Wind Impact

The proposed development will have negligible impact on the surroundings and is unlikely to cause additional wind tunnel effects. Wind impacts from the existing structure were negligible, and the new development is of a similar size, but with a greater level of façade articulation and mature plantings to provide protection from the elements.

The building's stepped and highly articulated form will mitigate against westerly winds funneling down the existing view corridor along the northern boundary of the site. Further, this corridor will be heavily planted along the boundary, thus helping to reduce any wind impacts to the adjacent residential properties.

There are limited expanses of façade that are greater than 2 storeys and where the building is at its maximum height (over the delivery dock), podium planting, canopies and stepped terraces will all help to reduce down-draft along the northern boundary. Along Rocklands Road boundary to the site, the façade is well protected by the existing mature street trees, which will further reduce any funneling between the existing Mater Hospital and the new development.

Streetscape and Landscaping

The existing attractive avenue of street trees along Rocklands Road will be enhanced by the new development, and new species will be planted to create a native gully and landscape feature on the corner of Sinclair Street and Rocklands Road. A Landscape Architectural Statement for the development was prepared by Daryl Jackson Robin Dyke Architects and is at **Appendix D**.

The proposed redevelopment will deliver an outdoor environment that is significantly improved when compared to existing Justinian House, with 45% of the site area devoted to landscaping. This compares favourably with 27% for the previous development.

However, this is less than the requirement for landscaping for sites over 900 m^2 in the residential C zone, where 60% landscaping is required. Further, according to the North Sydney DCP 2002, a minimum of 80% of the landscaped area comprises soft landscaped elements such as gardens, lawns, shrubs and trees on the site.

These departures from the landscaping controls are considered reasonable in this case, given the following circumstances:

- Significant improvement in landscaping when compared to the previous development on the site;
- The proposed development will increase the amount of landscaping on site by 66%;
- The proposed landscaping will complement and improve the existing streetscape;
- The landscaping controls are intended for residential development, and not at the proposed medical research use, which has different requirements for open space;
- The proposed open space is appropriate for a medical research facility and creates areas with a pleasant outlook for patients, staff and carers, while providing valuable open space for quiet reflection and relaxation; and
- Sufficient landscaped area is provided to meet the stormwater management objectives for the site.

In addition, the development meets the objectives of the landscaped area control (which is targeted at new, high density residential development in the zone), in that it:

- Promotes the use of private open space;
- Provides a landscaped buffer between adjoining properties;
- Controls density;

- Improves the flow of underground water and retaining surface drainage water on site; and
- Promoting the character of the neighbourhood.

The existing evergreen perimeter of the site will be enhanced through significant plantings of Livistonia palms and appropriate understorey species along Rocklands Road, and the creation of a grassed terrace opening up from the building to the street, as shown in **Figure 9** below.

A key feature of the development is the creation of an internal courtyard that will be visible from upper levels, with deep soil planting to enable the establishment of large trees. This space will provide an important respite for patients, staff and carers for reflexion, relaxation and outlook. Lower level rooftops on the northern boundary will also be planted with low shrubs and grasses to further enhance the outlook from the building and views from Sinclair Street. Views to the north will be further softened through the planting of bamboo along the northern boundary.

Construction of the new facility will require the removal of one tree (*Eucalyptus nicholii* – Small leaved Peppermint) specimen to help facilitate to strong focal point and entry to the new medical facility and is recommended in the arboricultural assessment prepare by Urban Forestry Australia at **Appendix P**. The removal of this tree is in addition to the removal of certain other vegetation as part of the demolition of the current facility on the site, and has been approved by North Sydney Council.

A rainwater collection system has been incorporated within the building, which will be connected to an irrigation system for the landscaped area, although the vegetation proposed is generally native with lower water demands. Plant species selected have been chosen from North Sydney Council's list of Indigenous Native Plants of North Sydney.

Figure 9 – Landscaping concept plan for proposed development

Conclusions

The new medical research facility will deliver a built form that is sympathetic to adjacent properties while creating an interesting and attractive feature on Rocklands Road.

The existing harsh exterior of the former aged care facility known as Justinian House will be replaced by an articulated and contemporary structure that responds positively to local planning controls. Multiple projections of the existing facility beyond the building envelope controls will be reduced, with only minor additional overshadowing to Gillies Street at 9am on 22 June. Therefore, there is no significant impact on surrounding properties in terms of sunlight access, privacy or views.

The existing landscaped character of the Gillies, Rocklands and Sinclair Street frontages will be reinforced, with the corner at Sinclair and Rocklands Road providing a clear entry feature to the building. Roof top and boundary plantings will soften the appearance of the structure for both patients and staff, as well as residents of neighbouring properties. Existing street trees, and those on the boundary of the site, will be well-protected by measures such as fencing, tying back of branches and tree protection zones, in combination with specific construction techniques, as recommended in the arboricultural assessment.

7.4 Heritage

The site on which the proposed medical research facility is to be located does not contain a heritage item and there are no known archaeological items on site, based on previous use of the land. 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 *Heritage Act* 1977.

However the North Sydney Local Environmental Plan 2001 identifies two heritage items in the vicinity of the site (13 Gillies Street and 7 Sinclair Street [former Mater Misericordiae Maternity Hospital]). Clause 50 of the NSLEP 2001 states that the consent authority must consider the likely effect of the proposed development on the heritage significance of the heritage item and its curtilage.

The property at 13 Gillies Street is a large two-storey brick house with gabled slate roof on a rusticated sandstone foundation course, constructed in the Federation style. It is set in generally level, landscaped grounds with frontages Gillies Street, Rocklands Road and the Mater Hospital.

The property at 7 Sinclair Street is the former Mater Misericordiae Maternity Hospital, which was constructed in 1939-1940 in the Inter-War Art Deco Style. The maternity hospital ceased operations in the early 1980s and the building underwent considerable internal renovations when it was converted into a residential flat building in 1999. The property is constructed of concrete beams and slabs, brick cavity walls externally and brick partitions internally. The property extends to four storeys at its tallest point at the corner of Sinclair Street and Rocklands Road, where it is constructed to the boundary.

Impact Assessment

The proposed new facility will have a positive and sympathetic impact on the heritage items in its vicinity.

