

Preferred Project Report and Statement of Commitments

Long Bay Gaol Hospitals Project

Long Bay Correctional Complex

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

June 2006 • 06025

JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Vivienne Goldschmidt

Signature Inline holdschuide Date 19/06/06

Contents

1.0	Introduction		1
2.0	Preferred Project		1
3.0	Stat	ement of Commitments	2
	3.1	General	2
	3.2	Environmentally sustainable development	2
	3.3	Heritage conservation and archaeology	2
	3.4	Contamination during construction	3
	3.5	Management of geotechnical conditions during construction	3
	3.6	Management of construction noise, vibration, dust, soil and erosion	3
	3.7	Management of construction traffic	3
	3.8	Services	3
	3.9	Waste management	4
	3.10	Operational noise management	4
	3.11	Stormwater management	4
	3.12	Parking	4
	3.13	Landscaping	5
	3.14	Consistency with Long Bay Correctional Complex Development Control Plan	5
4.0	Con	clusion	6

Attachments

- A Submissions Received
- B Response to issues raised in submissions
- C Response to issues raised by Randwick City Counciil

1.0 Introduction

The Environmental Assessment Report for a Project Application for the Long Bay Gaol Hospitals Project was exhibited for 32 days from 21 March to 21 April 2006. During that time submissions were received from the NSW Heritage Office and the Roads and Traffic Authority (RTA), copies of which are located at Attachment A to the Preferred Project Report. The response to the issues in the submissions from the proponent (the NSW Department of Health) and Multiplex Constructions (on behalf of the private sector consortium delivering the project) are at Attachment B. The Department of Natural Resources was consulted and had no issues with the project.

Randwick City Council raised a number of detailed matters regarding the project. The response to the key issues is at Attachment C.

Multiplex and the NSW Department of Health have considered the submissions made by the NSW Heritage Office and the RTA and have revised the Statement of Commitments to reflect their position in relation to the relevant issues raised by those agencies.

Due the level of security required for a correctional facility, only information necessary for the determination of this application is provided and design drawings are accordingly limited to building footprints.

2.0 Preferred Project

On the basis of the submissions made by the NSW Heritage Office and the RTA, no significant changes have been made to the Project as exhibited. Accordingly, the Preferred Project is that described in the Environmental Assessment Report prepared by JBA Urban Planning Consultants dated March 2006 (including all accompanying plans and Appendices). However, in order to deal with the issues raised, the NSW Department of Health and Multiplex have jointly revised their Statement of Commitments to take into account all issues that were considered reasonable and which minimise the environmental impact of the proposal. The revised Statement of Commitments follows in Section 3.

3.0 Statement of Commitments

In accordance with Part 3A of the *Environmental Planning and Assessment Act 1979*, the following are the commitments made by the NSW Department of Health and Multiplex to manage and minimise potential impacts arising from the Long Bay Gaol Hospitals Project.

3.1 General

- A. The development will be undertaken generally in accordance with the Environmental Assessment Report dated March 2006 prepared by JBA Urban Planning Pty Ltd (including accompanying Appendices) and drawings DA-A-1902, EW-A-1600, EW-A-1601, JH-A-1600 and FEW-LA-9400 prepared HPI-CS Architects.
- B. In undertaking the project Multiplex will obtain all necessary approvals required under State legislation and relevant Randwick City Council policies
- C. Multiplex will continue to liaise with Randwick City Council during the development process.

3.2 Environmentally sustainable development

Multiplex is committed to the principles of sustainability as defined in *the Environmental Planning and Assessment Act 1979*. The proposed development will incorporate the following measures in 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.

3.3 Heritage conservation and archaeology

- A. The proposed works will be undertaken in accordance with the Long Bay Correctional Complex Conservation Management Plan.
- B. Any impacts from the current proposal on Aboriginal archaeology will be managed under relevant legislation.
- C. If any archaeological relics are discovered during construction, the proponent will cease work on that part of the site and the Heritage Council will be notified in accordance with section 146 of the Heritage Act. If required by the Heritage Council, the remains will be recorded by a suitable qualified archaeologist prior to the recommencement of works.
- D. Prior to demolition, the NSW Department of Health will record the existing Prison Hospital, including the masonry wall, in accordance with NSW Heritage Council guidelines.

