

Environmental Assessment Report

Long Bay Gaol Hospitals Project

Long Bay Correctional Complex

Submitted to NSW Department of Planning On Behalf of NSW Department of Health

March 2006 • 06025

Project Application Number 06-0043

Statement of Validity

Submission of Environmental Assessment

Prepared under Part 3A of the Environmental Planning and Assessment Act 1979.

Environmental Assessment prepared by

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In respect of	Long Bay Gaol Hospitals Project

Applicant & Land Details

Applicant	NSW Department of Health 73 Miller Street North Sydney NSW 2060
Subject Site	Long Bay Correctional Complex, Anzac Parade, Malabar NSW
Land to be developed	1250 Anzac Parade Malabar NSW 2036
Lot & DP	Lot 5291 in DP 824057
Project Summary	Development of a new Forensic Hospital and new Prison Hospital

Environmental Assessment

An Environmental Assessment is attached

Declaration

I certify that I have prepared the contents of the Environmental Assessment in accordance with the requirements of the *Environmental Planning and Assessment Act* 1979 and Regulation and that, to the best of my knowledge, the information contained in this report is not false or misleading.

Amerne holdshid

Signature Name

Vivienne Goldschmidt 16 March 2006

Date

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Executive Summary

This Environmental Assessment Report (EAR) for the Long Bay Forensic and Prison Hospitals Project is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment* Act 1979 (EP&A Act) and State Environmental Planning Policy (Major Projects) 2005 (SEPP).

The project is being undertaken jointly by the NSW Department of Health (Justice Health) and the Department of Corrective Services in association with NSW Treasury and is being procured as a Public Private Partnership. It is being delivered by PPP Solutions Pty Limited, which is owned equally by Babcock & Brown Australia Pty Limited and Multiplex Infrastructure. Multiplex Constructions has been contracted to undertake design and construction. The capital investment value of the project is \$130 million.

The project consists of the construction of new facilities in two separate areas of the Long Bay Correctional Complex (LBCC) located on Anzac Parade in the suburb of Malabar in the Randwick local government area. The development consists of a new Forensic Hospital including a new Justice Health Operations Building and a new Prison Hospital.

The two facilities will be managed as autonomous construction sites running concurrently with a common management structure. Both hospitals will be enclosed within 5.5m high perimeter walls and be subject to maximum security arrangements.

The Forensic Hospital is to incorporate best practice in the design and operation of a health facility for the treatment and care of forensic patients. It will occupy the land currently used for the existing Long Bay Hospital. The Justice Health Operations Building will be constructed as part of the Forensic Hospital development to accommodate a range of supporting functions. Details of the design, construction and operations of the Forensic Hospital precinct are contained in section 3.2 of this report. The new Prison Hospital will be built on currently vacant land adjacent to the Metropolitan Medical Transient Centre (MMTC) and is to be physically and functionally integrated with MMTC. Details of the design and construction of the Prison Hospital are contained in section 3.3 of this report.

Due to the level of security required for a correctional facility only information essential for the determination of this application has been provided and design drawings are limited in detail to building footprints.

In accordance with Part 3A of the EP&A Act, the Director-General of Planning issued Environmental Assessment Requirements for the project that must be addressed in the EAR (see Appendix B). These requirements refer to the following issues:

- compliance with relevant environmental planning instruments;
- consultation with the community and relevant government authorities;
- the suitability of the site and whether the public interest would be served by the proposal; and
- the potential social, environmental and economic impacts of the proposed development
 during construction and operations - including heritage, local amenity, traffic, stormwater, groundwater, site contamination.

The proposal complies with all relevant environmental planning instruments, including the site specific LBCC Development Control Plan (DCP) (formerly the LBCC Master Plan).

Consultation by NSW Department of Health during preparation of the above LBCC Master Plan highlighted the community's primary concerns with the redevelopment of the LBCC hospitals. These issues have been addressed by the proposal. Multiplex Constructions has consulted with relevant government authorities.

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The site is considered suitable for the proposed new hospitals for the following reasons:

- The proposal continues a long existing land use to which the surrounding community is attuned.
- Necessary infrastructure and services, including security, are available on the site.
- The proposal uses existing land resources and facilitates the orderly and economic use of the site.
- The Prison Hospital has been designed and sited to capitalise on co-location with the MTCC.
- The Forensic Hospital is located on the site of the existing facility.

The public interest is well served by the proposed development, for the following reasons:

- The project will substantially improve the care of forensic patients in line with best practice.
 Forensic patients and prisoners will no longer be accommodated and treated together.
- The potential for escapes is reduced through the security arrangements built in to the design of both hospitals. The location of the new Prison Hospital improves the custodial management of prisoners as they will no longer be moved about the LBCC.
- The location of the hospitals within the LBCC will provide economic benefit to the State through the optimisation of existing facilities and reuse of land.
- The heritage values of the site will not be compromised by the proposal.
- The locations of the hospitals provide adequate and appropriate separation from the public and adjacent land uses.
- An appropriate level of security is maintained for both hospitals.
- There will be no impact on the public domain during operations and minimal impact during construction.

In relation to site contamination, an environmental site assessment identified actual and potential contaminants in the soil and groundwater, including asbestos, petroleum and underground fuel storage tanks (UST). Remediation and management will involve removing point sources of contamination associated with the USTs and capping other asbestos contaminated fill material *in-situ* using a combination of hardstand and soil capping layers. Groundwater contamination is considered unlikely to pose a significant risk to users of the site or potential groundwater receptors.

A range of ESD initiatives are intended to minimise the impacts of the development on the environment, including: low energy building design; demand management of potable water; rainwater harvesting; optimal use of natural light through building design and materials; individual lighting control; and use of refrigerants with minimal or no ozone depletion.

The LBCC is listed on the State Heritage Register and is an item of local heritage significance in Randwick Local Environmental Plan. The development has the potential to impact on view corridors to the old Gatehouses, the heritage fabric of the complex and Aboriginal heritage and archaeology. A Heritage Impact Statement (HIS) assessed the proposal in relation to compliance with the Conservation Management Plan for the site.

The HIS concluded that the development retains the visual setting of the place; that the proposed Forensic Hospital, while not improving, respects the existing view corridor to the heritage skyline as much as possible; and that the proposed development has an acceptable level of impact on the heritage significance of the overall LBCC.

An Aboriginal Heritage Assessment found that the significance of the place to the Aboriginal community lies not in specific or known sites containing archaeological deposits, but in the social and cultural association the Aboriginal community has with the place and its broader landscape context.

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The measures to be put in place are adequate to manage and mitigate the potential risks and impacts of construction in relation to geotechnical conditions, contamination, noise, vibration, air quality, soil erosion and waste. Impacts on surrounding residents from construction traffic are considered acceptable and manageable given the limited duration of construction, moderate volumes and proposed car parking arrangements. Likewise, the volume of construction traffic on the regional road system will be moderate and impacts not unacceptable.

Operationally, the proposal has the potential to impact on the amenity of local residents by virtue of increased traffic, noise, and lighting/ illumination and intrusion into existing view corridors. In relation to traffic, no significant change in traffic conditions will result from the proposal and the amenity of the local residents will not be affected. All visitor and staff parking is provided on site.

Noise emissions will primarily come from plant and equipment as most human activity will occur indoors within sealed glazing. Noise from these sources will be assessed during the design of the systems and appropriate methods recommended to control emissions in accordance with relevant guidelines.

Impacts on residents on Anzac Parade from flood lighting used in the event of a security incident at the Forensic Hospital are considered acceptable as this is likely to occur on rare occasions.