The design of the new medical research facility has been to respect the nearby heritage items through the use of complementary materials in the form of a range of face brickwork and other masonry units. Further, through the considered approach to fenestration and with a relatively low scale overall, the proposed building is not conceived as a high contrast development.

The proposed new development is of a similar scale to the existing Justinian House, but with increased setbacks and landscaped areas, and reduced protrusions beyond the building envelope controls. Views from 7 Sinclair Street will be maintained, and the existing view corridor along the northern boundary of the site will be slightly improved.

The exterior expression of the proposed medical research facility has been conceived to present a considered and composed design that responds to the surrounding environment, both in materials selection and composition. The composition of the façades has been generated using a scale that this responsive to nearby properties, and is more akin to a residential development than a commercial or medical facility.

The principal building materials include a range of masonry brickwork, with limited use of stone and copper cladding at the building entry, complemented by small-medium window openings with both frameless and aluminum-framed glazing.

In addition to the design of the building form and selection of materials, the development is shielded from view along Rocklands Road by a row of Camphor laurel trees that will obscure the new development from the street and nearby heritage items. The Camphor Laurels themselves also have a significance that the project recognises. Setbacks and construction techniques have taken into account the need to protect these trees, further enhancing the landscaped character of the vicinity.

Overshadowing impacts to the property at 13 Gillies Street will be slightly reduced when compared to the current situation, due to the reduced protrusions beyond the building envelope; 13 Sinclair Street is not affected by shadows from the current or proposed development.

Access into the new facility will be via Rocklands Road, minimising impacts on Sinclair and Gillies Streets. A new vehicle crossing is to be installed on Rocklands Road to the west of the current bush shelter, and the principal pedestrian entrance on a highly landscaped environment near to the corner of Sinclair Street. Delivery vehicles will access the site via the existing driveway on Gillies Street.

Demolition and construction vehicles will enter and exit the site in a forward direction, via Rocklands Road, again minimising any impacts on Sinclair and Gillies Streets. Air-borne dust will be retained within the site wherever possible, and noise and vibration impacts minimised.

Conclusions

The proposed redevelopment of Justinian House will create a visually pleasing built form that is sympathetic to the existing Wollstonecraft neighbourhood, including nearby heritage items.

Increased setbacks, landscaping and reduced protrusions beyond the building envelope will deliver a less bulky building that has a residential and contemporary feel, when compared to the existing institutional building on the site.

Further, access points to the new facility have been selected to minimise traffic on Gillies and Sinclair Streets, which provide important frontages to the heritage items.

Construction of the new facility will be done in such a way that ensures the building contractor is fully aware of the significance of the two properties, construction vehicles will access the site via Rocklands Road and environmental impacts of the development will be minimised as much as possible.

In addition, if any Aboriginal or Historical Relics are unexpectedly discovered during the construction works, all excavations or disturbances in the area will immediately cease and the Heritage Council of NSW shall be informed in accordance with Section 145 of the *Heritage Act*, 1977.

7.5 Transport, Traffic and Access

This part of the report considers the traffic and parking issues associated with the development of the new facility. A Traffic Report has been prepared by Colston Budd Hunt & Kafes Pty Ltd and is included at **Appendix K**.

The main traffic issues associated with the development are:

- Traffic to be generated by the development;
- Pedestrian, vehicle, bicycle and public transport access;
- Number of carparking spaces provided;
- Design and layout of access;
- Traffic impacts associated with demolition and construction;
- Emergency evacuation and accessibility.

Existing Environment

The site is located at the southern end of a block bounded by Rocklands Road, Sinclair Street, Gillies Street and Rocklands Lane, Wollstonecraft. Vehicle access to the current development is largely limited to a loading dock and driveway off Gillies Street, however there are several at-grade parking spaces located within the boundary of the development at Rocklands Road. Informal parking was also available at the rear of the adjoining cottages at 20-22 Sinclair Street.

Streets surrounding the site generally carry local traffic to and from the Pacific Highway from Waverton and Wollstonecraft, less than 200 metres to the east of the site. The intersection between Rocklands Road and the Pacific Highway is controlled by traffic lights. Sinclair and Gillies Streets have one traffic lane and one parking lane in each direction, while Rocklands Road provides some kerbside parking.

Traffic counts were undertaken on weekday morning and afternoon peak periods at intersections close to the site in order to ascertain existing traffic conditions. The counts were then augmented with the anticipated traffic impacts from the recently approved Mater Clinic medical centre, to be located on Gillies Street between Rocklands Road and Hazelbank Street, approximately 150 metres from the site. The counts found that during the morning and afternoon peak periods:

- The Pacific Highway carries between 2550 and 2670 vehicles per hour (two way);
- Rocklands Road carries 200-550 vehicles per hour (two way);
- Sinclair Street carries 140-220 vehicles per hour (two way); and
- Gillies Street carries 100-240 vehicles per hour (two way).

INTANAL assessment undertaken by Colston Budd Hunt & Kafes Pty Ltd against the Roads and Traffic Authority's *Guide for Traffic Generating Developments* found that the local roads surrounding the development (including Gillies and Sinclair Street) have some capacity for additional traffic volumes. Rocklands Road, which is defined as a collector road, at times exceeds capacity as a result of queuing at the intersection with the Pacific Highway and nearby land uses (such as residential flat buildings, commercial properties and the existing Mater Hospital).

Traffic generation

Colston Budd Hunt & Kafes Pty Ltd also carried out analysis of traffic generated by similar medical centres. This research found that medical centres generate up to 1 trip per 70m^2 of GFA in the morning peak, and 1 trip per 25m^2 GFA in the afternoon peak. Applying these rates to the proposed medical research facility would generate up to 50 vehicles per hour in the morning peak (two way) and 140 vehicles per hour in the afternoon peak (two way). This would deliver the following impacts on nearby streets:

- Traffic flows on the Pacific Highway would increase by 15-25 vehicles per hour (two way) in the morning peak, and 40-70 vehicles per hour (two way) in the afternoon peak;

- Traffic flows on Rocklands Road would increase by 10-40 vehicles per hour (two way) in the morning peak, and up to 100 vehicles per hour (two way) in the afternoon peak; and
- Traffic flows on Gillies Street would increase by up to 40 vehicles per hour (two way) in both the morning and afternoon peaks.