3.4 Contamination during construction

The proposed development will be undertaken in accordance with the Environmental Risk Analysis appended to the Environmental Assessment Report.

3.5 Management of geotechnical conditions during construction

- A. The construction methodology will be selected by the proponent 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.
- B. A Dilapidation Report will 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.

3.6 Management of construction noise, vibration, dust, soil and erosion

- A. Management of noise, vibration, dust, soil and erosion arising from the proposed construction will be undertaken in accordance with the Long Bay Prison and Forensic Hospitals Construction Methodology Plan and the measures set out in the Environmental Risk Analysis.
- B. Hours of construction for both hospitals will be limited to 6.30am to 5.30pm Monday to Friday and 6.30am to 4.00pm on Saturday.

3.7 Management of construction traffic

- A. Multiplex undertakes to ensure that the management of access, traffic and parking during construction will be in accordance with the revised Construction Traffic Management Plan, Roads and Traffic Authority, Randwick City Council requirements and relevant Australian Standards.
- B. The design of the proposed deceleration lane along Anzac Parade to the construction site and the temporary car park within the median island will be in accordance with current Australian Standards and RTA design requirements.
- C. The available sight lines at the two access points to Anzac Parade will comply with AS 2890.2, and 'No Stopping' restrictions adjacent to driveways will be installed.
- D. All vehicles will enter and exit the site in a forward direction.
- E. All loading/unloading activities will be carried out on site and not on Anzac Parade.
- F. Multiplex will provide a separate parking area for 150 cars for construction workers off-site in the median strip on Anzac Parade. Access by workers to the two construction sites will be controlled.

3.8 Services

Multiplex will comply with the requirements of relevant service authorities with regard to connection to, and relocation and/or adjustment of, services affected by the construction of the proposed development.

3.9 Waste management

- A. Prior to commencement of work on the site, a construction and demolition waste management plan will be submitted by Multiplex to the Department of Planning. The plan will detail the type and quantity of waste to be generated during demolition and construction together with details of how materials will be stored, re-used and recycled.
- B. Prior to occupation of the new hospital buildings, a copy of the operational waste management plan will be submitted by the NSW department of Health to the Department of Planning. The plan will detail waste management practices recycling, reuse and waste reduction measures.

3.10 Operational noise management

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

3.11 Stormwater management

- A. Management of on-site stormwater will comply with the objectives listed in the Long Bay Development Control Plan. This will include:
 - provision of on-site detention for rainfall events up to and including the 100 year average recurrence interval (ARI) event;
 - provision of on-site detention basin OSD-3 which is to be formed from the existing oval levels and would be at approximately RL 36.4 in the 1:100 ARI rain event;
 - diverting existing external drainage away from the Forensic and Prison Hospitals;
 - setting building floor levels above the 100 year ARI event level; and
 - excluding absorption and infiltration into the stormwater system.
- B. Multiplex and the NSW Department of Health will comply with Randwick City Council's requirements in relation to stormwater management. The two sub-catchments on site will be managed separately.
- C. Prior to commencement of work, Multiplex will submit engineering calculations and plans (with levels reduced to AHD) relevant to their works to the Department of Planning for the drainage of sub-catchment areas 1 and 2. This will be conditional on clearance for release being given by the Department of Corrective Services. The drawings and details will comply with Randwick City Council's policies for on-site detention.
- D. Gross pollutant traps will be provided by Multiplex to control stormwater pollution prior to stormwater being discharged either from the site or into any infiltration areas.

3.12 Parking

All parking for visitors to the Forensic Hospital and staff of the Forensic Hospital, Prison Hospital and Justice Health Operations Building will be provided on-site.

3.13 Landscaping

- A. Multiplex will provide landscaping in accordance with the Landscape Design Report and Plans prepared by Site Image Landscape Architects.
- B. Any removal of trees from within the site, as well the planting of any new street trees on Randwick City Council land will be in accordance with the Council's Tree Preservation Order and Street Tree Master Plan. Where this is not possible Multiplex will liaise with Randwick City Council to agree a strategy.
- C. NSW Department of Health will ensure that the Prison Hospital is screened from nearby residences with suitable landscaping or other forms of screening.

3.14 Consistency with Long Bay Correctional Complex Development Control Plan

The proposed development will be undertaken in accordance with the provisions of the Long Bay Correctional Complex Development Control Plan.

