

# **ATTACHMENT 1**



XXXX 2013

State Transit Authority  
Sydney Buses  
C/- Mary MacKen  
Level 1  
219 Cleveland St  
STRAWBERRY HILLS NSW 2012

Contact: Brendon Clendenning  
Phone: 9367 9054

File Ref: XXXX

**NOTICE OF DETERMINATION OF  
DEVELOPMENT APPLICATION NO: D/2012/295  
Issued under the Environmental Planning & Assessment Act 1979  
(Section 81(1)(a))**

**Applicant Name:** State Transit Authority

**Applicant Address:** Sydney Buses  
C/- Mary MacKen  
Level 1  
219 Cleveland St  
STRAWBERRY HILLS NSW 2012

**Land to be Developed:** Lot 2 DP 1159702, Lot 1 DP 1159702, PT LOT 33 DP 867166 (LESSEE BUS DEPOT LEASE 71589), PT LOT 33 DP 867166 (LESSEE BUS DEPOT LEASE 71589)  
230-240 Balmain Road & 27 Derbyshire Road, Leichhardt. Also know as Leichhardt Bus Depot

**Proposed Development:** Re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot.

**Determination:** Draft conditions provided, without prejudice, in the event the application is approved

**Date of Determination:**

**Consent to Operate From:**

**Consent to Lapse On:** XXXX 2017

The following conditions have been included in response to development considerations and to ensure a high standard of development having regard to the effect upon the environment.



## DEFERRED COMMENCEMENT

1. The following deferred commencement conditions must be complied with to the satisfaction of Council, prior to the issue of an operational Development Consent.

An engineering design of roadworks and associated stormwater drainage in Derbyshire Road, prepared by a qualified practicing Civil Engineer, must be approved by Council prior to the consent becoming operable. The design must be prepared to make provision for the following:

- a) Derbyshire Road, between William Street and the southern end must be reconstructed and widened in accordance with the following criteria:
  - A minimum 3.0 metre wide travel lane plus 2 parallel parking lanes.
  - Adequate footpath widths on the western side of Derbyshire Road.
  - Reconstruction/realignment of the south west corner of the William Street/Derbyshire Road intersection with reduced radius to create a narrowed carriageway in Derbyshire Road.
  - Provision of a local cycle route (bicycle logos and signposting) in Derbyshire Road extending from the College to William Street and beyond.
  - Relocation of existing power poles as required.
  - Reconstruction of concrete footpath for the full length of Derbyshire Road on the western side, adjacent to Pioneers Park.

Note that the design would need to be supported by swept path analysis for manoeuvring between Derbyshire Road and Moore Street West taking into account the extent of the proposed on street parking.

- b) The design must be in accordance with the requirements of Council's Specification for Roadworks.
- c) The design must be accompanied by detailed engineering drawings including relevant long and cross sections and location of utility services.
- d) Relocation/ installation of parking/ traffic signs as required.
- e) Linemarking as required.
- f) The design must be in accordance with the relevant requirements of Austroads and all Australian Standards.
- g) The applicant must consult with Council's Manager – Assets and Manager – Traffic in relation to the design of all works in the public road reserve.

The design will need to be submitted to and approved by Council's Local Traffic Committee prior to Council issuing an approval.

The following conditions of consent including any other conditions that may arise from resolution of matters listed in the above condition, will be included in an operational Development Consent. The operational Development Consent will be issued by Council after the applicant provides sufficient information to satisfy Council in relation to the conditions of the deferred commencement consent.

2. An additional 28 car parking spaces must be provided on site within the Bus Depot. Should the bus storage capacity of 281 be unable to be achieved as a result of these additional on-site car parking spaces, the bus storage capacity must be reduced. For every reduction of two (2) buses, one (1) less additional car space is to be provided. A plan identifying the location of the proposed parking arrangement is to be approved by Council prior to the consent becoming operable.

### CONDITIONS OF CONSENT

3. Development must be carried out in accordance with Development Application No. D/2012/295 and the following plans and supplementary documentation, except where amended by the conditions of this consent.

Plan Reference	Drawn By	Dated
Basement Parking Plan	Unknown	n.d.
Outdoor Parking Plan	Unknown	n.d.
Additional Car Parking and Hardstand Area	Unknown	3 May 2012

In the event of any inconsistency between the approved plans and the conditions, the conditions will prevail.

### PRIOR TO THE ACTIVATION OF THE DEVELOPMENT CONSENT

4. All conditions of Development Application No. D/2006/660 must be satisfied prior to the activation of D/2012/295.
5. Any public address system on the site must be installed and operated at all times in a manner that complies with the following;
  - a) *The Protection of the Environment Operations Act 1997* - in particular the "offensive noise" criterion and
  - b) The Office of Environment Heritage Industrial Noise Policy – in particular the "intrusive noise" criterion".
6. The bicycle storage area must accommodate a minimum of 10 bicycles and be designed in accordance with Australian Standard AS 2890.3:1993 *Parking Facilities – Bicycle parking facilities*. Details are to be provided prior to the activation of the Development Consent.

7. A total of two (2) car parking spaces for use by persons with a disability must be provided as part of the total car parking requirements. Consideration must be given to the means of access from the car parking spaces to adjacent buildings, to other areas within the building and to footpath and roads and must be clearly shown on the plans prior to the activation of the Development Consent.

All details must be prepared in accordance with Australian Standard AS/NZS 2890.1:2004 *Parking Facilities – Off street car parking* and the relevant provisions of Australian Standard 1428.1:2001 *Design for Access and Mobility – General requirements for access - New building work* and Australian Standard 1428.4:2002 *Design for Access and Mobility – Tactile indicators*.

8. A Building Code of Australia Assessment Report is to be provided confirming the location of the proposed vehicles and bike storage areas maintain compliance with the following Parts of the BCA.
- a) Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
  - b) The number of required exits remains compliant with D1.2.
  - c) Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
  - d) The proposed location and number of the Disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.

The report must address the above without reducing the number of on-site parking spaces.

9. The design of the vehicular access and off street parking facilities must address the relevant provisions of Australian Standards, including but not limited to *AS/NZS 2890.1-2004 Parking Facilities - Off-Street Car Parking*, *AS 2890.2-2002 Parking Facilities - Off-Street commercial vehicles facilities*, *AS/NZS 2890.6-2009 Off-street parking for people with disabilities* and *AS 2890.3-1993 Parking Facilities - Bicycle parking facilities*. The design must be certified by a suitably qualified Civil Engineer.
10. The applicant must bear the cost of construction of the following works:
- a) Roadworks in accordance with the plans approved by Council under **Deferred Commencement Condition No 1**.

Development Consent does NOT give approval to undertake any works on Council property. **An application must be made to Council for a Roadworks Permit under Section 138 of the Roads Act 1993 for approval to construct these works.**

The application must be accompanied by the above engineering design and survey plan. The Roadworks Permit will only be issued when the design has been approved by Council. A copy of the Roadworks Permit must be obtained from Council prior to the activation of the Development Consent.

The applicant must bear the cost of construction of all works, including the cost of any required adjustment or relocation of any public utility service. Where the finished levels of the new works will result in changes to the existing surface levels, the cost of all necessary adjustments or transitions beyond the above scope of works shall be borne by the owner/applicant.

These works must be constructed in accordance with the conditions of the Roadworks Permit and be completed prior to the activation of the Development Consent.

11. Prior to the activation of the Development consent, a security deposit to the value of \$79,600.00 must be paid to Council to cover the costs associated with the road, footpath and drainage works required by this consent.

Payment will be accepted in the form of cash, bank cheque, EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee.

Video inspection must be carried out of completed stormwater drainage works that are to revert to Council and a copy provided to Council to support the certification of the works.

A request for release of the security may be made to the Council after all construction work has been completed.

The amount nominated is only current for the financial year in which the consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.

12. Where any works are proposed in the public road reservation, the following applications must be made to Council, as applicable:
  - a) For installation or replacement of private stormwater drainage lines or utility services, including water supply, sewerage, gas, electricity, etc. an application must be made for a *Road Opening Permit*.
  - b) For construction/reconstruction of Council infrastructure, including vehicular crossings, footpath, kerb and gutter, stormwater drainage, an application must be made for a *Roadworks Permit*.

Note: Private stormwater drainage is the pipeline(s) that provide the direct connection between the development site and Council's stormwater drainage system, or street kerb and gutter.

13. The LA10\* noise level emitted from the premises must not exceed the background noise level in any octave band centre frequency (31.5Hz– 8k Hz inclusive) by more than 5dB between 7:00 am and 12:00 midnight at the boundary of any affected residence.

The LA10\* noise level emitted from the premises must not exceed the background noise level in any octave band centre frequency (31.5Hz – 8k Hz

inclusive) between 12:00 midnight and 7:00am at the boundary of any affected residence.

Notwithstanding compliance with the above, the noise from the premises must not be audible within any habitable room in any residence between the hours of 12:00 midnight and 7:00am.

\*For the purposes of this condition, the LA10 can be taken as the average maximum deflection of the noise emission from the licensed premises or restaurant.

Details of the acoustic measures to be employed to achieve compliance with this condition must be provided prior to the commencement of works.

14. Provision must be maintained for access to and within the building on the site for persons with a disability in accordance with the provisions of Australian Standard AS 1428.1:2001 *Design for access and mobility – General requirements for access – new building work* prior to the activation of the Development Consent.
15. Prior to the activation of the consent, the Principle Certifying Authority must ensure that the vehicle access and off street parking facilities have been constructed in accordance with the development consent and relevant Australian Standards and the car park has been completed, line marked and all signage relating to parking erected.

Certification by a qualified practicing Civil Engineer that the vehicular access and off street parking facilities have been constructed in accordance with the above must be provided prior to the activation of the Development Consent.

16. Prior to the activation of the Development Consent, the Principal Certifying Authority must ensure that all approved road, footpath and/or drainage works, including vehicle crossings, have been completed in the road reserve in accordance with Council Roadworks Permit.