INTANAL assessment of the additional generated found that all nearby intersections would continue to operate at acceptable levels, with average delays of less than 20 seconds in peak times at the busiest intersection, Rocklands Road and Pacific Highway.

Public transport

The site is very well serviced by public transport, with State Transit operating a regular service (route number 265) along Rocklands Road en route to Wollstonecraft station and the Pacific Highway. In addition, local and regional bus routes travel along the Pacific Highway 24 hours a day, seven days a week.

Railway stations at Wollstonecraft, Waverton and North Sydney are around 1km distant from the site, and are readily accessible via bus or foot.

Further, as part of the development's commitment to achievement of a Green Star rating of at least 4 stars and the well-being of building occupants, 10 bicycle parking spaces (and shower /change room) will be provided on basement level 1.

Carparking provision

The proposed medical research facility comprises a six-storey building including two levels of basement carparking and one level of roof-top plant, with a total gross floor area of around 3500m^2.

On-site carparking (as shown in Table 8) has been provided in accordance with section 9 – Carparking of the North Sydney Development Control Plan 2002, and will be located in the two basements.

Table 8 – On-site carparking

Vehicle	DCP controls	No spaces provided
Cars	Medical centres: Max 4 carspaces / 100 m2 GFA	118 (including 3 accessible spaces)
Motorcycles	Min 1 space / 10 cars	12
Bicycles	1 bicycle locker / 600 m2 GFA	10

Colston Budd Hunt & Kafes Pty Ltd has carried out an analysis of peak parking demand for medical centres in Sydney. This research found an average peak demand equates to one space per 38m^2 of GFA. A development of 3500m^2 would thus require 92 spaces, 26 less than is intended for the proposed facility. In addition, the proposed facility has a higher proportion of research (non-consultation) space than other medical centres, thus requiring fewer carspaces for patients and carers.

Provision of a higher level of on-site parking than comparable medical centres will provide important relief to residents of nearby streets, who find up to 100% of on-street carspaces occupied during weekday working hours.

Car access

Primary vehicle access to the site will be via Rocklands Road into the basement carpark, deliberately avoiding the quieter and more residential Gillies and Sinclair streets. The entrance is also positioned so that it is some distance away from the Mater loading dock and the corner of Rocklands Road and Gillies Street.

Parking spaces, aisles, ramps etc will be provided in accordance with AS2980.1-2004, and access into the basements will be controlled by boom gates located 25 metres within the site, to allow for queuing for up to four cars.

Delivery access

Deliveries to the site will be managed by a Delivery Management Plan that would limit the hours and frequency of deliveries. Access to the loading dock for the site will be via the existing driveway off Gillies Street. All deliveries will access the driveway and delivery dock via the Pacific Highway and Rocklands Road to minimise impacts on the amenity of the area.

Numbers of delivery vehicles accessing the site during the operational phase will be minimised by consolidating the waste management and collection system for the new facility, as recommended in the Construction and Operational Waste Management Plan at **Appendix N**.

Pedestrian and bicycle access

The principal pedestrian entry to the site is via a key entry point to the site on the corner of Rocklands Road and Sinclair Street. With a prominent view from the upper end of Rocklands Road, this corner provides an opportunity for a landscaped entry plaza, which is open and set back from the street and has an important visual connection to the main entry of the Mater Hospital or the bus stop on Rocklands Road. However, a secondary entrance is positioned midway along Rocklands Road and provides the potential for clear identity for secondary users of the building, particularly those in the Mercy Foundation.

Access to nearby pedestrian and cycle routes (including the Walk North Sydney routes) will be clearly marked, and staff, patients and carers encouraged to maximise their use of public transport, walking or cycling to access the site.

Works impacts

General access to Rocklands Road, Sinclair and Gillies Streets will be maintained throughout the demolition and construction phases of this development, and a detailed Construction Traffic Management Plan to be prepared following the engagement of the construction contractor. The draft Construction Management Plan: Statement of Commitments prepared by Savills - Strategic Project Delivery at **Appendix S** also includes measures to minimise impacts associated with the construction.

Further, the Traffic Report for the redevelopment, prepared by Colston Budd Hunt & Kafes Pty Ltd has recommended that all works traffic enter and leave the site in a forward direction, and travel along the Pacific Highway and Rocklands Road en route to the site, to minimise impacts on local streets. Further, loading and unloading of trucks will generally occur on site, and workers' vehicles will be located to minimise any impacts on local parking availability. A separate application will also be made to North Sydney Council for a works zone on Rocklands Road for the duration of the construction period.

Pedestrian access around the site will be maintained during the construction period, with a construction fence erected along the boundary ensuring the site remains secure at all times.

Emergency evacuation and accessibility

The new medical research facility will be constructed to ensure the building is safe and accessible for all users, and emergency access and egress points are clear and not obstructed.

The Access Report prepared by Accessibility Solutions at **Appendix L** advises that the building provides appropriate access in accordance with Parts D3, E3.6 and F2.4 of the Building Code of Australia, relevant Australian Standards and the

objectives of the Disability Discrimination Act, including the provision of tactile indicators and ensuring the auditorium includes hearing augmentation to assist people with hearing impairments. To ensure the development meets North Sydney Council's requirements for the provision of safe places of refuge in the event of an emergency, a detailed communications system and emergency evacuation system will be developed.

Access for emergency services including the NSW Fire Brigade will be in accordance with AS21118.1 and the Building Code of Australia.

Conclusions

The proposed medical research facility is well located in relation to a range of public transport options for staff, visitors and carers to access the site. Sydney buses route 265 travels along Rocklands Road, and a large number of local and regional services are available on the Pacific Highway, less than 200 metres from the site. In addition, Wollstonecraft, Waverton railway stations are around 1km from the site.

Traffic generated by the proposed medical research facility can be accommodated on the local road network, with little or no change in the performance of intersections in the vicinity of the site. In addition, providing 118 carparking spaces in the basement of the development complies with the North Sydney Development Control Plan 2002 and will minimise any chance of staff, patients or carers utilising the existing on-street carparking in Rocklands Road, Gillies and Sinclair Streets, providing valuable relief to local residents.

Delivery vehicles accessing the site will be limited through the consolidation of services with the nearby Mater Hospital, and deliveries will be via the driveway in Gillies Street that will be retained from the current development on the site.