4.0 Conclusion

This report together with the appended comprehensive Environmental Assessment which accompanied the Major Project Application represents the Preferred Project for the Long Bay Gaol Hospitals Project.

The proposed development represents an appropriate use of the site, will result in positive social, environmental and economic benefits and is consistent with the applicable statutory controls. Specifically, the proposed development:

- continues a long existing land use to which the surrounding community is attuned;
- will result in the appropriate separation of forensic patients and prisoners, and enable more appropriate treatment, management and accommodation of forensic patients;
- represents a significant upgrade of existing dated facilities;
- will have negligible impact on the view corridors to the heritage listed features of the Long Bay Correctional Complex; and
- will result in better custodial management of prisoners as the new location of the Prison Hospital obviates movement of prisoners across the complex to access hospital facilities.

Importantly, the improvement of health facilities and services on the site will contribute to meeting the requirements of national and international conventions for the 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.

Accordingly, it is requested that this project be approved by the Minister.



Submissions Received

Randwick City Counci

27 APR 2006

RDC 2002-1763 Pt3 (SM)

Records Receiver



The General Manager Randwick City Council 30 Frances Street Randwick 2031

Attention: Kerry Kyriacou

RCC CORPORATE INFORMATION Location File No.__ Action Officer/KERASS AC C Document No.

PROPOSED CONSTRUCTION OF A NEW FORENSIC HOSPITAL AND A NEW PRISON HOSPITAL IN THE LONG BAY CORRECTIONAL COMPLEX

Dear Kerry,

I refer to your letter of 28 March 2006, with regard to the subject application, which was referred to the Roads and Traffic Authority (RTA) for comment.

The RTA has assessed the development application and raises no objection to the proposal on traffic grounds as it will not have a significant traffic impact on the adjacent classified road network. However, the RTA offers the following comments on the provision of site access and temporary parking arrangement to assist Council in its determination of the development application:

- 1. Council must ensure that the RTA is suitably indemnified in relation to any proposed works (temporary cark park etc) within the road reserve of Anzac Parade.
- 2. The design of the proposed deceleration lanes along Anzac Parade to the construction site and the temporary carpark within the median island must be undertaken in accordance with current Australian Standards and RTA design requirements. Details of these requirements should be obtained from the RTA's Project Services Manager, Traffic Projects Section, Blacktown (Ph: 02 8814-2144).
- 3. An acceleration lane designed to current RTA and Australian Standards should also be provided for vehicles exiting the site to the south.
- 4. The proposed provision of a pedestrian crossing on Anzac Parade must meet the warrants for the installation of this type of facility. If warrants are met. Council should ensure all signage and linemarking associated with this crossing conform to the current standards.
- 5. Council should ensure all driveway widths, aisle widths, number of parking spaces and parking bay sizes are provided in accordance with the requirements of Australian Standard AS 2890.1 2004.
- 6. A clear sight distance is to be maintained at all times for the proposed driveway entry and exit points.
- 7. All vehicles must enter and exit the site in a forward direction.

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Roads and Traffic Authority ABN 64 480 155 255

- 8. Provision must be made for all loading/unloading activities in association with the proposed development to be carried out on site as the use of Anzac Parade for these purposes should not be permitted.
- 9. All works associated with this development shall be at no cost to the RTA.

Any inquiries in relation to this matter can be directed to the undersigned on telephone 8814 2553 or facsimile 8814 2107.

Yours sincerely,

Adriana Gavazzi Traffic and Development Assessment Manager Operations and Services Directorate

20 April 2006.

C.C. Graham Pindar, Traffix.



of New South Wales

Handwick City Council

- 2 MAY 2006

Records Received

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Contact: Gary Pringle Telephone: 02 9873 8564 gary.pringle@heritage.nsw.gov.au File: H00/00299/001 Our Ref: HRL39506 Your Ref: DA/177/2006

The General Manager Randwick City Council 30 Frances Street RANDWICK 2031

RCC CORPORATE INFORMATION Location File No. Action Officer _ . Document No. _ 2

Dear Sir

ENVIRONMENTAL ASSESSMENT REPORT – LONG BAY CORRECTIONAL CENTRE, 1250 ANZAC PARADE MALABAR Attention: Kerry Kyriacou

Thankyou for your letter of 27 March 2006 referring the subject Environmental Assessment Report to the Heritage Council under section 75H of the EP&A Act. It is understood that Council has been delegated the consultation and assessment functions for the application.