Works-as-executed plans of the extent of roadworks, including any component of the stormwater drainage system that is to revert to Council, certified by a Registered Surveyor, together with certification by a qualified practicing Civil Engineer to verify that the works have been constructed in accordance with the approved design and relevant Australian Standards, must be provided to Council prior to the issue of an Occupation Certificate.

Video inspection must be carried out of completed stormwater drainage works that are to revert to Council and a copy provided to Council to support the certification of those works.

The works-as-executed plan(s) must show the as built details in comparison to those shown on the plans approved with the Roadworks Permit. All relevant levels and details indicated must be marked in red on a copy of the Council stamped plans.

Written notification from Council that the works approved under the Roadworks Permit have been completed to its satisfaction and in accordance with the conditions of the Permit, must be provided to the Principal Certifying Authority prior to the activation of the Development Consent.

17. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.
18. All works / regulatory signage associated with the proposed development are to be at no cost to the RMS"
19. The development must be inspected at the following stages by the Principal Certifying Authority during construction:
  - a) After Conditions 2-19 of this consent have been satisfied.

#### ONGOING CONDITIONS OF CONSENT

20. The maximum number of people employed on the premises must be in accordance with the following table:

Total Staff	557
Daytime staff	328
Bus drivers	266

21. All vehicles must enter and exit the site in a forward direction.
22. An annual Fire Safety Statement must be given to Council and the New South Wales Fire Brigade commencing within twelve (12) months after the date on which the initial Interim / Final Fire Safety Certificate is issued.
23. All outdoor lighting must not detrimentally impact upon the amenity of other premises and adjacent dwellings and must comply with, where relevant, Australian Standard AS 1158.3:2005 *Lighting for roads and public spaces – Pedestrian Area (Category P) lighting – Performance* and design requirements and Australian Standard AS 4282:1997 *Control of the obtrusive effects of outdoor lighting*.
24. Driveways and parking spaces must not be used for manufacture, storage or display of goods, materials and equipment. The spaces must be available at all times, for all vehicles associated with the development.
25. The parking spaces must be easily accessible and be clearly designated marked and signed.
26. At all times, the loading, car parking spaces, driveways and footpaths must be kept clear of goods and must not be used for storage purposes.

27. All owners, tenants and occupiers of this building are not eligible to participate in any existing or proposed Council Resident Parking Schemes. All occupants and/or employees of this building will be ineligible to obtain Council Resident Parking Scheme parking permits. The owner of the dwelling must advise in writing all intending owners, tenants and occupiers of the dwelling, at the time of entering into a purchase / lease / occupancy agreement, of this prohibition.
28. Signs reading "all owners, tenants and occupiers of this building are advised that they are not eligible to obtain Resident Parking Scheme parking permits from Council", must be located in prominent places such as at display apartments and on directory boards or notice boards, where they can easily be observed and read by people entering the building. The signs must be erected prior to the activation of the Development Consent and must be maintained in good order at all times.

## **PRESCRIBED CONDITIONS**

### **A. BASIX Commitments**

Under clause 97A(3) of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. The Certifying Authority must ensure that the building plans and specifications submitted by the Applicant, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition. In this condition:

- a) Relevant BASIX Certificate means:
  - (i) a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
  - (ii) if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

### **B. Building Code of Australia**

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

### **C. Home Building Act**

- 1) Building work that involves residential building work (within the meaning and exemptions provided in the Home Building Act 1989) must not be carried out unless the Principal Certifying Authority for the development to which the work relates has given Leichhardt Council written notice of the following:

- a) in the case of work for which a principal contractor is required to be appointed:
    - i) the name and licence number of the principal contractor, and
    - ii) the name of the insurer by which the work is insured under Part 6 of that Act, or
  - b) in the case of work to be done by an owner-builder:
    - i) the name of the owner-builder, and
    - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
- 2) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

#### **D. Site Sign**

- 1) A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
- a) stating that unauthorised entry to the work site is prohibited;
  - b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
  - c) showing the name, address and telephone number of the Principal Certifying Authority for the work.
- 2) Any such sign must be maintained while the building work or demolition work is being carried out, but must be removed when the work has been completed.

#### **E. Condition relating to shoring and adequacy of adjoining property**

- (1) For the purposes of section 80A (11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense:
- (a) protect and support the adjoining premises from possible damage from the excavation, and



- (b) where necessary, underpin the adjoining premises to prevent any such damage.
- (2) The condition referred to in subclause (1) does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

## NOTES

1. This Determination Notice operates or becomes effective from the endorsed date of consent.
2. Section 82A of the *Environmental Planning and Assessment Act 1979* provides for an applicant to request Council to review its determination. This does not apply to applications made on behalf of the Crown, designated development, integrated development or a complying development certificate. The request for review must be made within six (6) months of the date of determination or prior to an appeal being heard by the Land and Environment Court. A decision on a review may not be further reviewed under Section 82A.
3. If you are unsatisfied with this determination, Section 97 of the *Environmental Planning and Assessment Act 1979* gives you the right of appeal to the Land and Environment Court within six (6) months of the determination date.
4. Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.
5. Works or activities other than those approved by this Development Consent will require the submission of a new development application or an application to modify the consent under Section 96 of the *Environmental Planning and Assessment Act 1979*.
6. This decision does not ensure compliance with the *Disability Discrimination Act 1992*. Applicants should investigate their potential for liability under that Act.
7. This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):
  - a) Application for any activity under that Act, including any erection of a hoarding.
  - b) Development Application for demolition if demolition is not approved by this consent.
  - c) An application under the Roads Act 1993 for any footpath / public road occupation. A lease fee is payable for all occupations.

8. Prior to the issue of the Construction Certificate, the applicant must make contact with all relevant utility providers (such as Sydney Water, Energy Australia etc) whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained.

**Have you made a political donation?**

If you (or an associate) have made a political donation or given a gift to a Councillor, political party or candidate at the local government elections during the last two (2) years you may need to include with your application a full disclosure of this matter. For information go to Council's website at [www.leichhardt.nsw.gov.au/Political-Donations.html](http://www.leichhardt.nsw.gov.au/Political-Donations.html). If you have made a reportable donation, failure to provide a completed declaration with your application is an offence under the Environmental Planning and Assessment Act, 1979 for which you may be prosecuted.

<DELEGATED OFFICER>

<DELEGATED OFFICER TITLE>

# **ATTACHMENT 2**



# NSW Transport State Transit

## Leichhardt Bus Depot



### Development Application

Additional Bus Accommodation  
Leichhardt Bus Depot  
230-240 Balmain Road  
Leichhardt

### Peter Andrews + Associates Pty Ltd

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June 2012

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Job No: 11037  
Date: 7 June 2012  
Version: D  
Purpose: Final for DA

## 1.0 INTRODUCTION

The new facilities at the Leichhardt Bus Depot have been in operation since 2009. Due to various reasons including the introduction of the Metrobus, additional residents and workers and more people catching public transport, the demand for bus services has increased. The Leichhardt Bus Depot is able to accommodate additional buses within the existing hardstand area that is already approved for the accommodation of buses.

This development application is therefore seeking approval for:

- the reconfiguration of the bus parking and bus circulation areas to cater for a total of 281 buses being an additional 81 buses from the current development approval and to provide an additional 14 carparking spaces; and
- reconfiguration of the basement car park to accommodate an additional 7 car parking spaces and additional motorbike spaces for staff.

Therefore, bringing the total additional number of car parking spaces subject to this development application to 21 spaces.

Leichhardt Bus Depot is well located and has the capability of expansion with minimal impact to provide much needed public transportation for Sydney.

## 2.0 SITE DESCRIPTION AND LOCALITY

Leichhardt Bus Depot ("the site") is located on Balmain Road at the corner with the City West Link (refer Figure 1, and is owned by the NSW State Transit Authority (STA). It is known as Lots 1 and 2 DP1159702 and Lot 33 DP867166 (refer Figure 2).

The Site is zoned part 5(A) Public Transport Depot and part 5(B) Railways under Interim Development Order 27 and part Public Purpose under the Leichhardt Local Environmental Plan 2000 ("LLEP") (refer Figure 3). The land is currently used as a bus depot.

The administration building has its main vehicular and pedestrian entry for staff and visitors from Balmain Road. The Bus Depot can be accessed from the City West Link or an accessway off Balmain Road and William Street. All access to the Bus Depot is for authorised vehicles only through the use of a boom gate.

## 3.0 BACKGROUND

The existing bus depot incorporates bus accommodation and administration facilities. The facilities were approved under Development Consent DA06/0660 dated 19 July 2007. That application included the approval for accommodation of 200 buses and a basement carpark area for 125 vehicles.

Prior to this, the site had also been used as a bus depot.