The Forensic Hospital has the potential to impact on views to the heritage gatehouses from residences on Anzac Parade. A visual impact assessment demonstrates that from the primary viewpoint opposite the proposed Forensic Hospital views of the heritage buildings are unimpeded by the proposal. While foreground buildings and perimeter wall structure have some visual impact at lower levels, these are ameliorated by the proposed planting to occur along Anzac Parade. The new Prison Hospital will have no impact on the view from Bilga Crescent and environs. The two proposed hospitals and related operations replace, in the same location, a long standing existing facility (the Long Bay Hospital) as well as the associated facilities for Justice Health personnel. No negative social impacts on local residents are identified as a result of this, which, other than an increase at the Forensic Hospital of 160 staff and 16 patients, essentially replicates the *status quo*. Indeed, potential positive social impacts include improved security, potential employment for local residents and increased patronage of local shops as a result of the intended increase in staff.

In relation to services and infrastructure, stormwater management and on-site detention will be in accordance with the requirements of Randwick City Council, while geotechnical and groundwater conditions are suitable for the proposed development.

There are no matters of National Environmental Significance under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 on the site.

A Draft Statement of Commitments sets out the commitments made by the NSW Department of Health and Multiplex to manage and minimise potential impacts arising from the project. These cover:

- Management and remediation of site contamination.
- Environmentally sustainable development.
- Heritage conservation and archaeology.
- Management of the geotechnical impacts on construction.
- Management of construction noise, vibration, dust, soil and erosion, and waste.
- Management of construction traffic.
- Operational noise.
- Stormwater management.
- Development being undertaken in accordance with the provisions of the LBCC DCP.

1.0 Introduction

This Environmental Assessment Report (EAR) in relation to the Long Bay Gaol Hospitals Project is submitted to the Minister for Planning pursuant to Part 3A of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) and State Environmental Planning Policy (Major Projects) 2005 (SEPP).

The report was prepared by JBA Urban Planning Consultants Pty Ltd on behalf of the proponent, the NSW Department of Health (the project sponsor on behalf of the NSW Department of Health/Justice Health and the Department of Corrective Services). It is based on plans and supporting technical information provided by the Department of Health and Multiplex Constructions (on behalf of PPP Solutions Pty Ltd, the private sector consortium delivering the project).

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

1.1 Background to the Project

The existing Long Bay Hospital was constructed in 1987 within the grounds of the Long Bay Correctional Complex (LBCC) to accommodate forensic patients and provide medical treatment for prisoners. Recent growth in inmate numbers and the increasing incidences of mental illness in the prisoner population has necessitated the development of improved hospital facilities within the LBCC to provide appropriate care for both prisoners and forensic patients. 'Forensic' patients are those who have been found not guilty of crimes by reason of mental illness, are unfit to be tried because of mental illness or who are waiting trial for a serious offence where mental illness is thought to be a factor.

Currently, forensic patients and prisoners are accommodated and treated in the same facility which results in an inappropriate model of care for forensic patients. This practice contravenes international mental health convention where forensic patients should be held in a secure hospital and not in a correctional facility.

The Long Bay Forensic and Prison Hospital Project, the subject of this application, is being undertaken jointly by the Department of Health/Justice Health and the Department of Corrective Services in association with NSW Treasury. The Department of Health is the Project Sponsor on behalf of the Department of Health/Justice Health and the Department of Corrective Services. The project is being procured as a Public Private Partnership (PPP) with the private sector financing, designing, building and operating the facilities, including providing ancillary support services over a 28 year concessional term. The project is being delivered by PPP Solutions Pty Limited, which is owned equally by Babcock & Brown Australia Pty Limited and Multiplex Infrastructure. Multiplex Constructions has been contracted to undertake the design and construction of the hospitals.

As described in this report, the project consists of the construction of two separate facilities on two distinct sites of the LBCC: a new dedicated Forensic Hospital and a new Prison Hospital. Custodial services in the Prison Hospital will remain under the control of the Department of Corrective Services with clinical services provided by Justice Health. Clinical services in the Forensic Hospital will be provided by Justice Health.

The capital investment value of the project is \$130 million in total, with the capital cost of each hospital being approximately \$65 million. Capital investment value is defined in the SEPP as the value of development including all costs necessary to establish and operate the development, including design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment (but excluding land costs).

1.2 Statutory Context

State Environmental Planning Policy (Major Projects) 2005 identifies development to which Part 3A of the EP&A Act applies and which therefore requires approval from the Minister for Planning ('the Minister'). 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 of the SEPP, is declared to be a project to which Part 3A of the Act applies. The project falls into two classes of development described in Schedule 1: Group 7 (Hospitals) and Group 21 (Correctional Facilities). In accordance with Section 75B of the EP&A Act and Clause 6 of the SEPP, the Department of Health sought the opinion of the Minister as to whether the project is of the kind to which Part 3A of the Act applies. On 16 February 2006 the Director-General of the Department of Planning, as delegate of the Minister for Planning, formed the opinion that the development is of a kind described in Schedule 1 and is thus declared to be a project to which Part 3A of the Act applies for purposes of Section 75B of the Act. Relevant correspondence is attached at **Appendix A**.

Subsequently, the Director-General issued Environmental Assessment Requirements for the project under Part 3A of the Act. A copy of these requirements is included in **Appendix B**.

This EAR addresses the requirements of the Director-General.

1.3 Structure of the Report

Due to the level of security required for a correctional facility only information essential for the determination of this application has been provided and design drawings are limited in detail to building footprints.

This report has been structured to meet the Director-General's Environmental Assessment Requirements as follows:

- Chapter 1: Introduction
- Chapter 2: Site Description and Location
- Chapter 3: Description of Development Proposal
- Chapter 4: Consultation
- Chapter 5: Relevant Environmental Planning Instruments
- Chapter 6: Environmental Assessment
- Chapter 7: Draft Statement of Commitments

2.0 Site Description and Location

The site is formally described as Lot 5291 in DP 824057 and covers a total of 39.53 hectares. The land is owned by the Crown. Pursuant to Clause 8F of the *Environmental Planning and Assessment Regulation* 2000, owner's consent is not required for a Part 3A application because the application is made by a public authority (NSW Department of Health). However, in accordance with the Regulation the proponent has given notice to the owner prior to the lodgement of this application.

LBCC is located on Anzac Parade, Malabar, in the local government area (LGA) of Randwick, approximately twelve kilometres south east of the Sydney CBD. LBCC is bounded by Anzac Parade, Austral Street, Bilga Crescent and Calga Avenue. The site is roughly triangular in shape and is located on the headland that separates Long Bay and Little Bay. A ridgeline crosses the site at a north-east to south-west angle. Most of the main building zones are located along this ridgeline with the buildings arranged in a basic grid pattern. A slope across the site falls away from the ridgeline towards Anzac Avenue. The LBCC site is sparsely vegetated with some established trees located adjacent to the heritage listed gatehouses. The proposed development sites of the new Prison and Forensic Hospitals do not contain any vegetation of any note.

LBCC is surrounded by predominantly low and medium density housing. Residential properties fronting Austral Street and properties to the south of the site share property boundaries with the Complex. Educational uses, including the Matraville Sports High School and Chifley Public School, are located on the western side of Anzac Avenue to the north of the site. The John Newbourn Child Care Centre is located immediately to the north of the site.

LBCC is listed on the State Heritage Register, while the whole site and the original gatehouses are identified as items of local heritage significance in the Randwick Local Environmental Plan 1998. LBCC is visually prominent as a result of its elevation, the slope of the land and the open space surrounding the prison buildings. Long range views of the site and its heritage features are visible from Anzac Parade including from several residences on Anzac Parade that face the Complex. The wide median strip between the northbound and southbound lanes of Anzac Parade provides a vegetated screen for the lower storey of residences on this part of Anzac Parade.

The region surrounding the LBCC contains special uses including defence, ports operations, water treatment and a university, and significant natural and recreational attractions such as beaches, Botany Bay National Park and several golf courses. The site's locational context is shown at **Figure 1** below.