It is noted that the application is for a major project as described in Group 7 of Schedule 1 to State Environmental Planning Pollcy (Major Projects) 2005 relating to hospitals and correctional facilities. It is also noted that the land to which the application relates is listed on the State Heritage Register. It is understood that the proposed project will be an "approved project" for the purposes of Part 3A of the EP&A Act and section 75U of the Act therefore suspends the requirement for an approval under part 4 and an excavation permit under section 139 of the Heritage Act. Although approval under the Heritage Act is not required for the proposed development, the site has been identified as being of State heritage significance and the opportunity to comment on the Environmental Assessment is appreciated.

The Heritage Office has reviewed the Environmental Assessment, particularly Appendices I, O and P relating to heritage impact, the Conservation Management Plan (CMP) and visual impact statement. It is understood that the purpose of the project Is to demolish the existing prison hospital and construct a new forensic hospital and associated Justice Health Operations Building fronting Anzac Parade and a new prison hospital on vacant land in the south eastern part of the site. The CMP grades only those elements within the outer prison complex which existed in 1918 as being of high significance. The Prison Hospital to be demolished was completed in 1987 and is graded as being of little heritage significance. Nevertheless it is suggested that the building should be recorded in accordance with Heritage Council guidelines as a layer in the development history of the site.

The HIS also concludes that the proposed development complies with the conservation policies of the CMP relating to the continuation of the historic use of the site and retention of significant views from Anzac Parade to the imposing entrance blocks of the historical dual institutions. The Forensic Hospital will occupy the lowest part of the site and will be predominantly of single storey construction. The proposed 5.5 metre high perimeter wall will be an imposing structure fronting part of Anzac Parade but will not further obstruct views to the significant heritage structures. The proposal to retain substantial parts of the existing Hospital Prison perimeter wall will assist historical interpretation and is supported, as is the intention to choose colours and landscaping directed towards receding the visibility of the wall in the landscape.



The development site has been disturbed over a long period and the Archaeological Assessment identified no Aboriginal archaeological sites within the development footprint. The recommendations regarding archaeological monitoring are supported. It is also requested that a condition be imposed in the following terms:

If any archaeological relics are discovered during construction, work must cease on that part of the site and the Heritage Council is to be notified in accordance with section 146 of the Heritage Act. The Heritage Council may require the remains to be recorded by a suitably qualified archaeologist prior to the recommencement of works.

For further information or contact in relation to this matter please phone Gary Pringle at the Heritage Office on 98738564.

Yours sincerely

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REECE McDOUGALL Executive Director Heritage Office Department of Planning

26/+/05

Response to issues raised in submissions

Attachment **B**

Response to issues raised in submissions

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
NSW Heritage Office	
• The 1987 Prison Hospital to be demolished should be recorded in accordance with Heritage Council guidelines as a layer in the development history of the site.	Prior to demolition the NSW Department of Health will record the current Prison Hospital in accordance with Heritage Council guidelines.
• If any archaeological relics are discovered during construction, work must cease on that part of the site and the Heritage Council is to be notified in accordance with section 146 of the Heritage Act. The Heritage Council may require the remains to be recorded by a suitably qualified archaeologist prior to the recommencement of works.	Noted. This requirement will be met and is incorporated into the Statement of Commitments (SOC)
Roads and Traffic Authority	
• The design of the proposed deceleration lane along Anzac Parade to the construction site and the temporary car park within the median island must be undertaken in accordance with current Australian Standards and RTA design requirements.	Noted. The design of the deceleration lanes will be to RTA requirements. However, as this a temporary facility, some concession to the RTA's 'normal' requirements for a permanent facility may be warranted and would be subject to further discussion with the RTA if necessary.
 An acceleration lane designed to current RTA and Australian Standards should also be provided for vehicles exiting the site to the south. 	Multiplex is unable to meet this requirement for the following reasons: an acceleration lane with a merge taper is highly undesirable at this location and would represent an accident potential. The merging movement would occur on the inside of a bend (severely limiting visibility) and on approach to the intersection of Forrest Street, where conflicts would occur. The preferred method of exit should be via the normal driveway crossing as is proposed, whereby exiting traffic must give way to through traffic movement on Anzac Parade. This would be similar in practice to vehicles that currently exit from within the central median roadway in Anzac Parade (on the alignment of Forest Road) to turn right into Anzac Parade. These movements are of a short term nature, being for long-stay employee parking with exits between 4pm and 6pm which is at a time that does not coincide with northbound peak flows along Anzac Parade. The RTA is requested to review this requirement.