## **4.0 PROJECT DESCRIPTION**

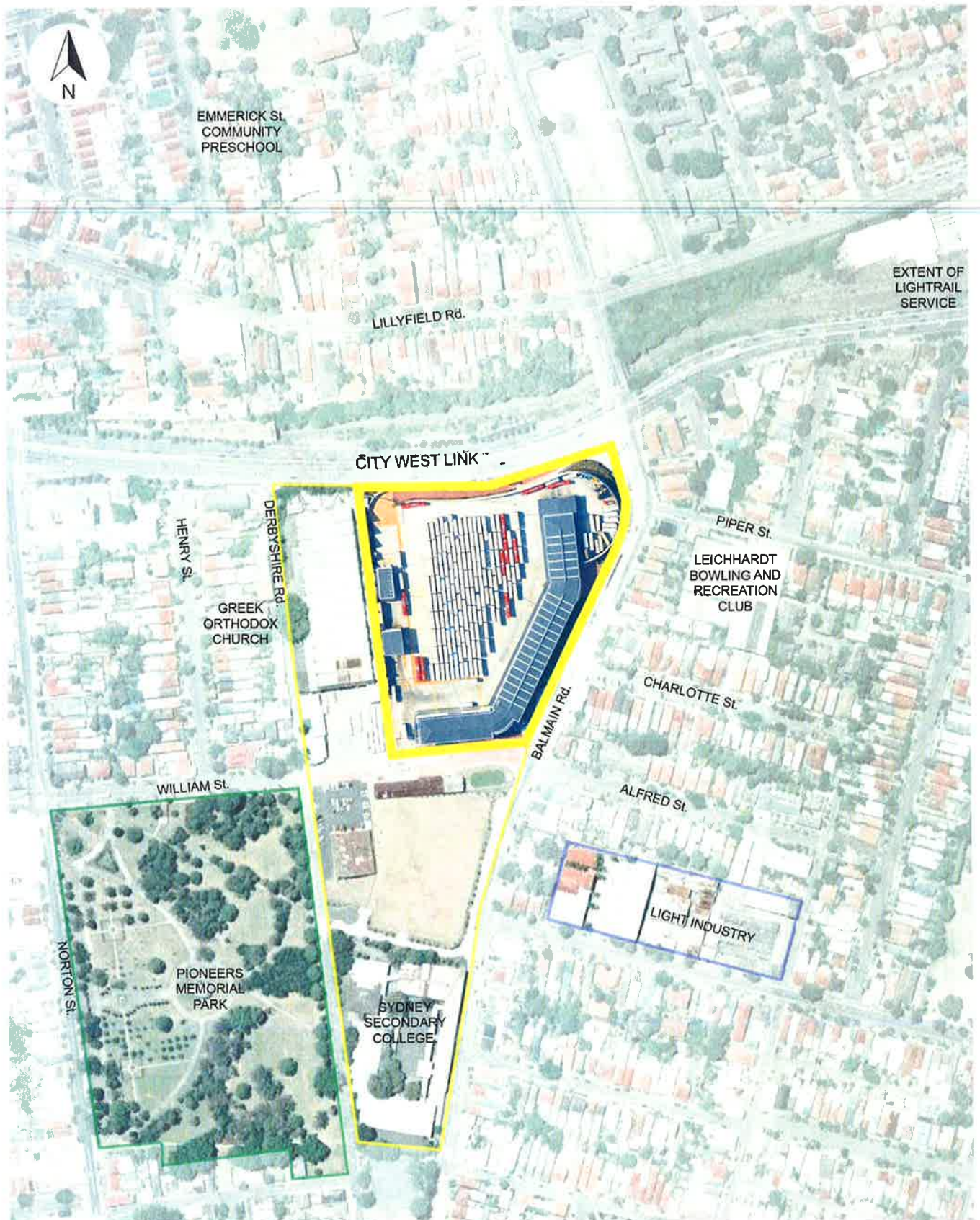
### **4.1 Proposed Works**

The proposal is for the reconfiguration of the existing bus depot parking areas to incorporate additional accommodation for buses within the existing hardstand area and additional carparking spaces, bicycle and motorbike parking. The bus depot will continue to operate in accordance with all other requirements under its current development approval.

The proposed reconfigured parking areas for the bus depot are shown on plans prepared by the State Transit Authority and are attached in Appendix 1 and incorporate:

- Bus Parking Layout incorporating a total of 281 buses. The bus parking is managed to ensure that buses within the aisle areas are the buses that are first out and last in.
- Basement car park layout within the administration building incorporating:
  - 130 carparking spaces;
  - 2 disabled parking spaces;
  - 38 motorbike parking spaces; and
  - bicycle parking.
- Car parking layout on existing hardstand area incorporating 14 carparking spaces. These carparking spaces will be utilised once the buses within this area are in service, which will generally be the first bus services. These carparking spaces will be allocated for STA authorised vehicles only.

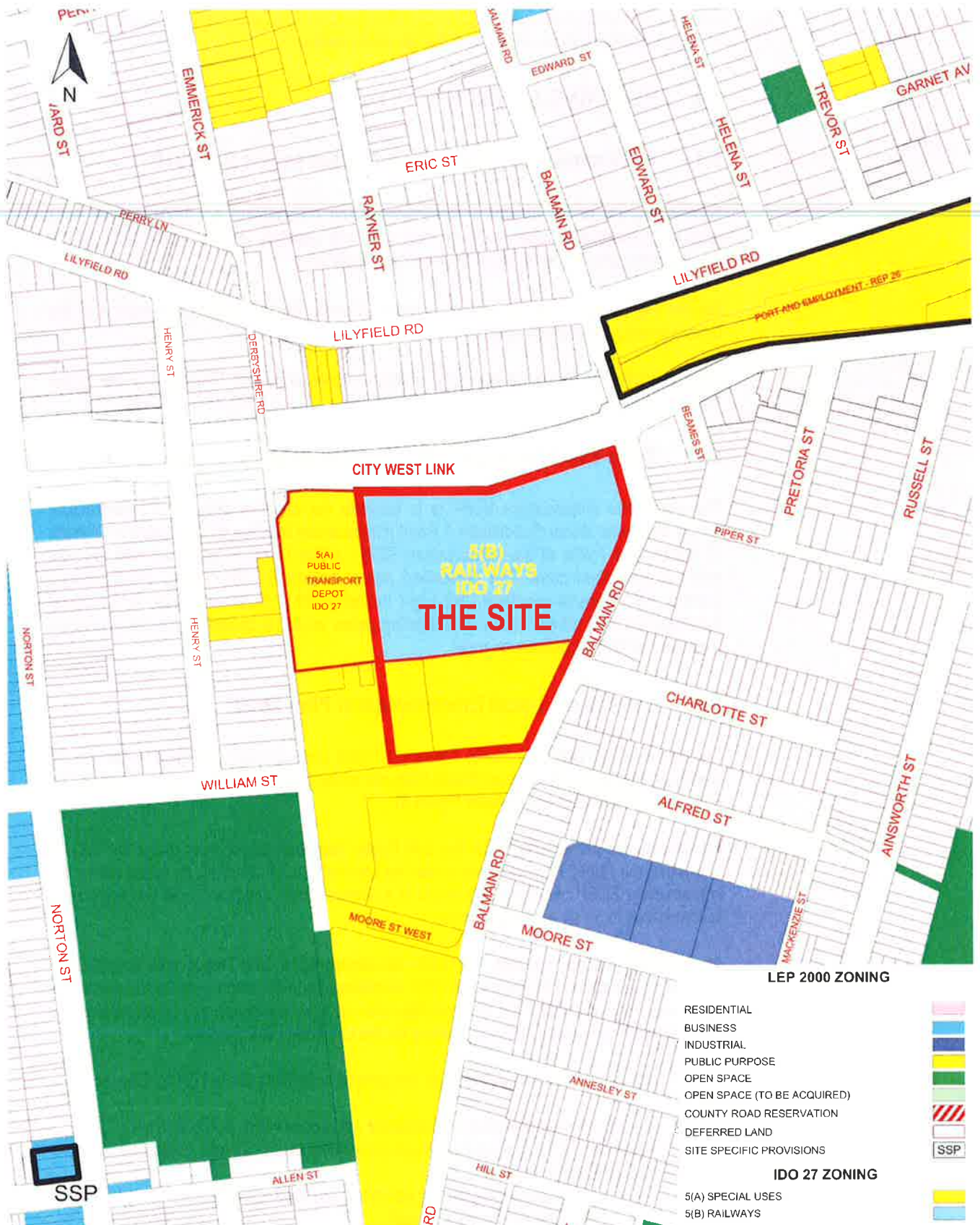




Source: Extract from Google Earth Pro 2012







Source: Extract from Leichhardt Local Environment Plan 2000 - Leichhardt Municipal Council

## 5.0 PLANNING CONSIDERATIONS

### 5.1 Environmental Planning and Assessment Act 1979

Section 79C (1) of the Environmental Planning and Assessment Act 1979 (“EP&A Act”) provides matters a consent authority must take into account, as are of relevance to the development, when determining a development application.

Further discussion on relevant points is provided under Section 6.0, Likely Impacts of the Development, of this Statement.

This application is also a Crown development in accordance with Division 4 of the EP&A Act.

### 5.2 State Environmental Planning Policy (Infrastructure) 2007

The aim of the Infrastructure SEPP is to facilitate the effective delivery of infrastructure across the State. Under Subdivision 1 Road infrastructure facilities Infrastructure in Division 17 Roads and Traffic of the Infrastructure SEPP, a Bus Depot is permitted with consent within a prescribed zone. The prescribed zones include B4 Mixed Use, B6 Enterprise Corridor, IN1 General Industrial, IN2 Light Industrial, IN3 Heavy Industrial, SP1 Special Activities and SP2 Infrastructure. The existing zones could be considered to be equivalent zones to the SP2 Infrastructure zone.

### 5.3 Leichhardt Local Environmental Plan 2000

The site is zoned part 5(A) Public Transport Depot and part 5(B) Railways under Interim Development Order 27 and part Public Purpose under the Leichhardt Local Environmental Plan 2000 (“Leichhardt LEP”) (refer Figure 3).

Bus Depots are permissible within the 5(A) Public Transport Depot zone under the IDO 27 and within the Public Purpose zone under the Leichhardt LEP. Further, as noted above the Infrastructure SEPP permits a Bus Depot in a Special Zone, which the 5(B) Railways zone is considered to be an equivalent zone.

As previously stated, the site has been developed as a Bus Depot with approval for basement parking for 125 vehicles and the hardstand and circulation area for the parking of 200 buses. The proposal is for the reconfiguration of the existing approved parking areas to allow for additional buses and staff parking for the Leichhardt Bus Depot.

Clause 13 of the Leichhardt LEP outlines the general objectives of the LEP as follows:

- (3) The general objective for **transport and access** is to encourage the integration of the residential and non-residential land uses with public and private transport and improve access to:*
  - (a) reduce the need for car travel and subsequent pressure on the existing road networks, and*
  - (b) maximise utilisation of existing and future public transport facilities,*

The intensification of the Leichhardt Depot assists in meeting the transport and access objectives of the Leichhardt LEP as it is maximising an existing Bus Depot facility as well as providing additional buses to service the existing and future demands of the area.