Figure 1 - Locality Plan



Figure 2 - Aerial photo of the site



Figure 3 - The Long Bay Correctional Complex from existing car park on Anzac Parade



Figure 4 - The Long Bay Correctional Complex from the western side of Anzac Parade

3.0 Description of Development Proposal

3.1 Overview

The proposal, the subject of this Part 3A application, consists of two separate but related developments on different parts of the LBCC site (refer to **Figure 6** below). They will be managed as two autonomous construction sites, running concurrently, with a common management structure. Their staging and occupation are mutually dependant.

The Forensic Hospital is to have a lower scale character and be domestic in its appearance. The Prison Hospital will reflect the requirements of a healthcare facility while meeting security requirements. The duration of construction, from commencement to completion, is intended to be 24 months (refer to Construction Methodology Plan at **Appendix C**).

Architectural Design Statement

The joint venture architect for the development, Health Projects International and Codd Stenders (HPI-CS), has prepared an architectural design statement for the project, appended at Appendix D. In summary, the design of both the Prison Hospital and Forensic Hospital are composed of simple predominantly single and two storey forms broken down in scale through a modulated roof form and the use of materials. Wherever possible façades are divided into a masonry/concrete base, light weight cladding, and a floating roof except where high security enclosure defines otherwise. This philosophy of reducing scale though roof form and materials helps to create a domestic scale while taking account of the need for a safe secure environment for patients, staff and visitors.

The difference in operating philosophies between the Prison Hospital and the Forensic Hospital has resulted in a different approach to the design of building fabric. The Prison hospital is influenced by the design requirements of secure environments in correctional facilities whereas the design of the buildings and fittings in the Forensic Hospital more closely mirrors typical hospital wards and mainstream integrated mental health units.

The two hospitals are described separately in the following Sections.

3.2 Forensic Hospital

The development objectives adopted for the Forensic Hospital are to:

- Achieve the most humane care for the mentally ill while ensuring community safety; and
- Deliver forensic mental health care and services in line with national and international best practice.

The Forensic Hospital is to be a state of the art maximum security hospital encapsulating current health facility guidelines and practices and world's best practice in relation to the design and operation of a health facility for the treatment and care of forensic patients. It will occupy the land currently used for the existing Long Bay Hospital and additional land to the south and west of that existing facility. This land will be re-gazetted for health purposes and ownership transferred to the Health Administration Corporation, as are other NSW Department of Health hospital sites. Justice Health will operate the facility. The Forensic Hospital relaces the existing facility and functions operating in the same location.

The Forensic Hospital Development site approximately 5.4 ha in area - incorporates the construction of five new buildings with a new 5.5 metre high pre-cast concrete wall surrounding the hospital buildings (see **Figure 5 opposite**). Development will comprise:

- Demolition of the existing Long Bay Prison Hospital.
- Construction of the Justice Health Operations Building and extension to existing car park.
- Construction of the hospital buildings consisting of two Acute Care buildings, a Long Stay Unit and a Recreation and Rehabilitation Centre.
- Construction of the maximum security 5.5 metre perimeter wall, internal fences, garden walls, a circulation road, driveways, and landscape works.

The project consortium will provide the following ancillary services to the Forensic Hospital: building and grounds maintenance including cleaning; catering; linen services; security; utilities; pest control and non-clinical waste management. All clinical services to the Forensic Hospital will continue to be delivered by Justice Health.





LBCC Boundary
 Hospital Site Boundary

Figure 6 - Locations of proposed Forensic and Prison Hospital development within the LBCC

Justice Health Operations Building

The Justice Health Operations Building will be constructed as part of the Forensic Hospital development and is to provide accommodation for the staff that support the delivery of the clinical services to be undertaken by Justice Health in the new Forensic and Prison Hospitals. With a floor area of approximately 2800m², the part two level building will accommodate the administration, pharmaceutical and security requirements for the Forensic Hospital. One of the main functions of the building is the "Sally Port" – the search and checkpoint for all vehicles and personnel entering the Hospital. A photomontage of the proposed building is provided at **Figure 7** below.

The functions to be provided in the building will be those currently performed within the administration area of the existing Long Bay Hospital, to be demolished as part of the project. These support and administrative functions, currently accommodated within the secure perimeter wall of the existing Long Bay Hospital, are not required (for security reasons) to be located with the secure wall. Accordingly, the Operations Building will be constructed outside the perimeter walls of the Forensic Hospital to enable ease of access by the public and Justice Health staff without the need to go through security screening processes. This will allow staff to be in a safer environment by not being located in the confines of the hospital.

The facility will accommodate a range of supporting administration functions such as clinical services, information technology, research and education, clinical administration and Justice Health management. Justice Health management functions will be conducted separately from the day-to-day administration functions of the Forensic Hospital.

Materials and finishes

The Justice Health Operations building represents the corporate image of Justice Health and as such is a designed as a contemporary office building. This building also incorporates the entry to the Forensic Hospital, and this component of the structure has been designed to be non-threatening and deliberately unlike any typical 'gatehouse' of its correctional facility neighbour. Clearly separate and distinct entry points are defined for Justice Health and the Forensic Hospital.

As much as possible of the existing brick masonry wall of the existing hospital is to be retained, and the new perimeter security wall has been designed to harmonise with it. The wall will be constructed from pre-cast panels with an architectural finish. The colour will reflect the existing brick masonry wall (see **Figure 8**). The visual effect will be not dissimilar to driving along a road with pre-cast concrete retaining walls or acoustic screens.

Access and parking

Pedestrian access to the Forensic Hospital will be via the Forensic Hospital Entrance Building. Vehicle access will be via the new north-west perimeter wall facing the existing Anzac Parade car park and the "Sally Port". The parking area immediately in front of the proposed Justice Health Operations Building will be used solely for Justice Health requirements during business hours on Mondays to Fridays and will be appropriately secured. On weekends, however, the boom gates will be released and the parking spaces will be available for use by visitors.

Landscaping

A Landscape Plan for the site has been prepared by Site Image Landscape Architects and is appended at Appendix E. The setting for the Forensic Hospital seeks to take on a parklike quality. Supplementary landscape works including occasional tree planting, low mass planting and turf will be carried out in the general vicinity of the Forensic Hospital entry, the Justice Health Operations building, the existing car park and its extension. Plants will be low growing and it is the intention that no plant will be maintained at a height greater than 750mm. A simple linear retaining wall and associated mass planting will be constructed to the northern perimeter of the Justice Health Operations building to accommodate grade differentials in this area.

No tree planting will occur in the area surrounding the Forensic Hospital, as the proximity to building facades may create an inappropriate security risk. Plant species have been selected on the basis of their ability to withstand the existing and proposed site conditions.



Figure 7 - The proposed Justice Health Operations Building



Figure 8 - New Forensic Hospital as viewed from western side of Anzac Parade



Figure 9 - New Prison Hospital as viewed from Bilga Avenue

The landscape of the site perimeter will respond to the qualities of the surrounding district and will minimise the visual impact of this facility. Tree planting will be undertaken along the Anzac Parade boundary in accordance with security requirements and Council's Street Tree Master Plan.

Stormwater

On-site stormwater detention (OSD) will be provided for the Forensic Hospital. The stormwater discharge for the Justice Health Operations building will be directed to the existing site drainage and site discharge point, without OSD applied. Details of stormwater management are located in the Stormwater Drainage Statement, prepared by Meinhardt at **Appendix F.**

Security

The Forensic Hospital will be located within a secure perimeter wall that meets the requirements of a maximum security correctional facility.

The perimeter wall will be the primary security barrier with no concealed voids, recesses, patterning or ridges which could conceivably hide or obscure unauthorised persons inside or outside the structure. The wall will be constantly monitored by movement sensors and video surveillance.

Construction Management

The site will be constructed in a north to south direction with all trades sequenced to create continuity and flow of the work force. Following the initial site establishment and demolition, excavation will commence in stages starting at the site of the future Justice Health Operations Building and working progressively towards the southern end of the site.

During the excavation period temporary construction haul roads will be constructed in the position of the permanent roads. These roads will be sealed to prevent dust, erosion and allow for the efficient capture of stormwater run off.