The site will be made accessible in accordance with relevant Australian Standards, the BCA and DDA, and emergency services' access and other requirements will be satisfied.

7.6 Noise & Vibration Impact

Noise impacts associated with the proposed medical research facility are expected to be limited to noise from equipment during the construction. Plant and equipment is to be located on level 4 of the facility, and be well shielded to minimise any noise transfer.

The site is located in a locality that is characterised by residential and medical uses. According to an acoustic assessment conducted by Bassett Consulting Engineers and at Appendix H, ambient noise levels controlled by distant traffic noise, most likely from the Pacific Highway which is around 160 metres to the east of the site, and wind-induced movement of foliage.

To measure background noise levels, a noise logger was installed at the rear of a residential property approximately 30 metres north of the site. Measurements were taken every 15 minutes for a period of one week to ascertain the background noise level (RBL) for day, evening and night periods, in accordance with the Department of Environmental and Climate Change's (DECC) *Industrial Noise Policy* (INP). Existing background noise levels averaged between 38-42 L_{Aeq}, while ambient noise levels averaged 45-51 L_{Aeq}.

Noise and Vibration Criteria and Guidelines

Noise impacts from road and traffic noise impacting in the interior of the new facility will be measured against the DECC *Environmental Criteria for Road Traffic Noise* (ECRTN), which adopts the desirable noise levels contained in AS/NZS 2107:2000 *Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors* for commercial and industrial developments, including this facility.

Design noise levels for the various components of the facility are set at a point to achieve a moderate level of acoustic privacy, while ensuring loud background noise level does not lead to communication difficulties and fatigue.

External noise emissions from on-site mechanical plant and carparking activities are controlled to minimise intrusive impacts on neighbouring residences and other land uses. Emissions will be assessed against DECC's ECRTN to protect noise amenity.

Vibration from construction and demolition works should seek to comply with DIN 4150 *Structural vibration in buildings* and *Assessing Vibration: a technical guideline* (prepared by DECC) where to do so is feasible and reasonable.

Noise Impact and Management Strategies

Noise impacts associated with the new facility for external receivers will be associated with construction impacts, mechanical plant and people leaving the auditorium.

To minimise impacts, the hours in which construction activities will occur will be restricted (to 7am-6pm Monday to Friday, 8am-1pm on Saturdays and no work on Sundays or public holidays), and construction noise will be limited to the background noise level (L_{90}) + 10 dB(A) for the first 26 weeks of demolition and construction where feasible and reasonable. During the remainder of the works period, construction noise to be limited to the background noise level (L_{90}) + 5 dB(A). These limits are consistent with DECC's Environmental Noise Control Manual (ENCM) and were adopted by North Sydney Council for the upgrade of the North Sydney railway station.

In addition, a Construction Noise and Vibration Management Plan (CNVMP) will be developed for the works once the contractor has been appointed. The CNVMP will include details of the duration of noisy activities, as well as location major plant and cranes, and will address:

- Predicted construction noise emissions;
- Construction noise and vibration monitoring;
- Complaint management procedures;
- Complaint testing;
- Mitigation measures; and
- Community Notification.

Mechanical plant and equipment will be located to minimise noise transfer and be acoustically limited through the use of duct lining, attenuators and acoustic barriers, as appropriate.

Disturbance from users of the auditorium will be managed by controlling the number and duration of events held in the evening, and notifying local residents in advance of such events.

Noise impacts for internal receivers will be managed through the use of façade elements with sufficient noise insulation performance, to meet the standards established in DECC's ECTRN.

Vibration Impact and Management Strategies

Acceptable vibration doses have been established to minimise opportunity for structural damage and disturbance to human comfort during the construction period of the development. In addition, the draft Construction Management Plan: Statement of Commitments at **Appendix S** requires the building contractor to carry out a comprehensive photographic survey and written dilapidation report on adjoining properties and Council's footpaths, kerbs and roads surrounding the site.

7.7 Community and Social Impact

The proposed medical research facility will deliver significant community benefits to both the Sydney and NSW communities, but to the world scientific community in terms of its research capacity.

The Sydney Melanoma Unit is a Clinical Unit of the Discipline of Surgery within the Faculty of Medicine of the University of Sydney. With around 1,300 new referrals each year, the SMU treats approximately one third of the melanoma patients in NSW.

Accommodating the world's largest concentration of melanoma specialists and researchers, the SMU will also house the world's largest biological bank of melanoma specimens, which will be used to create new and innovative treatments for current and future melanoma patients.

Locating the facility in such close proximity to the existing Mater Hospital and foreshadowed Mater Clinic, patients of the proposed new medical research facility will benefit from access to one of Sydney's most sophisticated medical precincts. Treatment for melanoma patients will be shared between the proposed new facility and the existing Mater Hospital – for example the Hospital will provide necessary in-patient facilities, while participation in clinical trials and consultation with practitioners will take place in the new facility.

As with many cancers, melanoma patients treated in specialty multidisciplinary oncology centres have better outcomes. By further consolidating the treatment of patients with melanoma into a research-oriented clinical facility, together with resources to procures research material and on-site laboratories, more patients in clinical trials will receive cutting-edge treatment to ensure better outcomes.

The aged care facility on the site (known as Justinian House and operated by Catholic Health Care) commenced operation in 1986, following refurbishment of the former nurse's quarters. Although having a licence to accommodate up to 80 aged persons, the number of residents living in Justinian House has been steadily declining in recent years. All residents of Justinian House were relocated to other facilities in northern Sydney.

7.8 Air Quality

Air quality impacts associated with the project are expected to be limited to airborne dust during the construction period. No dangerous emissions will be generated by the facility and fume cupboards have been provided in the laboratory on site to protect staff from any unpleasant odours generated by during research activities.

The Dangerous Goods Compliance Report prepared by Premier Engineering at **Appendix O** recommends that corrosive materials, for example as glass cleaners, formalin (formaldehyde solution) and any other acids used in the laboratory are handled in these facilities are handled in the fume cupboards provided to ensure indoor and outdoor air quality is maintained.

A draft *Construction Management Plan: Statement of Commitments* prepared by Savills - Strategic Project Delivery is at **Appendix S**. Included in this Plan is a commitment to minimise any air quality impacts generated as a result of the development.