Clause 16 of the Leichhardt LEP outlines general provisions for the development of land including development in the vicinity of a heritage item as follows:

*(7) Consent must not be granted for development on land in the vicinity of a heritage item, unless the consent authority has made an assessment of the effect the carrying out of that development will have on the heritage significance of the heritage item and its setting as well as on any significant views to and from the heritage item.*

Schedule 3 of the Leichhardt LEP identifies the following heritage item:

<b>Balmain Road, Leichhardt</b>	SRA site	Built	SRA Stores Branch Building, former Tram Depot Office, Tramshed, Cable Store	State
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The proposal will not have any impact on the heritage listed items as the Bus Depot is existing and the proposed works are internal to the site.

## 5.4 Leichhardt Development Control Plan

The Leichhardt Development Control Plan 2000 outlines the parking standards and controls for development. Parking rates are not provided for Bus Depots, however the Development Control Plan states that development not tabled should have regard to the criteria including:

- *The person capacity of the premises;*
- *The proportion of visitors or patrons likely to arrive by car;*
- *The availability and level of service of public transport;*
- *The number of full-time and part-time employees;*
- *The hours of use;*
- *The location of the premises particularly in relation to schools, local services, employment, retail and recreational facilities and where these services will reduce the need for vehicle use;*
- *The number of occasions during the year when the facility is fully used;*
- *The availability and affordability of public parking;*
- *The availability of additional parking areas to cover peak demands.*

The proposal is to allow for additional bus parking to cater for additional public transport demand. These extra services will require additional bus drivers and therefore additional staff parking will be required. As outlined above, the existing basement carpark is proposed to be reconfigured to provide additional parking spaces and additional car parking spaces are proposed on the hardstand area external to the building to cater for the staff parking demand.

An Assessment of Traffic and Parking Implications has been carried out by Transport and Traffic Planning Associates and is attached in Appendix 2. The report outlines that there are various bus services to and from the Depot and the light rail stop on the Ultimo-Pymont line is in close proximity. This provides a range of public transport to and from the Depot for staff. Further, STA staff have access to free public transport.

The existing consent for the Bus Depot requires the provision of 125 carparking spaces. The proposal will increase the number of carparking spaces by 21 and also includes additional motorbike and bicycle parking.



The Traffic Assessment concludes that the existing provision has proved to be adequate for the operational needs of the depot. The existing maximum D/T shift staff (252) ratio to parking spaces (111) is some 2.27 persons per space while the future ratio will be maximum D/T (328) to spaces (170) being 1.93 persons per space. It is apparent that the provision of parking with the proposed fleet increase will be “in line with” (in fact slightly better) than the existing provision.

## 6.0 LIKELY IMPACTS OF DEVELOPMENT

### 6.1 Traffic and Parking

An Assessment of Traffic and Parking Implications has been carried out by Transport and Traffic Planning Associates and is attached in Appendix 2. It concludes that the Leichhardt Bus Depot is well placed to provide additional services as:

- there will not be any adverse or unsatisfactory traffic implications; and
- the existing vehicle access and circulation provisions will be quite suitable and adequate.

The results from the traffic modelling indicate that there will not be any perceptible change to the existing satisfactory operation of the intersections as a result of the proposal.

Also as stated above, the parking ratio will be improved with the reconfiguration of the basement carpark to provide additional carspaces and the additional carspaces within the hardstand area.

### 6.2 Heritage

As outlined above, an existing approved Bus Depot is located on the site and the proposal incorporates reconfiguration of the parking areas only. There will not be any impact on adjoining heritage listed buildings.

## 7.0 JUSTIFICATION FOR THE PROPOSAL

State Transit Authority advised that since the opening of the new Leichhardt Depot in August 2009, there has been significant growth experienced at the depot as a result of several influencing factors. First and foremost has been the overall growth in patronage where there has been a 7.24% positive change in the 12 month rolling average. The growth has been realised in the following areas:

Route	Leichhardt LGA growth areas serviced	% Change (Nov 09 - Oct 10 to Nov 10 – Oct 11)
433	Balmain, Lilyfield, Annandale, Forest Lodge	7.7%
440	Rozelle, Leichhardt, Annandale	2.3%
441	Birchgrove, Balmain	6.1%
444	Balmain, Rozelle, Leichhardt	2.2%*
L38	Leichhardt, Annandale	2.4%
M10	Leichhardt, Annandale	6.2%

\* 444 service introduced March 2010, comparisons are May 10 – Jan 11 to Feb 11 – Oct 11

Secondly during the March 2010 Integrated Network Plan, there was a rationalisation of the Sothorn Region's bus fleet as a result of growth in the contract region and the depot capacity issues at Burwood Depot. As such, buses were relocated from Burwood to Leichhardt depot in order to maintain the levels of services to meet the growing demand. These services include:

Route	Leichhardt LGA areas serviced
439	Leichhardt, Annandale
461	Leichhardt, Annandale
480	Leichhardt, Annandale
483	Leichhardt, Annandale
502	Rozelle, Balmain
L39	Leichhardt, Annandale

Another significant factor resulting in growth at Leichhardt depot was the introduction of the M41 Hurstville to Macquarie Park service introduced as a result of the NSW Governments Metrobus strategy. This service operates out of the Southern Region's Burwood depot and as a result, additional buses were once again rationalised once again to address the Burwood accommodation restraints and to meet the growing demand for public transport.

As a result of these public transport improvements, overall patronage on services operated from Leichhardt Depot has grown 10.5% (Nov 09 - Oct 10 to Nov 10 – Oct 11) and State Transit's Southern Region continue to provide a safe, reliable and convenient service and working towards meeting the targets of the NSW Governments State Plan.

Since the opening of the depot in 2009, articulated buses have been introduced to efficiently meet the public transport demands. The use of this vehicle type has improved the service to the region and has also contributed to the growth in patronage and success of the services.

Past, current and future residential developments in and around the Leichhardt Local Government Area have had (and will continue to have) an effect on the demand of services operating from the Leichhardt Depot. Past development in areas such as Balmain, Pyrmont and Glebe have significantly influenced service levels over the years, while future developments at Harold Park, Terry Street Rozelle, the Balmain Leagues Club site, Central Park (Broadway), White Bay and Barangaroo will rely on key government infrastructure such as Leichhardt Depot to deliver the services required to meet the customers demands.

## 8.0 SUITABILITY OF THE SITE

The site is currently zoned partly for a Public Transport Depot and partly for Railways. It is noted that the whole of the site is proposed to be zoned SP2 Transport Depot in the Leichhardt new comprehensive LEP. Although it is noted that this is still an informal document as Council is currently seeking a section 65 certificate from the Department of Planning & Infrastructure to publicly exhibit its new comprehensive LEP.

Further, the site has been approved for the Leichhardt Bus Depot including parking and maintenance of buses and administration and has been in operation since 2009. The site is ideally located on the major road network with suitable access to provide much needed public transport.

Therefore a bus depot has already been determined as being suitable on this site and the incorporation of additional buses on the subject site assists in providing public transport to meet existing and future needs. This also meets Council's objective in its LEP in relation to transport and access by ensuring to maximise utilisation of existing public transport facilities.

## **9.0 CONCLUSION**

The Leichhardt Bus Depot is an essential part of the Public Transport Network for the Sydney Metropolitan Area. It has the capacity for the expansion for additional buses with minimal impacts. The incorporation of additional buses on an already established bus depot to assist in meeting existing and future public transport demand is sensible and does not rely on the need to establish a separate transport depot.