Further details of the construction management for the Forensic Hospital site are included in the Construction Access Arrangements Report attached in **Appendix G**, Construction Traffic Management Plan attached at **Appendix H** and Construction Methodology Plan attached at **Appendix C**.

3.3 Prison Hospital

The development objective adopted for the proposed development of the Prison Hospital is to deliver a new hospital in a secure location integrated physically and functionally with the Metropolitan Medical Transient Centre (MMTC) which provides a range of outpatient, ambulatory and primary care health services for inmates.

The new Prison Hospital will be built within a new secure perimeter wall of LBCC abutting the northern end of the existing prison wall, adjacent to the MMTC on the site of the former workshop facilities (refer to **Figure 6**). The site is approximately 2.1 ha in area. The hospital consists of four new buildings surrounded by a new 5.5m pre-cast concrete wall. The proposed development site has been cleared of all building structures in preparation for the commencement of the new works. Specifically, the development of the new Prison Hospital comprises:

- In-patient facilities for medical and surgical, aged care, mental health and rehabilitation purposes.
- Visitors Centre, Service and Administration building to service both patients from the hospital and inmates held in the adjoining MMTC.
- A new Gatehouse to service both the new prison hospital and the MMTC.
- A maximum security 5.5m pre-cast perimeter wall, internal fences, garden walls, and landscape work.
- An external perimeter road and alterations to existing roadways to form new entry road and lay-by.

Access and parking

During construction, access to the Prison Hospital site will be via a new driveway and crossing to Calga Avenue. The site will be appropriately secured. During operation of the facility, vehicular access to the site will be via specifically provided and secure roads and entries within the existing complex.

Pedestrian access to the site for patients, staff and visitors will be via the Hospital Entry Building.

Parking for the Prison Hospital is provided as part of the existing car park at the main entry to the site.

Landscaping

A Landscape Plan for the site, prepared by Site Image Landscape Architects, is appended in **Appendix E**. A more structured design approach has been taken to the landscape response to the Prison Hospital site. The constrained arrangement of the built form of the LBCC and the requirements for contained movement across and through the Prison Hospital site has influenced the landscape design. Similar to the Forensic Hospital, plant species will be selected on the basis of their ability to withstand the existing and proposed site conditions. Native plants will be used in preference to exotic species. All species used will be drought resistant, including the turf specified. Existing screen planting along the Bilga Crescent and Calga Avenue perimeter will be maintained.

Stormwater

The Prison Hospital site is graded slightly southwestward. On-site detention (OSD) will be provided in this vicinity to receive all stormwater runoff up to the 100 year ARI event. This site will continue to accept discharge from the adjacent MMTC and convey it through the site to the OSD. A Stormwater Drainage Statement is provided in **Appendix F**.

Security

The Prison Hospital site will be surrounded on three sides by a perimeter maximum security wall, internal sterile zone and sterile zone demarcation fence. The fourth side is bounded by the existing MMTC wall.

Construction Management

The Prison Hospital site has been cleared of all building structures, including the on-ground slabs. Construction will be undertaken in three distinct phases, being: site establishment, earthworks and construction of new buildings. Prior to works commencing, appropriate OH&S facilities, including the erection of site fencing, will be implemented in accordance with LBCC security requirements. The construction workforce for the Prison Hospital site will be required to park in the temporary staff car park which is proposed to be within the wide median strip of Anzac Parade.

Further details of construction management for the Prison Hospital site are included in the Construction Access Arrangements Report attached in **Appendix G**, Construction Traffic Management Plan attached at **Appendix H** and Construction Methodology Plan attached at **Appendix C**.

3.4 Construction Staging

The redevelopment of the Long Bay Forensic and Prison Hospitals consists of the construction of new facilities in different areas of the Complex. These two projects will be managed as autonomous construction sites running concurrently with a common management structure.

Staging of the project has been planned in consideration of the welfare of the prisoners, patients, construction workers and LBCC personnel and in accordance with all necessary security requirements of the Complex.

Construction of the Prison Hospital will be commenced first. Prior to the new works commencing, the site will be secured, OH&S facilities will be established and Stormwater, Traffic and Security Management Plans will be implemented. A temporary driveway crossover will be constructed from Calga Avenue to the site entry for construction traffic to use. This entrance will be used by all personnel and for material deliveries to the Prison Hospital site. No other gates or access will be provided or installed to this area. Construction Access Arrangements are provided in **Appendix G**.

The Forensic Hospital is to be established with diversion of existing services, implementation of Stormwater, Traffic and Security Management Plans and erection of temporary perimeter fencing. A new temporary road will be constructed for site access. Once the new access road is operational and the site fence and gate complete construction of the new Forensic Hospital, including the Justice Health Operations Building and pharmacy store, will commence with the existing hospital remaining operational during construction of the two sites.

On completion of the Forensic and Prison Hospitals the final phase of the development will be to transfer patients to the respective new facilities and decommission the former Hospital.

Once patients have been relocated, the demolition of the former hospital and walls will commence followed by the completion of landscaping works and making good of perimeter walls which will define the newly occupied Forensic Hospital.

4.0 Consultation

In accordance with the Environmental Assessment Requirements issued by the Director-General for this project, consultation must be undertaken with relevant public authorities and the broader community. Specifically, the following public authorities have been consulted:

- Roads and Traffic Authority (RTA);
- Department of Natural Resources; and
- NSW Heritage Office.

Roads and Traffic Authority

Consultation with the Roads and Traffic Authority (RTA) will be undertaken as part of the review of the proposal by Randwick City Council.

The impact of traffic arising from the proposed development has been assessed in the Construction Traffic Management Plan (refer to **Appendix H**) and Traffic Review for the LBCC Master Plan (refer to **Appendix T**). These reports have been forwarded to Randwick City Council, the RTA and the State Transit Authority for preliminary assessment of proposed impacts on RTA roads and the surrounding road network.

Representatives from the RTA have previously advised that the RTA does not have any concerns with the proposed development on the following grounds:

- Additional traffic is moderate, with peak times in the morning and afternoon readily accommodated;
- There is adequate room for vehicle manoeuvrability on site without impacting the road networks; and
- Traffic flow to, from and within the site will not be affected as a result of the proposed development.

Department of Natural Resources

Consultation with the Department of Natural Resources was undertaken by Multiplex on 8 March 2006. During this discussion it was confirmed that:

- Coffey Geosciences would be engaged to monitor the proposed development to ensure foundations do not extend to the depth of the groundwater or impact on groundwater conditions.
- Departmental representatives do not have concerns with the proposed works and confirmed that the proposal does not pose a threat to the environment.

The likely impact of the proposal on groundwater and geotechnical conditions of the LBCC have been assessed in the attached Preliminary Geotechnical Investigation (refer **Appendix R**).

Heritage Office

Consultation with the NSW Heritage Office was undertaken by Multiplex on 16 February 2006. During this meeting it was confirmed that:

- The proposed development would be undertaken in accordance with the requirements of the LBCC Conservation Management Plan and the LBCC Aboriginal Heritage Assessment.
- A Heritage Impact Statement would be produced as part of the Part 3A application to identify and assess impacts of the proposal on heritage values of the site; and
- The Heritage Office did not have any concerns with the proposal on the condition that the abovementioned commitments would be undertaken.

The likely impact of the proposal on the heritage values of the LBCC have been assessed in the attached Heritage Impact Statement (refer **Appendix I**).

Community Consultation

Extensive community consultation on the proposed redevelopment of the LBCC Forensic and Prison Hospitals was undertaken in 2004 during the preparation of the LBCC Master Plan.

The Department of Health (Justice Health) commissioned a program of targeted community consultation to provide key stakeholders and local residents with the opportunity to participate in the preparation of the LBCC Master Plan. The consultation highlighted the community's primary concerns with the redevelopment of the LBCC hospitals. The concerns raised have been sufficiently addressed and mitigated by the proposal. A summary report on the outcomes of the community consultation undertaken for the LBCC Master Plan is attached at **Appendix J**.