Following the appointment of a contractor, a detailed Dust Management Plan will be prepared, identifying potential sources of dust or airborne pollutants, and measures to ensure dust is contained within the construction site and does not disadvantage nearby residents.

The Plan will include dust minimisation strategies such as:

- Ensuring all dust is contained within the construction site and that the adjoining buildings and residents are not disadvantaged;
- Minimising dumping of loose materials on site and providing appropriate cover where required;
- Minimising airborne dust from trucks and other vehicles entering or leaving the site by watering down driveways;
- Conducting regular monitoring of air quality during construction; and
- Rectifying any air quality non-compliances promptly.

7.9 Site Contamination

Landform and Geotechnical Capability

Geotechnical assessment of the site carried out by Douglas Partners (report at **Appendix G**) has shown that the site is underlaid with Ashfield Shale and Hawkesbury Sandstone, however due to the site's highly disturbed nature, no rocky outcrops, natural exposures or cuttings were observed on the site. Boreholes were drilled to confirm these assumptions, including that the boundary between the Shale and Sandstone occurs toward the centre of the site.

Samples of groundwater, soil and rock core were obtained via the boreholes, and results showed the concentrations of pH, chloride and sulphate in the soil and groundwater are non-aggressive.

Due to the presence of medium to high strength sandstone across the site, a range of excavation methods, and shoring of the site, the use of strategically placed piles and rock anchors will be used during the construction of the basement carpark, to maintain stability and minimise impacts on nearby properties.

Materials derived from excavation works may include fill and natural soil overburden from within the proposed bulk excavation footprint. Off-site disposal of this material will require assessment for re-use or classification of the excavated material in accordance with "Environmental Guidelines: Assessment, Classification and Management of Non-Liquid Wastes "(NSW EPA, 1997) prior to disposal at an appropriately licenced landfill.

Groundwater

Potential ingress of groundwater into the basement carpark has been assessed, and pumping excess groundwater is expected during part of the excavation.

Groundwater entering excavations and post-construction accumulation of groundwater below the basement floor will need to be disposed of in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act).

Groundwater discharges will be monitored throughout the excavation and construction to assess compliance with Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Australian and New Zealand Environment and Conservation Council (ANZECC) and Agricultural and Resource Management Council of Australia and New Zealand, October 2000, in particular for pH, turbidity, nutrients and dissolved oxygen. If the tested water complies with the guidelines, it may be pumped directly into the stormwater system.

Alternatively, the pumped groundwater will be treated on-site via sedimentation and dosing to improve the quality of water to a sufficient level to comply with the ANZECC requirements before disposal into stormwater.

Contamination

Heggies Pty Ltd (reports at **Appendix Q**) have completed an assessment the potential for contamination on the site. These reports conclude that the current status of soil contamination with potential contaminants of concern do not appear to have any adverse impacts on the proposed development.

This conclusion was formed following a comprehensive assessment of all available documentation associated with previous uses of the site, and inspections of the site.

During visits to the site, Heggies observed that the ground surface external to the building structures, including the front and rear car park areas and the driveway, was generally covered with concrete with no apparent direct access to soils. It was not clear if soils underneath the concrete slab contain soil contaminants and/or cause phytotoxicological stresses.

Fill materials containing foreign objects (e.g. construction rubble) were observed in garden and courtyard sections.

However, other than the previously identified hazardous materials in the existing structure (previously identified by New Environment, and will be appropriately removed from the site prior to the commencement of construction), Heggies have found that there are no apparent signs of soil or groundwater contamination such as phytotoxicological stress and no unusual stains are present on the site.

Therefore to complement the findings above, Heggies have recommended:

- Removal of hazardous materials during the demolition of the existing structures on site be undertaken in consultation with appropriately qualified professionals and in accordance with relevant legislation; and
- Should any evidence of potential land or water contamination be uncovered during this the construction of the new medical research facility, appropriate measures to remediate the site be developed and implemented immediately.

7.10 Ecologically Sustainable Development Rating

The proposed medical research facility seeks to deliver a landmark building in its adoption and implementation of ESD principles.

Green Building Council of Australia ("GBCAus") – Green Star Rating Scheme

The Green Star environmental rating system for buildings was developed by the Green Building Council of Australia ("GBCAus"). Green Star is Australia's first comprehensive rating system for evaluating the environmental design and performance of Australian buildings based on a number of criteria, including energy and water efficiency, indoor environment quality and resource conservation.

Green Star has built on existing systems and tools in overseas markets, including the British BREEAM (Building Research Establishment Environmental Assessment Method) system and the North American LEED (Leadership in Energy and Environmental Design) system, by establishing individual environmental measurement criteria relevant to the Australian marketplace and environmental context.

The Green Star rating system was created to:

- Define green building by establishing a common language and standard of measurement;
- Promote integrated, whole-building design;
- Identify building life-cycle impacts;
- Raise awareness of green building benefits;
- Recognise and reward environmental leadership; and
- Transform the built environment to reduce the environmental impact of development.

Green Star evaluates the environmental initiatives and/or the potential environmental impact of new or refurbished buildings.

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Preliminary advice from the GBCAus has recommended that the facility would be suited to their Green Star Education Rating tool, which is currently in pilot stage. This recommendation was made on the basis of the building

classification and function of the facility. A formal submission is being prepared for the GBCAus, to confirm this advice. As the rating tool is in its pilot stage, a formal certification cannot be achieved until the tool is finalised. Therefore, the facility will be "self assessed" against the requirements of the rating tool, with the intention of obtaining a certified rating when this is available.

The target for the medical research facility is for 4 Green Stars, according to rating tools developed by the Green Building Council. The key ESD initiatives that are under consideration to achieve the 4 Green Stars include:

Energy

Passive measures will cover a selection of energy efficient glazing and façade, insulation and shading. Techniques, such as optimised façade and window properties and maximising cross flow ventilation will be employed to increase day lighting without having the associated increase in the heat load on the air conditioning system.

Active systems will include utilization of High efficiency motors and/or variable speed drives for cooling, heating and mechanical ventilation systems, lifts and escalators and high efficiency air conditioning systems. High efficiency lighting with reduced lighting power density and daylight harvesting systems will deliver significant energy savings.