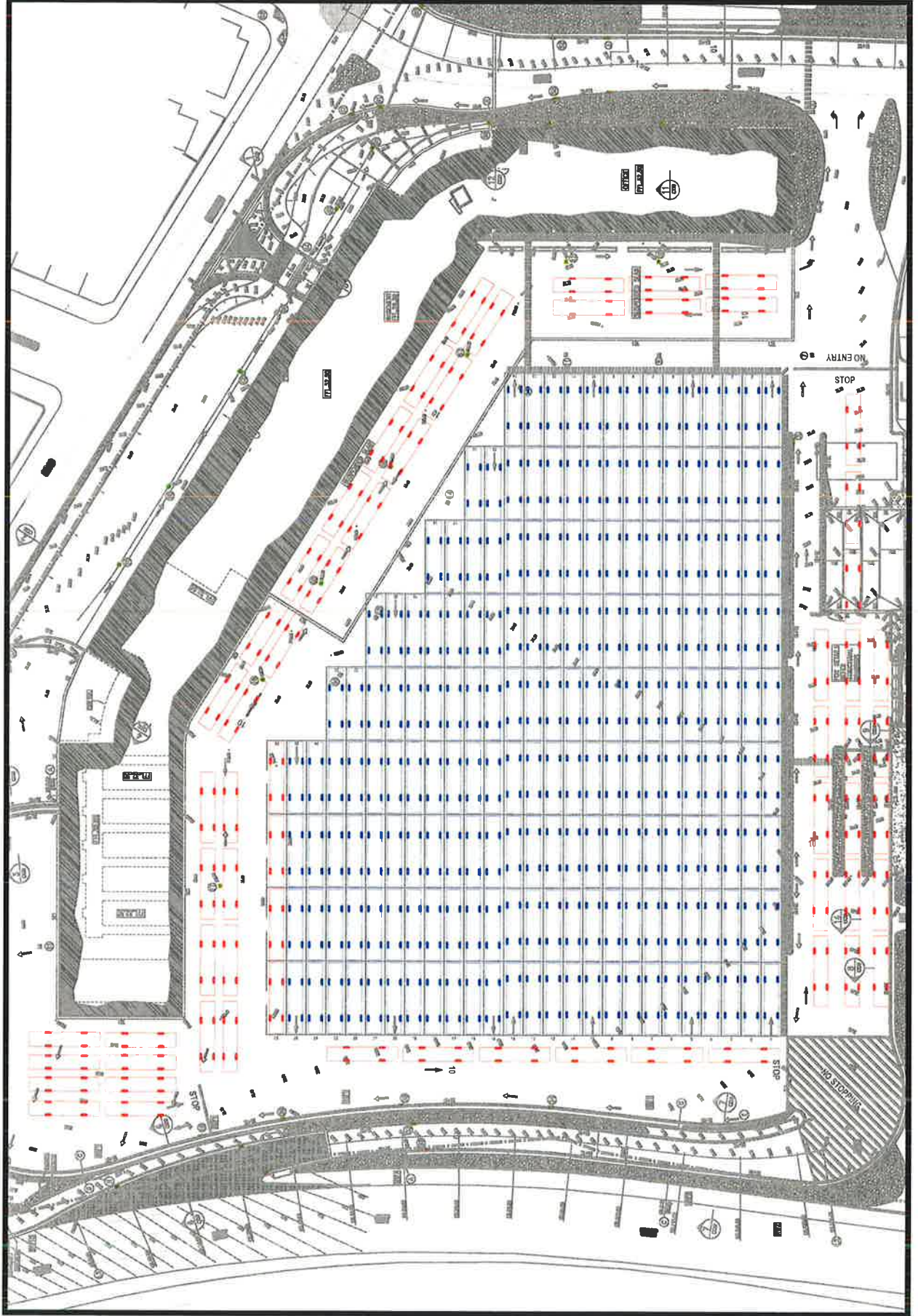


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**APPENDIX 1**  
**PARKING LAYOUT PLANS**  
**STA**  
**LEICHHARDT BUS DEPOT**

**MARKED BAYS = 192**  
**aisle AREAS = 64**  
**MAINTENANCE = 25**  
**TOTAL = 281**

STA  
Leichhardt Bus Depot  
Development Application  
Bus parking Layout  
03 May 2012



STA  
Leichhardt Bus Depot  
Development Application  
Basement Carpark Layout  
03 May 2012

8x m/bike

1x car

5x m/bike

13x m/bike

2x car

one way

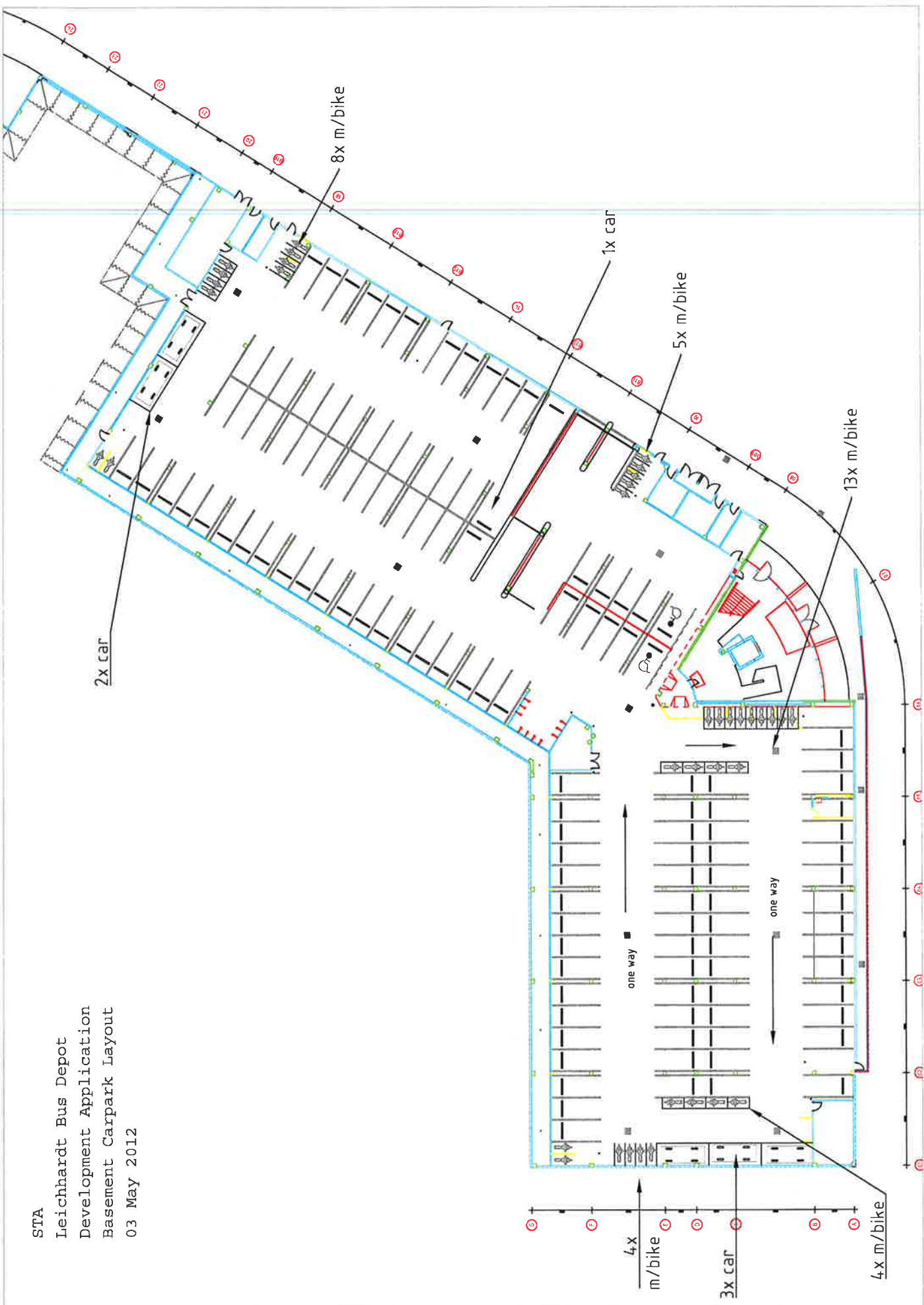
one way

4x m/bike

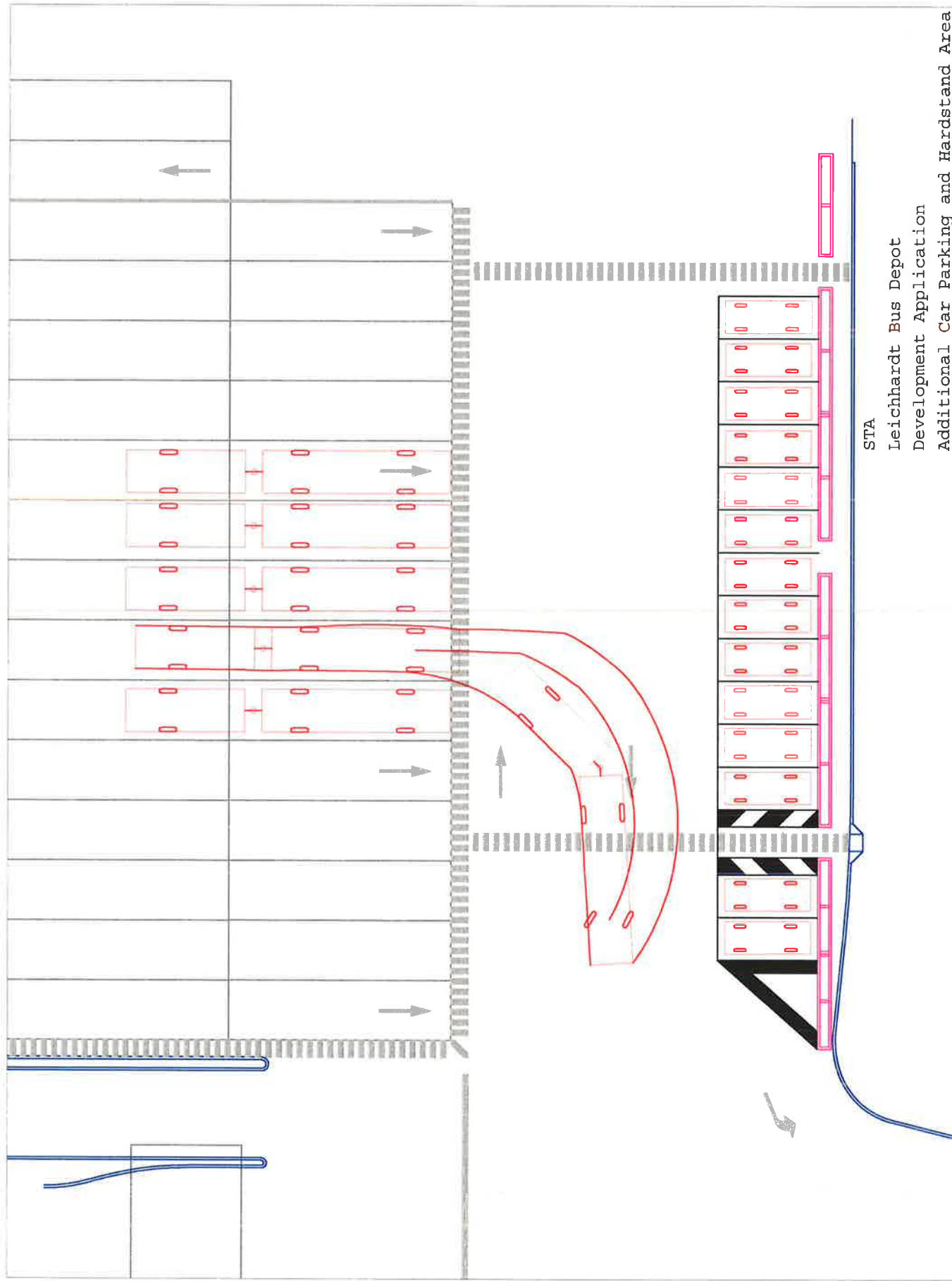
3x car

4x m/bike

m/bike







STA

Leichhardt Bus Depot  
Development Application  
Additional Car Parking and Hardstand Area