5.0 Relevant Environmental Planning Instruments

This Chapter details the relevant environmental planning instruments (EPI) applying to the site in accordance with the Director-General's Environmental Assessment Requirements for the proposal. An assessment of compliance with relevant planning controls is provided in Chapter 6.

5.1 Environmental Protection and Biodiversity Conservation Act 1999

Part C of Schedule 1 of the Director-General's Environmental Assessment Requirements requires the EAR to address, as applicable, matters of National Environmental Significance under the Commonwealth *Environmental Protection and Biodiversity Conservation Act* 1999 (EPBC Act).

The EPBC Act is triggered when there is likely to be a significant impact on matters of national environmental significance. Under the Act, matters of National Environmental Significance include, relevantly, listed threatened species, ecological communities and migratory species.

An Ecological Assessment of the site, undertaken by Keystone Ecological in March 2006, concluded that the site does not contain any matters of National Environmental Significance (refer to **Appendix K**). Therefore, the site and the proposed development are not subject to the provisions of the EPBC Act.

5.2 Heritage Act 1977

The Long Bay Correctional Complex is listed on the State Heritage Register (listing number 00810). Matters in relation to the heritage status of the LBCC are discussed in **Section 6.8** of this report.

Under clause 75U of Part 3A of the EP&A Act, an approval under Part 4 of the *Heritage Act* 1977 does not apply under Part 3A of the EP&A Act and an excavation permit under section 139 is not required. Accordingly, authorisation to carry out development is not required on approval of the project by the Minister.

5.3 State Environmental Planning Policy 11 – Traffic Generating Development

SEPP 11 Traffic Generating Development aims to ensure that the Traffic Authority is given an opportunity to make representations in respect of development referred to in Schedules 1 or 2 of the Policy. Schedule 2 of SEPP 11 identifies the following:

(o) "the erection of a building for the purposes of a hospital with accommodation for 100 or more beds or the enlargement or extension of a building for the purposes of a hospital where that enlargement or extension provides accommodation for 100 or more beds".

The proposed Forensic Hospital will consist of a total of 135 beds. Therefore, the proposed development must be referred to the Roads and Traffic Authority. The traffic impacts of the proposal are discussed in **Sections 6.9** and **6.10**.

5.4 State Environmental Planning Policy 55 – Remediation of Land

SEPP 55 - Remediation of Land applies to the site. This SEPP aims to provide a State-wide planning approach to the remediation of contaminated land in order to reduce the risk of harm to human health or the environment. The SEPP defines when consent is or is not required for remediation work, and requires that remediation work meets certain standards and notification requirements.

A comprehensive Environmental Site Assessment was conducted by Coffey Geosciences Pty Ltd on the two proposed development sites. The assessment identified that the site is contaminated and recommended further assessment, remediation, and management (refer to **Appendix L**). This remedial work will be undertaken in accordance with the requirements of SEPP 55.

5.5 Randwick Local Environmental Plan 1998

This Local Environmental Plan (LEP) applies to all land within the City of Randwick. Under the LEP the LBCC is located in Zone 5 (Special Uses). Development for the purposes of 'hospitals' is permissible with consent in this zone.

Clause 17 of the LEP sets out the zone objectives which includes *"to accommodate development by public authorities on publicly owned land"* and *"to enable associated and ancillary development"*. The proposed development meets the objectives of the LEP as it is by a public authority (NSW Department of Health) on publicly owned land (Crown land) and involves ancillary development (the Forensic Hospital).

The site and the original gatehouses are heritage listed in Schedule 3 of the RLEP. The relevance of the heritage listing of these items to the proposal is discussed in **Section 6.8** of this report.

5.6 LBCC Development Control Plan

In 2004, a Master Plan for the LBCC was adopted by Randwick City Council in accordance with the provision in Randwick LEP that a Council adopted Master Plan is required prior to Council determining a development application for areas within the City of Randwick greater than 4000m². The Master Plan was prepared in accordance with Clause 40(5) of the LEP which required comprehensive assessment and reporting of a range of planning issues such as land use principles, phasing of development, built form provisions, site servicing and heritage conservation.

Since the LBCC Master Plan was adopted by Council major amendments were been made to the EP&A Act and Regulation, including the introduction of Part 3A and replacement of the term "master plan". Pursuant to Clause 25AD of the EP&A Regulation, a reference to a master plan in an environmental planning instrument is now taken to be a deemed development control plan (DCP). Therefore, the Long Bay Master Plan is the DCP for the site. The consistency of the proposal with the LBCC DCP is discussed in **Section 6.6**. A detailed assessment of the proposal against relevant provisions of the Long Bay DCP is contained in **Appendix M**.

6.0 Environmental Assessment

This chapter of the report assesses the proposal in accordance with the Director-General's Environmental Assessment Requirements. The chapter is structured to mirror as best as possible the order of the requirements. The table below indicates where in this report each requirement is addressed. A copy of the D-G's Environmental Assessment Requirements is attached at **Appendix B**.

6.1 Director-General's Environmental Assessment Requirements

Director-General's Requirements	Report Location
General Requirements	
Executive Summary	Page iii
Description of the proposal	Chapter 3
Assessment of the environmental impacts of the project	Chapter 6
Statement of Validity	Provided at the front of this report
Environmental Assessment Requirements	
Environmental Risk Analysis	Appendix S
Matters set out in Schedule 1	Chapter 6
Part A: Heads of Consideration	
 Suitability of the site 	Section 6.2
 Ecologically sustainable development 	Sections 6.3 and 6.7
The public interest	Section 6.4
Part B: Relevant EPIs and Guidelines	Chapter 5 and Appendix M
Part C: Key Issues	
Environmental Impacts	
Contamination	Section 6.6
Compliance with Deemed DCP	Sections 6.6 and Appendix M
Ecological Impacts	
 Environmentally Sustainable Development 	Section 6.3 and 6.7
 Significant trees 	Section 6.7
Heritage Impacts	
 Heritage Impact Statement 	Section 6.8 and Appendices I and Q
Compliance with CMP	Section 6.8 and Appendix O
 Consultation with NSW Heritage Office 	Chapter 4

Director-General's Requirements	Report Location	
Construction Impacts		
Staging	Sections 3.4 and 6.9 and Appendices C and G	
 Geotechnical and Groundwater Conditions 	Section 6.9 and Appendix R	
Site Disturbance	Section 6.9 and Appendices C and R	
Construction related Contamination	Section 6.9 and Appendix S	
 Construction Traffic Impacts on Local Residents 	Section 6.9 and Appendix H	
 Construction Traffic Impacts on Road Network 	Section 6.9 and Appendix H	
Operational Impacts		
Local Amenity	Section 6.10 and Appendices P, T and U	
 Social Impact 	Section 6.10	
Services and Infrastructure		
 Stormwater management 	Section 6.11 and Appendix F	
 Suitability of Geotechnical and Groundwater Conditions 	Section 6.11 and Appendix R	
Matters of National Environmental Significance	Section 6.12 and Appendix K	
Part D: Draft Statement of Commitments	Chapter 7	
Consultation Requirements		
Demonstration of consultation with the RTA, Dept of NR, HO:	Chapter 4	
• RTA	Chapter 4	
 Department of Natural Resources 	Chapter 4	
Heritage Office	Chapter 4	

PART A: HEADS OF CONSIDERATION

6.2 Site suitability

The two development sites are located within the LBCC. The Forensic Hospital is to be sited in the same location as the existing Long Bay Hospital, while the new Prison Hospital will be on currently vacant land within the LBCC.

The site is considered suitable for the proposed development of the new hospitals for the following reasons:

- The proposal continues a long existing land use to which the surrounding community is attuned.
- The development of hospital and health related facilities supports the continued use of the site for correctional and forensic purposes.