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
• The proposed provision of a pedestrian crossing on Anzac Parade must meet the warrants for the installation of this type of facility. and all associated signage and line marking must conform to the current standards.	The required warrant is for a pedestrian volume of 60 in two separate one hourly periods, and for a traffic volume of at least 600 vehicles/ hour, subject to the product of these two also being more than 90,000. On the basis that the southbound carriageway carries a flow estimated at less than 100 vehicles/hour (based on RTA daily traffic volume data), the warrant would not be met. Accordingly, Multiplex does not intend providing this facility.
• A clear sight distance is to be maintained at all times for proposed driveway entry and exit points.	The available sight lines at both access points onto Anzac Parade comply with AS 2890.2, which requires a minimum distance of 83 metres along the Anzac Parade frontage based on the posted speed limit of 60 vehicles/hour. In addition, 'No Stopping' restrictions adjacent to driveways will provide satisfactory visibility.
• All vehicles must enter and exit the site in a forward direction.	Forward entry and exit movements are proposed at all access points.
 Provision must be made for all loading/ unloading activities to be carried out on site as the use of Anzac Parade for these purposes should not be permitted. 	Loading/unloading activities will be undertaken on site and not on Anzac Parade.

Response to issues raised by Randwick City Council

Attachment C

Response to issues raised by Randwick City Council

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
Parking	
• Adequate provision should be made on-site to cater for the maximum parking demand, particularly increased demand for visitor car parking. No detailed consideration has been given to the ongoing traffic	Staff parking for the Prison Hospital will continue to occur within the Correctional Complex (CC). The quantum of parking spaces meets current demand of the existing Long Bay Hospital and will continue to do so as the current administrative and Forensic Hospital staff will no longer use this area.
and parking implications for the proposed development.	Staff for the new Justice Health Operations Building and the new Forensic Hospital will park in the car parking areas outside the main gates of the CC. A parking survey demonstrated that peak visitation occurs on weekends when the demand for staff parking is significantly reduced. Accordingly, the existing number and configuration of car parking spaces outside the main gates of the CC are sufficient to meet the future staff parking requirements of the Forensic Hospital and Justice Health Operations Building, based on current visitor numbers to the CC.
 Additional information should be provided regarding proposed truck routes and the holding area for vehicles waiting to be loaded/ unloaded particularly for the site preparation and demolition phase. 	The truck holding area will be in the set-back areas to the security gates. Based on predicted truck levels, additional storage is not required. Multiplex will ensure that entering vehicles are processed quickly to prevent any on-street queuing. In addition, internal site traffic management will maximise internal holding areas.
 No detailed drawings have been provided showing that the deceleration lane on the eastern side of Anzac Parade, south of Forrest Street, will accommodate 19 metre long articulated trucks. 	Information has been provided to Randwick Council on the swept path of a 19 metre articulated truck for the proposed deceleration lane. Detailed engineering drawings will be prepared for consideration by Council and the RTA. Full compliance with AS2890.2 is proposed at all access driveways, including secondary access via Anzac Parade and Calga Avenue.
Construction Traffic Management	
Randwick Council requested that the following matters be addressed regarding the management of construction traffic:	
• Sight lines at checkpoints	The available site lines at both access locations onto Anzac Parade complies with AS 2890.2, which requires a minimum distance of 83 metres along the Anzac Parade frontage based on the posted speed limit of 60 vehicles/hr.
	The available sight distance at the Calga Avenue driveway is 69 metres based on a 50km/h speed limit.