03 May 2012

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## **APPENDIX 2**

### **ASSESSMENT OF TRAFFIC AND PARKING IMPLICATIONS**

**Transport and Traffic**

**Planning Associates**

**LEICHHARDT BUS DEPOT**

**"LEICHHARDT BUS DEPOT"  
PROPOSED BUS FLEET INCREASE**

***Assessment of Traffic and  
Parking Implications***

May 2012  
(Revision B)

Reference 12013

**TRANSPORT AND TRAFFIC PLANNING ASSOCIATES**  
***Transportation, Traffic and Design Consultants***  
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**282 Victoria Avenue**  
**CHATSWOOD 2067**  
**Telephone (02) 9411 5660**  
**Facsimile (02) 9904 6622**  
**Email: [ttpa@ttpa.com.au](mailto:ttpa@ttpa.com.au)**

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APPENDIX A	INTERSECTION PLANS
APPENDIX B	TRAFFIC SURVEY RESULTS
APPENDIX C	SCATES TRAFFIC MODEL RESULTS

## LIST OF ILLUSTRATIONS

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FIGURE 2	SITE
FIGURE 3	ROAD NETWORK
FIGURE 4	TRAFFIC CONTROLS
FIGURE 5	PEAK TRAFFIC FLOWS
FIGURE 6	APPROVED PEAK BUS MOVEMENTS
FIGURE 7	EXISTING PEAK BUS MOVEMENTS
FIGURE 8	PROJECTED PEAK BUS MOVEMENTS

## **1. INTRODUCTION**

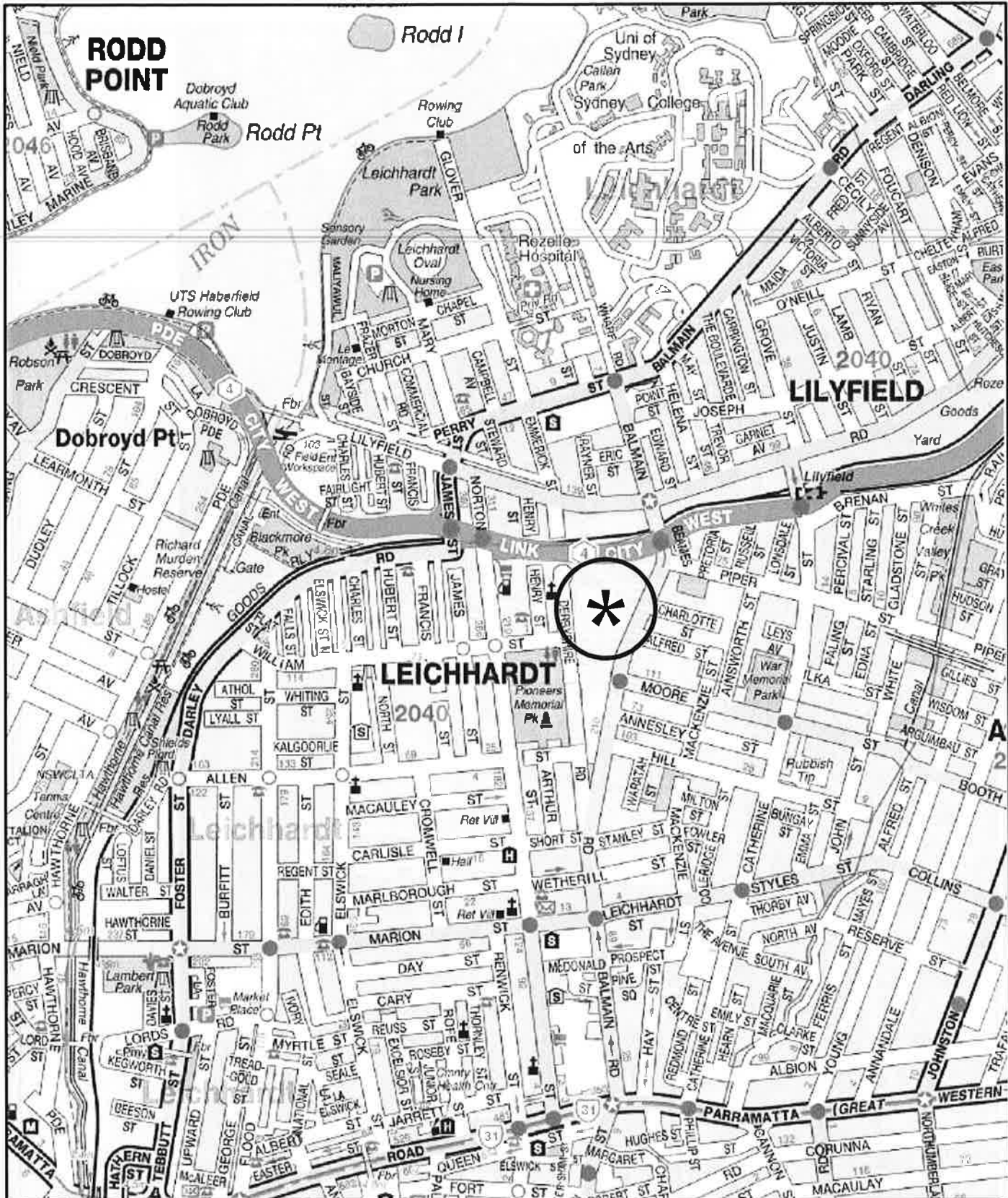
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This report has been prepared to accompany a Development Application to Leichhardt Council for a proposed increase in the bus fleet accommodated at the existing Leichhardt Bus Depot on the corner of City West Link Road and Balmain Road at Leichhardt (Figure 1).

The bus depot was the subject of major upgrading works in 2009 to accommodate some 200 buses with new access provisions in conjunction with the closure of Moore Street between Balmain Road and Derby Shire Road. The patronage demands of the “Inner West” area have increased significantly as a result of urban consolidation and made change and State Transit needs to upgrade the service capacities in order to avoid passenger delays and congestion.

The proposal is to increase the number of buses accommodated at the depot to 281 with a composite increase in drivers. The purpose of this report is to present an assessment of the potential traffic and parking implications of the proposal.





LEGEND



LOCATION

FIG 1





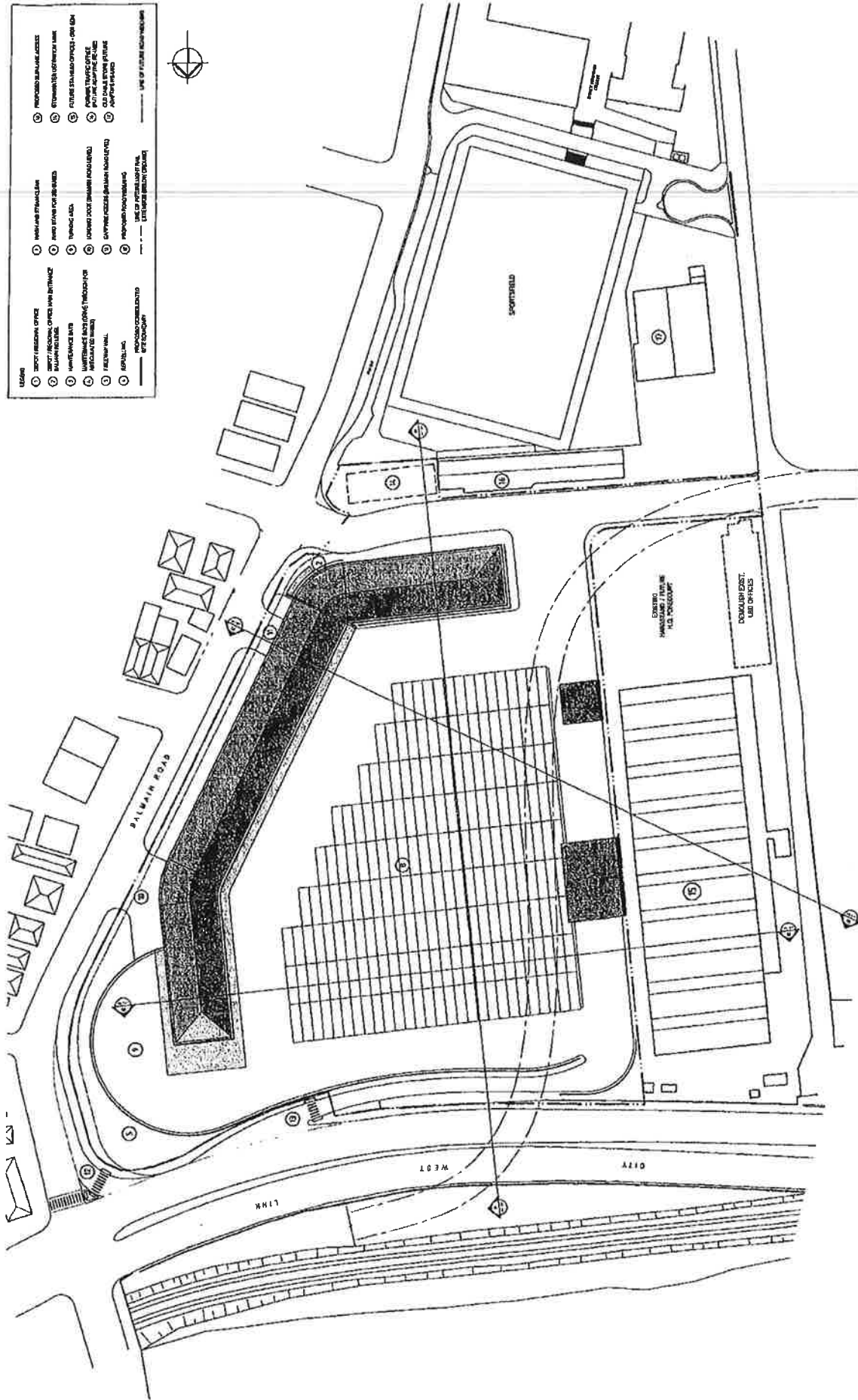
LEGEND



SITE

FIG 2





## 2. EXISTING APPROVED CIRCUMSTANCE

---

The site (Figure 2) is bounded by City West Link Road, Balmain Road, the former Tramsheds site to the west and the sports field to the south.