- Necessary infrastructure and services, including security, required by the proposed development is available on the site.
- The proposal uses existing land resources and facilitates the orderly and economic use of the site.
- The Prison Hospital has been designed and sited to capitalise on co-location with the MTCC.
- The Forensic Hospital is located on the site of the existing facility.

6.3 Likely environmental, social and economic impacts and the principles of ESD

As demonstrated in the detailed assessment in this chapter, the social and economic impacts of the proposal are positive (see **Sections 6.3**, **6.4** and **6.10**) and there are no negative environmental impacts that cannot be managed. **Section 6.7** of this report describes the ESD principles that have been applied to the project including energy reduction, water reuse and responsive building design.

6.4 The public interest

The public interest is well served by the proposed development, in that:

- The Long Bay Forensic and Prison Hospitals Project will substantially improve the care of forensic patients - in a domestic, non-prison like environment - in line with national and international best practice. Forensic patients and prisoners will no longer be accommodated and treated together.
- The potential for escapes is reduced through the security arrangements built in to the design of both hospitals. The location of the new Prison Hospital means the custodial management of prisoners is enhanced as they will no longer be moved about the Complex.
- The location of the hospitals within the LBCC will provide economic benefit to the State through the optimisation of existing facilities and reuse of land.
- The proposed development will incorporate ecologically sensitive design that will minimise and manage environmental impacts.
- The heritage values of the site will not be compromised by the proposed development.
- The locations of the proposed development provide adequate and appropriate separation from the public and adjacent land uses.
- An appropriate level of security is maintained for each of the hospitals.

 There will be no impact on the public domain resulting from the proposed development during operations and minimal impact during construction.

PART B: RELEVANT ENVIRONMENTAL PLANNING INSTRUMENTS AND GUIDELINES

6.5 Relevant environmental planning instruments and guidelines

The relevant EPIs for the proposed development are described in Chapter 5 of this report. The proposal is permissible in the Zone 5 (Special Uses) and meets the zone objectives under the RLEP.

The proposal complies with all relevant provisions of the Randwick Local Environmental Plan 1998 and the LBCC DCP (refer Appendix M).

As detailed in **Section 5.4**, site remediation will meet the requirements of SEPP 55.

Therefore, the proposed development complies with all relevant EPIs.

PART C: KEY ISSUES

6.6 Environmental impacts

Contamination

Issues and impacts

A Stage 2 Environmental Site Assessment (ESA) of areas identified as Area B (proposed Prison Hospital) and Area D (proposed Forensic Hospital) of the LBCC was undertaken by Coffey Geosciences Pty Ltd (Coffey) in 2005 (refer to **Appendix L**). The scope of work included preparation of an environmental sampling and analysis plan (SAP) for review and approval by an EPA Accredited Auditor, two phases of field investigations and laboratory testing, and data assessment and reporting.

The assessment identified a range of actual and potential contaminants in the soil and groundwater, including asbestos, petroleum and underground storage tanks.

Some leakage of petroleum hydrocarbons from the underground storage tanks or maintenance area in Area B (proposed Prison Hospital) has likely occurred and impacted on the groundwater within the sandstone.

The site is located within an area of no known occurrence of acid sulphate soil (ASS) material.

Assessment

Based on the investigations undertaken to date, it was considered that in order for Areas B and D to be suitable for the proposed developments, further remediation and management is required to address the identified contamination issues. An option for remediation identified in the ESA involves removing point sources of contamination associated with the underground storage tanks and then capping other asbestos contaminated fill material in-situ using a combination of hardstand and soil capping layers.

Given the relatively low levels of contaminant concentrations in the groundwater, the ongoing proposed use of the area and the large distance to potential groundwater receptors, it was considered that the groundwater contamination is unlikely to pose a significant risk to users of the site or potential groundwater receptors.

As the site is located within an area of no known occurrence of acid sulphate soil (ASS) material it has been determined that there is a low risk of ASS being present at Area B and a moderate risk within alluvial sediments in Area D.

Based on the available information and the implementation of appropriate remediation, the ESA concludes that contamination at the site would not pose a significant risk of harm to human health or the environment as defined in the NSW *Contaminated Lands Management Act* 1997.

Management of contamination is a matter included in the draft Statement of Commitments.

Compliance with deemed DCP

The proposal complies in all respects with the deemed DCP for LBCC, as demonstrated in the Table of Compliance prepared by JBA Urban Planning Consultants at **Appendix M**.

6.7 Ecological impacts

Environmentally sustainable development

The principles of ESD adopted for the project are to:

- Provide efficiency and flexible design across all services.
- Minimise energy usage and wastage through innovative design and plant capacity flexibility.
- Explore environmentally friendly design items where appropriate for the development, ie refrigerants, oils and solar technologies.
- Implement monitoring of energy management capability.

The proposal incorporates a range of ESD initiatives to minimise the impact of the development on the environment, in accordance with the provisions of the LBCC DCP and the above stated ESD principles. These initiatives include:

- Low energy building design.
- Potable water demand management including water metering and monitoring of water conservation targets.
- Rainwater harvesting for irrigation and to minimise impact on stormwater infrastructure.
- Optimal use of natural light through responsive building design and materials.
- Individual lighting control to ensure that artificial lighting only operates when required.
- Use of refrigerants with minimal or no ozone depletion.

- These ESD initiatives are described in the Services Enhancement and Expandability Reports, prepared by Lincolne Scott and appended in Appendix N.
- Ecologically sustainable development is a matter included in the Draft Statement of Commitments contained in Chapter 7.

Significant trees

Both development sites are almost devoid of vegetation. No significant trees will be affected by the development.

6.8 Heritage impacts

Issues and impacts

The LBCC is listed on the State Heritage Register and is identified as an item of local heritage significance in Randwick Local Environmental Plan. The site has been the principal prison complex in NSW and Sydney's major metropolitan gaol for over 90 years. It contains rare examples of purpose-built prison architecture and is culturally significant as the site of both male and female imprisonment since 1914. (For further details see Conservation Management Plan and Heritage Impact Statement at **Appendix O** and **Appendix I** respectively).

The development has the potential to impact on:

- view corridors to the old Gatehouses;
- the heritage fabric of the complex; and
- Aboriginal heritage and archaeology.

A **Conservation Management Plan** (CMP) was prepared for the whole LBCC in 2004 by Clive Lucas Stapleton and Partners (refer to **Appendix O**). The CMP established general conservation guidelines for the Outer Complex of LBCC including continuing to use the Outer Complex as part of a correctional centre, in accordance with an agreed long-term coordinated plan; and complying with the general conservation policies of the CMP. Policies that apply in particular to the Outer Complex cover the setting; treatment of fabric; views; interpretation; later developments; landscape; indigenous heritage and archaeology. In accordance with the D-G's EA Requirements a Heritage Impact Statement (HIS) of the proposal has been prepared by Graham Brooks and Associates (refer **Appendix I**). The HIS assessed the proposal in relation to compliance with the CMP.

An Aboriginal Heritage Assessment was undertaken by Mary Dallas Consulting Archaeologists in relation to the specific areas proposed for development and an Aboriginal community values assessment within the broader context of the LBCC and the Long Bay local area was prepared (see **Appendix P**). The Aboriginal Archaeological Assessment found no Aboriginal archaeological sites within the development footprint, but identified areas of varying archaeological potential. The report established management requirements for the specific areas currently being undertaken as part of a separate approval.

The D-G's Environmental Assessment Requirements require an assessment of compliance with the conservation policies adopted for the site in the Conservation Management Plan.

Assessment

View corridors

In relation to retaining the visual setting of the place, the HIS concludes that the development complies with this policy. It further states that: "the new development will be located in the lowest part of the overall site. The hospital buildings will be kept low behind a perimeter wall and will not distract long distance views to the avenue of palms and the original dual institution when viewed from Anzac Parade ... The image of the gatehouses and treetops that create a distinctive landmark in the local landscape will remain unchanged".