Water

Together with use of water efficient fixtures and fittings, a rain water harvesting scheme is proposed, which will enable use of rain water for toilet flushing and irrigation of the landscaped areas.

Materials

Materials selected for the new facility will consider the total life material from its creation, adaptability during use and final disposal.

Consideration will be given to:

- Sustainable materials selection, including products with all of life stewardship and postconsumer recycled content; and
- Recycling waste areas in construction and operation

Transport

The medical research facility is located in the immediate vicinity or within a short distance of a range of public transport modes. Staff, patients and carers will be encouraged to use public transport to access the facility to minimise transport emissions while reducing competition for on-street carparking spaces around the site.

Waste

Any waste generated during the construction period will be reused whenever possible. This includes mulching any remnant vegetation for use in landscaping, reusing any concrete from the demolition phase as fill and landscaping, and ensuring waste is separated on site before being sent to recycling outlets.

Recycling during the operational phase of the development would be encouraged through the provision of "office recycling stations", located close to office areas, and "public recycling stations", located in patient/visitor areas, to encourage separation and recycling of wastes wherever possible.

Assessment of ESD

The proposed development will improve the ESD performance of the new medical research facility by achieving a 4-star GreenStar rating with the Green Building Council of Australia.

7.11 Waste Management

The main waste types expected during the operation of the new medical research facility will be general waste, clinical waste, sharps, co-mingled recyclables, recyclable paper, and recyclable paper for secure destruction. Other wastes include female and baby changing sanitary waste and low levels of chemical or dangerous goods which may arise on an infrequent basis. Guidelines for the disposal of these wastes are in the Construction and Operational Waste Management Plan prepared by Hyder Consulting at **Appendix N**.

According to the Dangerous Goods Compliance Report prepared by Premier Engineering at **Appendix O**, the dangerous goods to be stored and used on the site include diesel for an electricity generator, liquid nitrogen, ethanol, corrosives such as glass cleaners and formaldehyde solution, however all will be totally consumed and neutralized during use, so no dangerous wastes will be produced.

However, some infectious waste, such as contaminated sharps and clinical waste, will be generated on site, which will be disposed of by designated cleaning staff will transfer the clinical waste from the laboratories to the waste storage area where it will be stored in Mobile Garbage Bins (MGBs) in a locked storage room until removal by a specialist contractor and transported for treatment or incineration.

Clinical waste will be generated in the consulting suites and clinical trial laboratories. It will consist of biological waste such as blood and tissue samples in addition to contaminated wastes such as paper tissues, swaps, disposable gloves etc. Clinical waste will be placed in suitably marked bags/ containers which will be available in each consultation suite.

Sharps waste will be generated in the consulting suites and clinical trial laboratories and placed in designated sharps bins located within each consulting suites and laboratories.

When full, the sharps boxes will be transferred by the relevant staff member to a designated MGB which will be locked, or the sharp boxes will be located in a locked storage room convenient to the laboratory areas and consulting suites. Empty replacement boxes will be available.

MGBs containing sharps waste containers will be transferred to the clinical waste room in the waste storage area by designated cleaning staff before being collected directly from the waste storage room by the specialist contractor and transported for treatment or incineration.

Other dangerous waste materials that may be generated on site include:

- Residual or expired clinical trials drugs, which would be stored according to the appropriate storage procedures and collected by the supplying pharmaceutical company for disposal;
- X-ray film will be archived for a period of 7 years in a secure room or archive facility, before being removed by a specialist X-ray film contractor in order for secure destruction and recovery of silver; and
- Feminine hygiene and nappy waste will be placed in female toilets and baby changing facilities, and collected/exchanged directly from the point of waste generation by the designated contractor.

Conclusions

All infectious and medical waste will be disposed of in accordance with NSW Department of Health guidelines by specialist contractors, as per the recommendations in the Dangerous Goods Report at **Appendix O** and Construction and Operational Waste Management Plan at **Appendix N**. Materials are likely to be removed from the site every second day, to avoid stockpiling of dangerous materials.

7.12 Utilities Infrastructure

The site is the location of a decommissioned aged persons facility that was serviced by water, wastewater, electrical, gas and telecommunications infrastructure. The survey plan prepared by Hard & Forester at **Appendix B** identifies the location of these existing services, including the points at which services to the cottages at 20 and 22 Sinclair Street will be severed. The capacity of existing utilities infrastructure, and whether any augmentation of services is required, has been assessed by Umow Lai Enginuity Pty Ltd and Warren Smith & Partners (reports at **Appendix I** and **E** respectively).

Electrical Services

Umow Lai Enginuity Pty Ltd has conducted an assessment of the proposed mechanical and electrical engineering requirements of the facility. Their report is at **Appendix I**.

An Energy Australia substation (no 3195) is located on the Gillies Street frontage to the site. This substation is not part of this development proposal and Energy Australia has confirmed that it is able to supply the anticipated maximum demand. However, the existing EnergyAustralia LV switchboard located within the substation chamber must be upgraded to accommodate the new supply, and an application has been made to Energy Australia for the said works to be carried out at the earliest available opportunity.

In addition, a diesel generator is to be installed in the facility to provide 36 hours' power supply in the event of a supply breakdown. The standby generator shall provide power on mains failure to biospecimen bank freezers, selected laboratory lighting and power circuits, sprinkler pumps, carpark exhaust, lifts, communications racks and associated mechanical services.

Stormwater Management

Warren Smith & Partners have carried out an assessment of the hydraulic conditions of the proposed new facility, and is at **Appendix E**.

The site will be provided with a stormwater drainage connection to the North Sydney Council drainage system at the corner of Rocklands Road and Gillies Street.

Stormwater drainage from roof outlets and downpipes will consist of a syphonic downpipe and drainage system to convey stormwater which will gravitate to a 75m^2 capacity rainwater reuse tank. When full, the rainwater reuse tank will overflow to connect to the site stormwater drainage system.

Basement levels will be provided with subsoil drainage and perimeter dish drains and the drainage pipework will gravitate to a drainage pump out pit, and will collect much of the stormwater that currently inundates properties on the opposite site of Gillies Street, during high rainfall events.

The stormwater drainage system will be sized for a 1 in 20 year rainfall intensity. Over flow systems will be sized for a rainfall intensity in excess of the 1 in 100 years.