The recently upgraded Bus Depot incorporates:

- \* parking for some 200 buses (ie 190 operational)
- \* service and refuelling facilities
- \* bus wash facility
- \* administration building
- \* parking for 125 cars
- \* total staff of some 465 persons with a maximum D/T shift of 252 including 190 drivers
- \* vehicle access provisions comprising
  - traffic signal controlled intersection ingress/egress on Balmain Road at Allied Street
  - ingress only of City West Link Road (CWLR)
  - ingress/egress on William Street at Derby Shire Road
  - service access on Balmain

Details of the approved depot are provided on the plan prepared by Woodhead which is reproduced overleaf. The approved road infrastructure works included the provision of a left turn lane in Balmain Road for the turn into CWLR however that element of the required works has not been completed at this time

### 3. PROPOSED FLEET EXPANSION

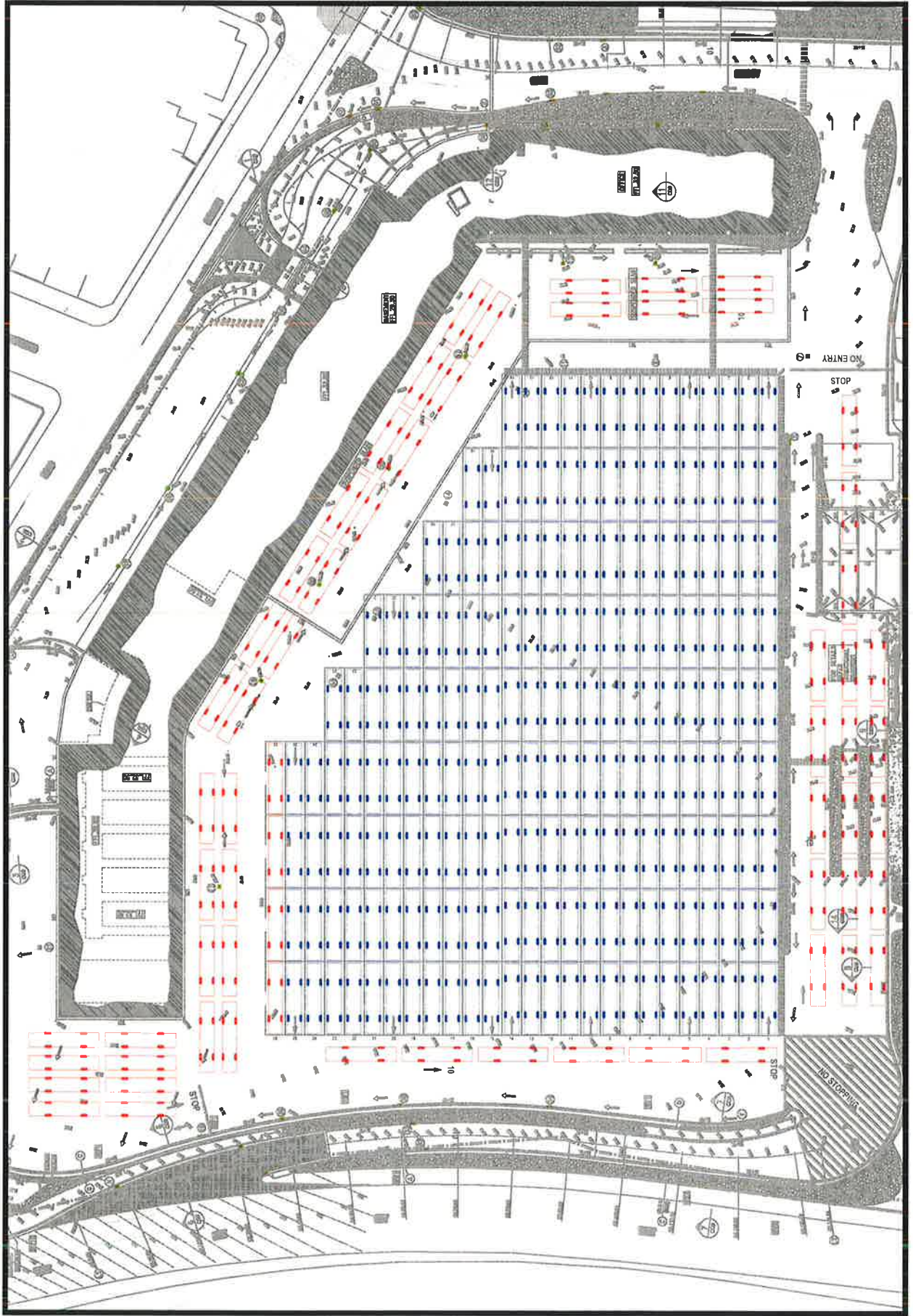
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It is proposed to increase the number of buses accommodated in the depot to 281 including 266 operational. The total staff will increase to 557 with a maximum daytime staff shift of 328 including 266 drivers. There will be some modifications to the existing parking provisions to increase the number of car, motorbike and bicycle spaces as follows:

- \* 146 car spaces (132 in basement)
- \* 38 motorbike spaces
- \* 20 bicycle spaces

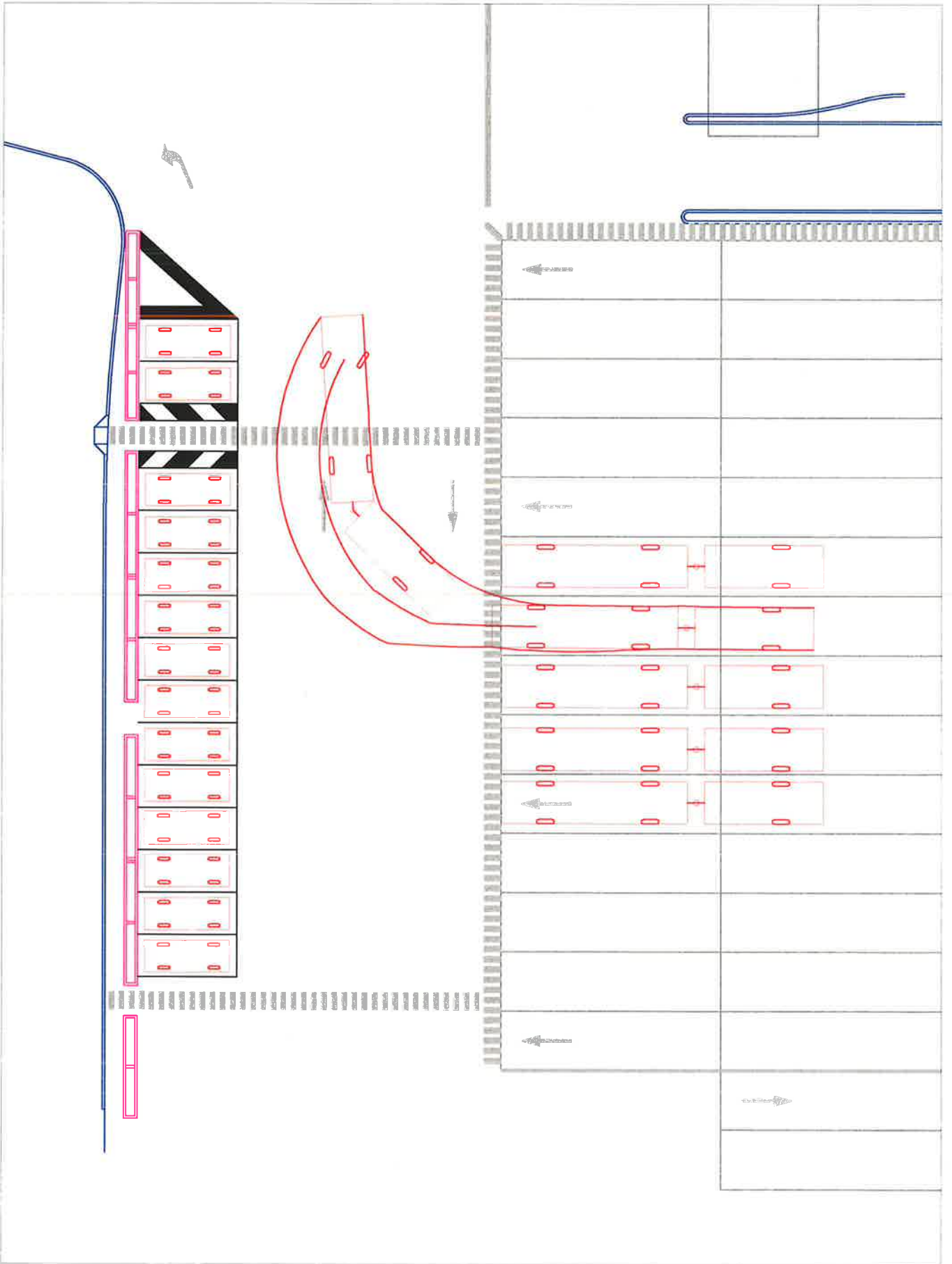
Details of the proposed changes are provided on the plans prepared which accompany the Development Application and are reproduced in part overleaf.