In relation to protecting and, where possible, re-establishing views to the original dual institutions (the male penitentiary and the female reformatory), the HIS concludes that the proposed Forensic Hospital, does not improve but, as much as possible, respects the existing view corridor to the heritage skyline.

The Prison Hospital will have no impact on heritage views.

Refer also to Visual Impact Assessment and Photomontages at **Appendix P**.

Heritage fabric of LBCC

The proposed buildings are located in the Outer Complex well away from any individual components of heritage significance. The HIS report concludes that the proposed development has an acceptable level of impact on the heritage significance of the overall LBCC, including heritage settings and view corridors to the old gatehouse.

Aboriginal heritage and archaeology

The Aboriginal Heritage Assessment found that the significance of the place to the Aboriginal community lies not in specific or known sites containing archaeological deposits, but in the social and cultural association the Aboriginal community has with the place and its broader landscape context (see Aboriginal Heritage Assessment, prepared by Mary Dallas Consulting Archaeologists, at **Appendix Q**).

Archaeological investigations are currently being undertaken as part of works under a separate approval. There are no impacts relevant to this application.

Aboriginal archaeology is addressed in the draft Statement of Commitments in Chapter 7.

Compliance with CMP

As detailed in the HIS the proposal complies with the CMP for LBCC. Specifically, the report states that: "both developments respect the planning of the original establishment, taking the complex to a new evolutionary phase of its historic use. The proposed development complies with conservation policies established by the CMP for new development within the place".

6.9 Construction impacts

The EA Requirements require details in relation to the construction matters set out in this section.

Proposed staging of the development

This is described in Section 3.4 of this report and in the Construction Access Arrangements Report at **Appendix G**.

Geotechnical impacts of the development on the site

The geotechnical and groundwater conditions of the two sites were investigated by Coffey Geosciences (see **Appendix R**).

Based on current information and site conditions, the construction of the two hospitals is not expected to impact on the geotechnical conditions of the two sites. However, the construction methodology will be selected to reduce/remove any potential impacts, and measures taken to manage and mitigate any issues should they occur.

In addition, all excavation and construction will be undertaken in accordance with the recommendations of a Dilapidation Report to be prepared by a suitably gualified consultant.

This matter is included in the draft Statement of Commitments.

Impacts, management and mitigation for noise, vibration, dust, soil and erosion, and waste removal

A detailed Construction Methodology Plan has been prepared by Multiplex Constructions setting out the management of the above matters during construction (see **Appendix C**). This is accompanied by an Environmental Risk Analysis (**Appendix S**).

It is considered that the measures to be put in place are adequate to manage the risks associated with, and impacts of, construction.

This matter is covered in the draft Statement of Commitments.

Contamination management during construction

Prior to construction, Multiplex will adopt a remediation strategy for the proposed development sites involving the removal of point sources of contamination associated with underground storage tanks (USTs) and capping of asbestos contaminated fill material *in-situ* using a combination of hardstand and soil capping layers, in accordance with the site remediation option recommended in the Stage 2 Environmental Site Assessment undertaken by Coffey Geosciences Pty Ltd (refer to **Appendix L**). During construction, management of potential contamination and contaminating events will be undertaken in accordance with the Environmental Risk Analysis at **Appendix S**.

Impacts on surrounding residents from construction traffic

Access for construction vehicles to the Forensic Hospital construction site will be via Anzac Parade and to the Prison Hospital site via Calga Avenue.

The Construction Traffic Management Plan (CTMP) prepared by Traffix Traffic and Transport Planners (**Appendix H**) sets out the estimated volume of construction related traffic – 44 truck trips per day on average, fluctuating over the approximately 20 months of the construction period. Of these trips only 14 truck trips per day will use Calga Avenue - where there is greater potential for impact on local residents.

The report concludes that traffic volumes are moderate and will not create unacceptable traffic impacts.

Measures to manage access, traffic and the parking of construction worker vehicles are detailed in the CTMP. This includes provision of a temporary car park in the wide median of Anzac Parade.

Given that construction traffic will be moderate, the limited duration of construction, and proposed car parking arrangement, the impacts on surrounding residents are considered acceptable and manageable.

Management of construction traffic forms part of the draft Statement of Commitments.

Impacts of construction related traffic on the regional road system and management of site access

The above CTMP identifies that the volume of construction traffic on the regional road system, primarily Anzac Parade, is moderate and that impacts would not be unacceptable.

The CTMP sets out detailed arrangements for management of access to the two construction sites, including temporary changes to a bus stop and deceleration lane on Anzac Parade, left-in left-out movements only, sign-posting and an onsite Traffic Controller.

6.10 Operational impacts

Amenity of local residents

Operationally, the proposal has the potential to impact on the amenity of local residents by virtue of increased traffic; increased noise; lighting and illumination and intrusion into existing view corridors.

Traffic

The Traffic Review of the LBCC Master Plan prepared by Traffix Traffic and Transport Planners in 2004 and updated in March 2006 (**Appendix T**) concluded that overall no significant traffic changes would arise as a result of the conditions intended in the Master Plan. The increase in patient numbers and staff levels are moderate and staff changeovers would not coincide with peak periods along Anzac Parade.

Peak traffic generation at the complex occurs at a time different to the on-street peak of the surrounding road networks. All visitor and staff parking is provided on site. All access points to the site operate at a high level of service currently and this will continue following the development of the Hospitals.

As demonstrated above, no significant change in traffic conditions will result from the proposal and therefore the amenity of the local residents will not be affected.

Noise

Noise emissions will primarily potentially come from plant and equipment associated with the development as most human activity will occur indoors within sealed glazing.

Noise emissions from the plant will be assessed during the design of these systems and appropriate methods recommended to control noise emissions in accordance with the EPA Industrial Noise Policy Guidelines and the *Protection of the Environment Operations Act.*

An Acoustic Impact Statement is provided in Appendix U.

This matter is included in the draft Statement of Commitments.

Lighting

Area surveillance lighting associated with the Forensic Hospital will be consistent with existing security requirements. Only in the event of a security incident will the Forensic Hospital be illuminated with 15 lux flood lights.

Given that use of this level of lighting will occur on rare occasions, the impact on adjacent residents is considered acceptable.

Views

The development of the Forensic Hospital has the potential to impact on the views of the heritage gatehouses from residences on Anzac Parade (with street numbers in the 1290's). These are illuminated at night and together with the avenue of palm trees provide a pleasant vista. There is some potential for the new Prison Hospital to impact on the visual outlook of residents on Bilga Avenue.

The results of a visual impact assessment, including photomontages, undertaken by HPI-CS and included at **Appendix P** is summarised below.

The photomontages (Figure 7) demonstrate that from the primary viewpoint in the region of Anzac Parade opposite the proposed Forensic Hospital (and from the primary viewing position at first floor level) views of the heritage buildings of the older parts of the Long Bay Correctional Complex are unimpeded by the new works. While foreground buildings and perimeter wall structure have some visual impact at lower levels, these are ameliorated by the proposed planting to occur in the median along Anzac Parade. Colours and materials of the new Forensic Hospital and the perimeter wall in the foreground have been chosen to blend and merge with existing building fabric and to avoid detracting from the visual presence of the original prison buildings.

The vista from houses just north of Forrest Street does not currently include clear views of the existing Long Bay Hospital and the new works will not significantly affect these views. The view in fact will be enhanced by the creation of the new operations building for Justice Health, which sits snugly in the landscape and is constructed of contemporary materials and finishes (**see Figure 7**). In relation to the new Prison Hospital, the view to the LBCC from the vicinity of Bilga Crescent is at present highly effectively screened by dense planting so that even from first floor level very little of the existing facility is visible (see **Figure 9**). The new Prison Hospital will have little or no impact at all on the view from Bilga Crescent and environs.

Social impact of proposed development on local community

The two proposed hospitals and related operations replace in the same location a long standing existing facility (the Long Bay Hospital) as well as the associated facilities for Justice Health personnel.