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ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
Predicted maximum queue lengths at check points	The average number of trucks will be about 44 vehicles/ day (22 in, 22 out) associated with both hospitals throughout the construction period. This equates to 2 to 3 truck arrivals per hour and these will make use of the two available accesses to Anzac Parade. Thus, there will generally be only a single truck arriving at any one time and this can be accommodated wholly within the site, clear of through traffic movement on either Anzac Parade or Calga Avenue.
	Peak flows associated with bulk excavation and filling operations for the Forensic Hospital will be of a short duration (a total of 168 vehicles/day (84 in, 84 out) which equates to an average of 9 truck arrivals per hour throughout the day over the period). It is proposed that these trucks will all enter via the proposed deceleration lane from Anzac Parade and then enter the site unhindered via the security gates, which are set back about 20 metres from Anzac Parade. The deceleration lane itself provides a further storage capacity of about 30 metres. The resultant storage capacity (clear of through traffic on Anzac Parade) is therefore 50 metres which will accommodate up to 4 large rigid trucks, even assuming that none of these trucks proceed immediately into the site. Nevertheless, it is assumed that a 20 minute average 'dwell' time will be required for each truck and on this basis, it is expected that a maximum of 3 trucks will attend the site at any time. These will generally be within the site and no queuing requirements are likely.
	Peak truck movements associated with the Calga Avenue access will be 28 trips per day (14 in, 14 out), which equates to a maximum of two arrivals per hour and no on-street queuing is proposed.
• Truck turning diagrams	Information has been provided to Randwick Council on the swept path of a 19 metre articulated truck for the proposed deceleration lane. Detailed engineering drawings will be prepared for consideration by Council and the RTA. Full compliance with AS2890.2 is proposed at all access driveways, including secondary access via Anzac Parade and Calga Avenue
 Justification as to why parking cannot be provided on site 	For prison security reasons access to the LBCC by construction workers has to be controlled. Hence Multiplex will bus workers in and out of the two secure construction sites. Significant traffic from construction workers would impact on security screening both on entry and exit and would significantly increase the potential for prison security to be compromised.
Justification as to why separate entry points are required for the two construction sites	The Forensic Hospital and the Prison Hospital are two distinct buildings on separate locations of the LBCC and will be constructed separately. Hence different access points are required for construction traffic.

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
• Traffic generation rates (trucks and standard vehicles) and impacts on the surrounding road network.	The external traffic impacts associated with the combined generation for the construction of both hospitals relates to the following movements:
	 average of 6 truck trips per hour (3 in, 3 out); and average of 75 car arrivals between 6am and 7am; and average of 75 car arrivals between 7am and 8am. PM Peak average of 6 truck trips per hour (3 in, 3 out); and average of 75 car departures between 4pm and 5pm; and
	- average of 75 car departures between 5pm and 6pm. These flows are moderate and when considered in a cumulative sense (associated with all available accesses) equate to slightly more than one additional vehicle movement per minute. The vast majority of these volumes will be onto Anzac Parade and can be readily accommodated. Short term peaks may occur in practice although these are not relevant for design purposes.
 Methods for discouraging on-street parking (particularly around the proposed Prison Hospital). 	Multiplex will provide a separate parking area for all construction workers. Access to the two construction sites will be controlled and there will be no parking around the access point for the Prison Hospital.
• Predicted parking generation rates and details of the proposed temporary parking area.	The temporary car park is to be located in the wide median of Anzac Parade at least 100 metres south of Forest Road. Detailed engineering drawings of the car park and associated deceleration lane will be prepared for consideration by Council and the RTA. The access arrangements facilitate safe entry and exit and allow recirculation as required by Randwick Council's traffic engineer.
	The maximum of 220 construction staff on-site will arrive using various modes of transport. It has been assumed that 95% of workers will drive and that average vehicle occupancy will be 1.4 as many tradesmen work for the same sub-contractor and have high-occupancy vehicles. This results in a need for 150 parking spaces. For the reasons stated above parking on site is not possible for security reasons. The provision of a 150 space car park within Anzac Parade is therefore considered to result in a very good outcome and will eliminate any potential for on-street parking. The area occupied by the car park will be landscaped.