Water Supply

Water will be supplied via the Sydney Water 200mm diameter water main situated in Sinclair Street. Cold water will be reticulated throughout the facility and five-star rated flow control devices will be provided within each tap set to limit the amount of water outflow from taps to reduce water wastage.

To further minimise potable water use, 75m^3 rainwater reuse tank will be located in basement level 2 and will receive rainwater from downpipes from the roof areas of the buildings only. The rainwater will be treated and reused for WC flushing and irrigation.

When the rainwater reuse exceeds the roofwater storage capacity, the tank will be topped up from the potable domestic cold water service supply to 10% of the overall storage capacity. Therefore, when the tank is topped up, it will always have at least 90% of the reuse tank capacity available for filling from the next rainfall event.

Hot water will be supplied by a combination of gas-fired mains pressure hot water heaters (for basins, sinks and showers) and electric hot water heathers (for utility rooms). Five-star rated flow control devices will be provided within each tap set to limit the amount of water outflow from taps and thus reduce water wastage.

Sewerage Services

The site is serviced by a 225mm diameter Sydney Water sewer situated in Gillies Street. Sewer drainage from the development will gravitate to connect to the Sydney Water sewerage system.

In addition to the standard sewer drainage systems, a trade waste drainage pit will be provided to service laboratory areas.

Communication Services

New voice and data lead-in cables will be provided to the premises that is compatible with the existing telecommunications infrastructure servicing the site, and complement the telecommunications system currently in place at the Mater Hospital.

A PABX system will be installed within the Level 1 building distributor room. The existing Sydney Melanoma Unit PABX will be relocated and reused if possible. An integrated structured cabling system will be provided for voice and data systems.

Voice over IP (VoIP) is to be provided to enable cost-effective and interoperable data and voice communications. Analogue PSTN telephone services will be required for the emergency lift telephones.

Gas Services

The site will use the existing connection to the Alinta natural gas main in Sinclair Street to supply natural gas to the Domestic Hot Water Heaters situated in the roof top plant room.

7.13 Construction Impacts

Construction activities at the site will be carefully managed to minimise any disturbance to, or impact upon any neighbouring properties.

As well as completing a detailed Construction Management Plan once the construction contractor has been appointed, the following issues will carefully monitored as discussed earlier in this section:

- Construction vehicles will access the site in a forward direction via a single point on Rocklands Road;
- Loading and unloading of vehicles will occur on site, and workers' vehicles will be located to minimise any impacts on local parking availability;
- Safe pedestrian access around the site will be maintained throughout construction;
- Noise from construction will be managed through the development of a Construction Noise and Vibration Management Plan;
- Dust from construction activities will be contained to within the building site; and
- Airborne dust from trucks and other vehicles entering or leaving the site will be minimised by watering down driveways.

Other issues will be addressed prior to the commencement of construction.

8.0 Draft Statement of Commitments

8.1 Approved Project

The development the new medical research facility will be carried out generally in accordance with the architectural drawings prepared by Daryl Jackson Robin Dyke and landscape architect drawings prepared by Daryl Jackson Robin Dyke as shown numbered and dated in **Table 9** below, and with the Environmental Assessment Report prepared by JBA Urban Planning Consultants Pty Ltd dated October 2007.

Table 9 – Approved Architectural Drawings

Design Standards Drawing Number (revision)	**Rev**	**Title**	**Date**
DA0100	A	Location Plan And Drawing List	29/10/2007
DA0101	E	Site Analysis Plan	29/10/2007
DA0110	C	Existing Site Plan	29/10/2007
DA0111	C	Demolition Plan - Stage 1	29/10/2007
DA0112	A	Demolition Plan - Stage 2	29/10/2007
DA0113	A	Proposed Site Plan	29/10/2007
DA0201	B	Landscape Concept Plan	29/10/2007
DA1001	A	Level B2 Floor Plan	29/10/2007
DA1002	A	Level B1 Floor Plan	29/10/2007
DA1003	A	Level 1 Floor Plan	29/10/2007
DA1004	A	Level 2 Floor Plan	29/10/2007
DA1005	A	Level 3 Floor Plan	29/10/2007

Design Standards Drawing Number (revision)	Rev	Title	Date
DA1006	A	Level 4 Floor Plan	29/10/2007
DA1007	A	Roof Plan	29/10/2007
DA1101	A	Site Coverage - Existing Development	29/10/2007
DA1102	A	Site Coverage - Proposed Development	29/10/2007
DA1103	A	Gross Floor Areas - Existing Development	29/10/2007
DA1104	A	Gross Floor Areas - Proposed Development	29/10/2007
DA1105	A	Shadow Diagrams Equinox	29/10/2007
DA1106		Shadow Diagrams Winter Solstice	29/10/2007
DA1107	A	Shadow Diagrams Summer Solstice	29/10/2007
DA2001	A	East and West Elevations	29/10/2007
DA2002	A	North and South Elevations	29/10/2007
DA2010	A	Comparison Of Existing And Proposed Elevations	29/10/2007
DA2011	A	Indicative Materials Pallette	29/10/2007
DA2012	A	Photomontages	29/10/2007
DA2501	A	Proposed Section 01	29/10/2007
DA2502	A	Proposed Sections 02 & 03	29/10/2007
DA2503	A	Proposed Sections 05 & 07	29/10/2007
DA2504	A	Sections 06 & 08	29/10/2007

8.2 Statement of Commitments

Table 10 includes a Draft Statement of Commitments which has been prepared on behalf of St Vincents and Mater Health Sydney Limited in accordance with the DGR's. These Statement of Commitments represent impose requirements to be met prior to or during the construction of the new medical facility.

Table 10 – Statement of Commitments

Subject	Commitments	Approved by Whom	Timing
Public benefits	Section 94 monetary contributions will be paid to North Sydney Council as prescribed by the North Sydney Section 94 Contribution Plan 2004.	North Sydney Council	Prior to the issue of an occupation certificate
Construction management	A Construction Management Plan will be prepared after a builder has been engaged and before works commence and be in accordance with the draft Construction Management Plan: Statement of Commitments at **Appendix S**. All construction activities will be in accordance with AS2601-2001 and the OH&S Act and Regulation, and a detailed Construction Management Plan will be prepared that will include a range of measures to minimise impacts on adjoining properties, and include: ▪ Traffic Management and Site Plan ▪ Dust Management Plan ▪ Erosion and Sediment Control Plan ▪ Construction Waste Management Plan ▪ Dilapidation reports for adjoining properties In addition stormwater management works will be in accordance with the requirements of North Sydney Council.	Consent Authority	To accompany relevant construction certificates for the development.