The number of beds in the new Forensic Hospital will be 135 which is 16 more than the capacity of the existing hospital. However, the additional movements to the Forensic Hospital over and above current fluctuations will be negligible. The people to be accommodated in the new Prison Hospital will be drawn from the existing prison population, therefore traffic generated by the Prison Hospital, during operations, will be no greater than already occurs.

The number of Justice Health staff on site will increase by 160.

As discussed earlier, the proposed development will have negligible impact on the view corridors to the heritage features of the LBCC, while the overall extent of new development is much the same as the existing.

Accordingly, the proposal will have no new impact on the *status quo*. Indeed, the proposal has a number of potential positive social impacts:

- Security will be improved because prisoners will no longer be moved across the Complex to access health facilities.
- New appropriate levels of security will be provided for prisoners in the new Prison Hospital and for forensic patients in the new Forensic Hospital – thus reducing the potential of escapes.
- Conceivably, the number of new Justice Health staff to be employed in the new Hospitals could come from the local area so providing employment opportunities.

- Potentially, new staff will patronise local shops
 thus benefiting these businesses.
- Finally, impacts on the surrounding community were identified during the consultation undertaken for the Long Bay Master Plan in 2004. The issues raised from this consultation included hospital security, landscaping, impacts to views, local amenity and environmental quality. These perceived impacts have been adequately addressed by the proposal.

6.11 Services and infrastructure

Stormwater management

The on-site stormwater detention (OSD) to be provided for the Forensic Hospital and the Prison Hospital will integrate into the Stormwater Management Plan for the LBCC. The volume of OSD required for the Forensic Hospital will be increased to compensate for the omission of OSD to the Justice Health Operations Building and ancillary buildings associated with the Forensic Hospital. Stormwater discharge for the Justice Health Operations Building will be directed to the existing site drainage and site discharge point, without OSD applied.

The Prison Hospital site is graded slightly southwestward. An OSD will be provided in this vicinity to receive all stormwater runoff up to the 100 year ARI event. This site will continue to accept discharge from the adjacent MMTC and convey it through the site to the OSD. A Stormwater Drainage Statement is provided at **Appendix F.**

In summary, stormwater works for the Project will:

- Provide on-site detention to the developed areas, for rainfall events up to and including the 100 year average recurrence interval (ARI) event;
- Utilise the sterile zone as a shallow swale drain;
- Divert existing drainage external to the Forensic and Prison Hospitals away from them;
- Set building floor levels above the 100 year ARI rainfall event water levels; and
- Exclude absorption and infiltration into the stormwater system.

The standard of stormwater management and OSD will be in accordance with the requirements of Randwick City Council. The existing catchment boundaries of the Long Bay Correctional Complex at the Forensic Hospital site are not altered. The overall discharge point on Anzac Parade is maintained.

Suitability of geotechnical and groundwater conditions

A preliminary geotechnical investigation of the geotechnical conditions of the two sites for the proposed hospitals was undertaken by Coffey Geosciences Pty Ltd (see **Appendix R**). Complex subsurface geological conditions are present in Area D – the site of the Forensic Hospital – related to the presence of a Paleochannel. Accordingly, further investigations will be required to assess piling conditions at this location. At this stage it is intended to utilize a piling system that minimises the quantity of spoil to be removed from the site.

Overall, the above report indicates that the geotechnical and groundwater conditions of both sites are suitable for the proposed development and sets out recommendations in relation to earthworks, piling, dewatering, slope stability, retaining walls, foundations, pavements etc.

6.12 Matters of National Environmental Significance

An Ecological Assessment of the site was undertaken by Keystone Ecological in March 2006 (refer **Appendix K**). Only one nationally threatened species listed in the EPBC Act 1999, Eastern Suburbs Bansksia Scrub, is known to occur in the immediate vicinity of the subject site.

The assessment concluded that the development proposal will not impact upon the ecological community of Eastern Suburbs Bansksia Scrub and no further assessment or referral to the Commonwealth Department of Environment and Heritage is required. Therefore, on the basis of the ecological assessment, there are no matters of National Environmental Significance on the site.

7.0 Draft Statement of Commitments

In accordance with the Director-General's Environmental Assessment Requirements, the proponent is required to include a Draft Statement of Commitments in respect of environmental management and mitigation measures on the site. The following are the commitments made by the NSW Department of Health and Multiplex to manage and minimise potential impacts arising from the project.

7.1 Contamination during construction

The proposed development is to be undertaken in accordance with the Environmental Risk Analysis.

7.2 Environmentally sustainable development

The proposed development is to incorporate the following measures in the support of the principles of ESD:

- Low energy building design;
- Potable water demand management including water metering and monitoring of water conservation targets;
- Rainwater harvesting for irrigation and to minimise impact on stormwater infrastructure;
- Optimal use of natural light through responsive building design and materials;
- Individual lighting control to ensure that artificial lighting only operates when required; and
- Use of refrigerants with minimal or no ozone depletion.

7.3 Heritage conservation and archaeology

The proposed works are to be undertaken in accordance with Long Bay Correctional Complex Conservation Management Plan.

Any impacts from the current proposal on Aboriginal archaeology are to be managed under relevant legislation.

7.4 Management of geotechnical impacts on construction

The construction methodology is to be selected to reduce or remove any potential impacts on geotechnical conditions, and appropriate measures will be taken to manage and mitigate any impacts should they occur.

A Dilapidation Report is to be prepared by a suitably qualified person prior to commencement of construction and all excavation and construction will be undertaken in accordance with the recommendations of the report.

7.5 Management of construction noise, vibration, dust, soil and erosion, and waste

Management of noise, vibration, dust, soil and erosion arising from the proposed construction is to undertaken in accordance with the Long Bay Prison and Forensic Hospitals Construction Methodology Plan and the measures set out in the Environmental Risk Analysis.

Hours of construction for both Hospitals will be limited to the following times:

- 6.30am to 5.30pm Monday to Friday;
- 6.30am to 4.00pm Saturday.

7.6 Management of construction traffic

Management of access, traffic and parking is to be in accordance with the Construction Traffic Management Plan.

7.7 Operational noise

Plant is to be designed, selected and operated in accordance with the EPA Industrial Noise Policy Guidelines and the *Protection of Environment Operations Act*.

7.8 Stormwater management

Stormwater management for the site is to be undertaken to comply with the objectives indicated in the Long Bay Master Plan. This is to include:

- Provision of on-site detention to the developed areas, for rainfall events up to and including the 100 year average recurrence interval (ARI) event;
- Utilising the sterile zone as a shallow swale drain;
- Diverting existing drainage external to the Forensic and Prison Hospitals away from them;
- Setting building floor levels above the 100 year ARI rainfall event water levels; and
- Excluding absorption and infiltration into the stormwater system.

7.9 Consistency with LBCC DCP

The proposed development is to be undertaken in accordance with the provisions of the LBCC DCP.

8.0 Conclusion

The assessment of the proposal has demonstrated that the development will result in positive social, environmental and economic benefits. Further, the proposal is consistent with statutory controls applying to the site including the Randwick Local Environmental Plan and relevant SEPPs. Approval for the proposal is sought on the following grounds:

- The proposal continues a long existing land use to which the surrounding community is attuned.
- The proposal will result in the appropriate separation of forensic patients and prisoners and more appropriate treatment, management and accommodation of forensic patients.
- The proposed development represents an upgrading of existing dated facilities
- The proposed development will have negligible impact on the view corridors to the Heritage listed features of the Complex.
- The proposal will result in better custodial management of prisoners as the new location of the Prison Hospital avoids movement of prisoners across the complex to access hospital facilities.
- The improvement of health facilities and services on the site will contribute to meeting requirements of national and international conventions for care of forensic patients.

The proposed development, both during construction and operation, will have no negative impacts on the environment and it serves the public interest. Therefore, we request that this project be approved by the Minister.