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
Drainage Requirements	
 Stormwater management must be in accordance with the 'On Site Detention Statement' dated May 2006 prepared by Meinhardt; and in general accordance with the 'Long Bay Corrective Complex Master Plan Development – Stormwater Management Concept Plan'. Onsite detention (OSD) must ensure that the discharge from sub-catchment areas 1 and 2 does not exceed that which would occur during a 1 in 5 year storm of 1 hour duration for existing site conditions. All other stormwater run-off from for all storms up to the 1 in 100 year storm is to be retained on sub-catchments 1 and 2 for gradual 	Multiplex and NSW Health will comply with Randwick City Council's requirements in relation to stormwater management and these will be incorporated in the Statement of Commitments. The two sub-catchments will be managed separately in accordance with Randwick City Council's requirements.
 release to Council's underground drainage system. Sub-catchment area 1: OSD systems 2 and 3 together with all drainage infrastructure required to convey runoff from their design sub-catchment area (21.1085 Ha) to the detention areas, must be constructed prior to occupation of the Forensic Upperior. 	
 Hospital. Sub-catchment area 2: The OSD systems for sub-catchment 2, together with all drainage infrastructure required to convey runoff from sub-catchment area 2 (3.92 Ha) to the detention areas, must be constructed prior to occupation of the Prison Hospital. 	
• A reflux valve must be provided over any pipelines discharging from the site to ensure that stormwater from Council's drainage system does not surcharge back into the site stormwater system.	There will be no requirement for reflux valves as the level and fall of the land is such that backflow from Council's drain is not an issue.

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
 Engineering calculations and plans (with levels reduced to AHD) in relation to drainage of sub- catchment areas 1 and 2 must be prepared by a suitably qualified hydraulic engineer and submitted to Council prior to commencement of work. The drawings and details must demonstrate compliance with the principles of the approved master plan and 'On-site Detention Statement' and include the following information: detailed drainage design for sub- catchments 1 and 2 including a catchment plan clearly showing the areas draining to each of the on-site 	It is noted that the facilities in the LBCC have been constructed over a period of over 100 years, with existing drainage systems installed to unknown design criteria. Accordingly, Multiplex can only provide information in relation to the subject project. Multiplex will prepare plans and calculation for the sub-catchment 1 and 2 as required by Council, however for security reasons, submission of plans is subject to Department of Corrective Services clearance.
detention (OSD) systems. – details of the proposed connection/s into Council's stormwater system.	
 layout of the proposed drainage system including pipe sizes, type, grade, length, invert levels, etc. 	
 proposed finished surface levels and grades of OSD areas. 	
 details of any special features that will affect the drainage design e.g. the nature of the soil in the site and/ or the presence of rock etc. 	
• Stormwater pollution control devices must be provided prior to stormwater being discharged either from the site or into any infiltration areas. The pollution control devices must be capable of treating all runoff up to at least the 3 month ARI storm event.	Due to the risk of ground water infiltration, Multiplex will be unable to meet this requirement. However a series of gross pollution traps will be installed in lieu.
• Any Absorption Trenches/Pits must be designed in accordance with relevant Randwick City Council policies and if geotechnical conditions are suitable.	Absorption trenches are unlikely to be effective due to the presence of groundwater. And will not be used. Multiplex is proposing detention basins in lieu.
• Buildings, structures or works that may adversely affect the design function of OSD systems are not to be erected/carried out on or over the on-site stormwater detention systems. This includes excavation or replacement of soil or landscape material on OSD system, or any variation to the size or shape of the OSD system.	Multiplex will not be building over any OSD system or undertaking any works that could affect the function of any OSD system built as part of this project. NSW Health on behalf of the State, on the other hand, cannot make any commitment in this regard as it could affect future development of the LBCC.

JBA Urban Planning Consultants 06025 C-5

ISSUE	NSW HEALTH / MULTIPLEX RESPONSE
Waste Management Requirements	
• Prior to occupation of the new hospital buildings a copy of the operational waste management plan for the development must be submitted to Council. The plan must detail waste management practices, recycling, reuse and waste reduction measures.	Clinical Waste for the Forensic Hospital, largely sharps containers, will be provided by a specialist clinical waste management contractor as a continuation of current arrangements for clinical waste management in the current Long Bay Hospital. Waste Management for the Prison Hospital will be provided for as part of the overall Waste Management contract currently in existence for the Long Bay Correctional Complex.
• Prior to commencement of a construction and demolition waste management plan must be submitted to Council. The plan must detail the type and quantity of waste to be generated during demolition and construction together with details of how materials will be stored, re-used and recycled.	Prior to commencement of works Multiplex will prepare and submit a construction waste management plan. These matters are contained in the Statement of Commitments.
Landscape Requirements	
• Removal of existing trees from within the site, as well as the planting of any new street trees on Council land, must be in accordance with the requirements of Council's Tree Preservation Order and Street Tree Master plan.	Multiplex notes and will comply with this requirement.