Subject	Commitments	Approved by Whom	Timing
	Construction activities will meet the criteria specified in the Acoustic Assessment prepared by Bassett Consulting Engineers, namely: ▪ Construction noise to be limited to the background noise level (L90) + 10 dB(A) for the first 26 weeks of demolition and construction where feasible and reasonable; ▪ Construction noise to be limited to the background noise level (L90) + 5 dB(A) for the remainder of the construction program where feasible and reasonable; ▪ Vibration not to exceed the limits in *DIN 4150 Structural Vibration in Buildings* and *Assessing Vibration: a technical guideline* (prepared by the Department of Environment and Climate Change). ▪ A Construction Noise and Vibration Management Plan will also be prepared.	Consent Authority	To accompany relevant construction certificates for the development.
	Disposal of excavated material will be in accordance with "Environmental Guidelines: Assessment, Classification and Management of Non-Liquid Wastes "(NSW EPA, 1997)	NSW EPA	During construction
	Groundwater entering excavations and post-construction accumulation of groundwater below the basement floor will need to be disposed of in accordance with the Protection of the Environment Operations Act 1997 (POEO Act)	NSW EPA	During construction
Traffic access and parking	Construction traffic to be addressed through a Construction Traffic Management Plan, to be prepared by the building contractor.	Consent Authority	To accompany relevant construction certificates for the development.
	Parking bays, aisles (including for queuing) and access ramps to comply with AS 2890.1-2004.	Consent Authority	Prior to the issue of an occupation certificate
	Delivery and service areas will be in accordance with AS 2890.2-2002 and a Delivery Management Plan will be prepared to manage local deliveries.	Consent Authority	Prior to the issue of an occupation certificate

Subject	Commitments	Approved by Whom	Timing
Emergency evacuation and public access	A Communications Management System and Emergency Management Plan will be developed.	Consent Authority	Ongoing
	A fire sprinkler system will be fitted throughout the facility, in accordance with AS21118.1, the Building Code of Australia and the requirements of the NSW Fire Brigade.	Consent Authority and NSW Fire Brigade	Prior to the issue of an occupation certificate
Acoustic assessments	During construction, criteria specified by Bassett Consulting Engineers and consistent with DECC's Environmental Noise Control Manual: ▪ Background noise level (L_{90}) + 10 dB(A) for the first 26 weeks of demolition and construction; and ▪ Background noise level (L_{90}) + 5 dB(A) for the remainder of the works period.	Consent Authority	To accompany relevant construction certificates for the development.
	Once operational, desirable noise levels contained in AS/NZS 2107:2000 *Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors*	Consent Authority	Ongoing
Hazardous materials and waste management	Dangerous and toxic materials will be stored and handled in accordance with the Occupational Health and Safety Act and Regulation, Department of Health guidelines, *Storage and Handling of Dangerous Goods – Code of Practice*, prepared by Workcover.	Department of Health and Workcover	Ongoing
Building construction	Building Code of Australia	Consent Authority	To accompany relevant construction certificates for the development.
ESD performance	4 –star Education pilot GreenStar rating from the Green Building Council of Australia.	Self assessment against the pilot tool.	Prior to the issue of an occupation certificate . It is the intention of the proponent that a certified rating will be obtained once it is available in this category.

9.0 Conclusion and Justification

The proposed development of a medical research facility on the site at Wollstonecraft in the North Sydney LGA has environmental planning merit and is justified in the following respects:

- The new facility will provide significant social and health benefits to NSW and Australia through the consolidation of clinical trials, research and consultation suites into a new single state of the art facility, and by also delivering financial savings which can be channelled into melanoma research.
- The site is suitable for the proposed development in being located close to other complimentary medical facilities, having good accessibility nearby public transport and arterial highway, having utility infrastructure available, and being of a size and configuration able to accommodate the facility, with no environmental constraints that are so sensitive as to preclude the development.
- The proposed development is consistent with the objectives and permissible uses of the land use zone under North Sydney LEP 2001. It is also consistent with the planning controls applying to the land under Council's LEP and DCP, with the exception of minor protrusions above the building height plane and a departure from the minimum landscaped area control. These departures are considered reasonable in this case given the proposed building is substantially within the existing building envelope, and delivers a better planning outcome in terms of a superior building that is more compliant with the local controls.
- The scale, bulk, height and setbacks of the proposed building are generally within the envelope of the existing building on the site.
- The form and architecture of the proposed new building has been designed to respond sympathetically to the existing character of the area, streetscape, and surrounding medical and residential developments.
- Landscaping is provided in a central courtyard and around the perimeter of the site in the building setbacks, and street trees are retained consistent with the character of the area.
- The proposed development will have no significant impact on nearby heritage buildings, and no significant additional impact on adjacent properties in terms of views, sunlight access or visual and acoustic privacy.
- The local road network has the capacity to accommodate traffic generated by the proposed medical research facility.
- A total of 118 car parking spaces are proposed on-site in the basement out of public view to meet the demands of the development and the requirements of Council's planning controls, thereby minimising any need for site users to park on surrounding residential streets. Delivery vehicles will be wholly accommodated on-site in the loading dock to minimise disruption to local traffic movements.
- The new facility is being designed to achieve a GreenStar rating of at least 4 stars under the Green Building Council of Australia's rating system to achieve a building with an efficient use of energy, water and materials, as well as a high level of internal amenity for occupants.
- A waste management plan is included in compliance with relevant health regulations and guidelines.
- A construction management plan will be prepared in conjunction with the builder prior to works commencing to manage the potential impacts of construction activities in accordance with relevant standards including site security and safety, noise and vibration, construction traffic, soil and water management, dust and construction waste, and community consultation.
- The development will comply with the Building Code of Australia's deemed to satisfy provisions, and in some instances, performance based measures.
- The proposal includes a Statement of Commitments on future actions by the proponent.

Given the above merits and justification, the proposed medical research facility warrants the approval of the Minister for Planning.