**MARKED BAYS = 192**  
**aisle AREAS = 64**  
**MAINTENANCE = 25**  
**TOTAL = 281**











## 4. ROAD NETWORK AND TRAFFIC CONDITIONS

---

### 4.1 ROAD NETWORK

The road network serving the site (Figure 3) comprises:

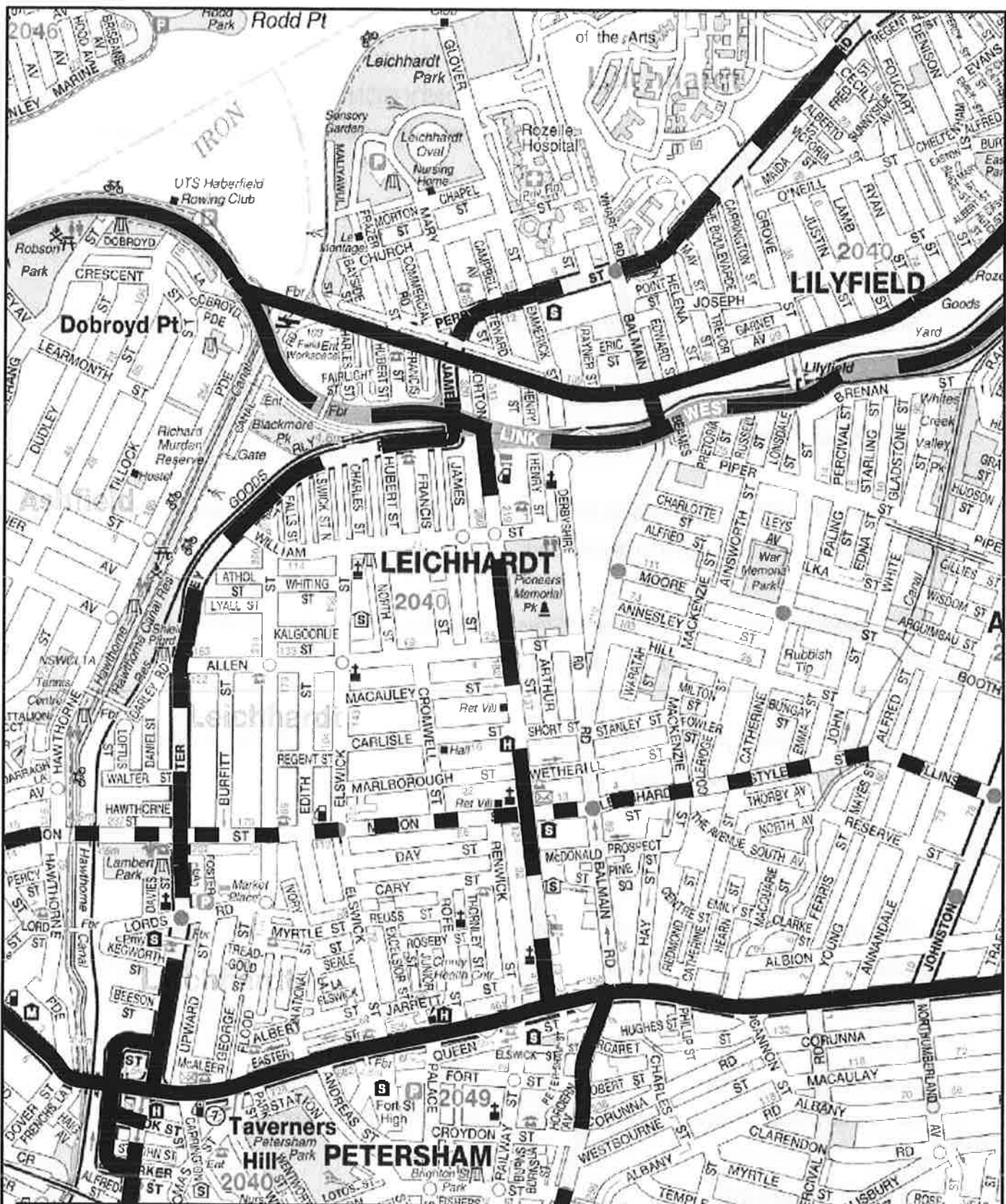
- \* *City West Link Road:* a State Road and arterial route connecting between the Anzac Bridge and Parramatta Road
- \* *Balmain Road:* a Regional Road and major collector road route linking between Parramatta Road and Victoria Road
- \* *Norton Street and Catherine Street:* collector roads which connect between Lilyfield Road, City West Link Road and Parramatta Road
- \* *Moore Street (east):* a minor collector road route connecting between Parramatta Road and Balmain Road
- \* *Lilyfield Road:* a minor collector road route.

The other roads in the vicinity are local roads essentially serving a local access function while Moore Street West (between Balmain Road and Derbyshire Street) has been closed. Derbyshire Road and Henry Street have been truncated (closed) at their crossing of the City West Link Road corridor while Allen Street on the eastern side of Norton Street and the central section of Derbyshire Road have been closed for traffic management reasons (to preclude through traffic movement).

### 4.2 TRAFFIC CONTROLS

The existing traffic controls on the road system serving the site (Figure 4) comprise:

- \* the traffic signals at the Balmain Road/City West Link Road intersection which include prohibition of the right-turn southerly into Balmain Road. Details of this



## LEGEND

- ARTERIAL**
- SUB-ARTERIAL**
- COLLECTOR**



## ROAD NETWORK

FIG 3

intersection arrangement are provided in Appendix A however the proposed left turn lane has not been constructed at this time

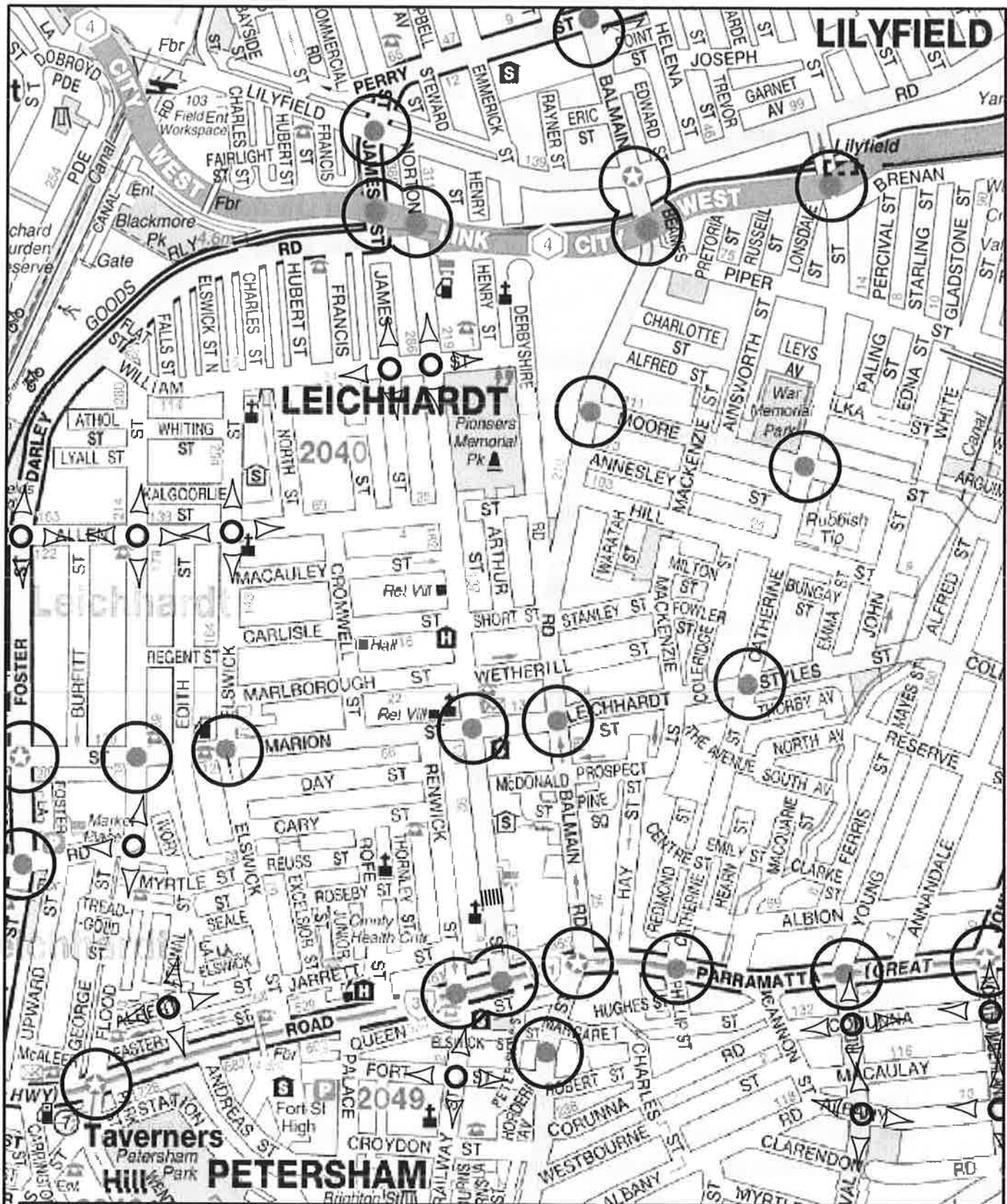
- \* the traffic signals at the intersections of the City West Link Road with Norton Street and James Street. Details of these intersection arrangements are also provided in Appendix A
- \* the traffic signals at the intersection of Balmain Road, Alfred Street and the Depot access. Details of this intersection with the recent closure of Moore Street West are provided in Appendix A
- \* the roundabout at the Norton Street/William Street intersection
- \* the one-way south traffic restrictions on the Catherine Street bridge and right/left-turning restrictions from the City West Link Road to Catherine Street
- \* the raised 'platform' and marked footcrossing in Balmain Road at Hill Street
- \* the cycleway along the western footway of Balmain Road.

### **4.3 TRAFFIC CONDITIONS**

A traffic survey program has been recently undertaken (February 2012) to establish the current traffic movement circumstances during the morning and afternoon peak periods. Details of the recorded movements at the principal intersections in the area are provided in Appendix B and summarised on Figure 5.

The operational performance of these intersections during the peak traffic periods has been modelled using SCATES and the results are summarised in the following while the criteria for interpreting the mode output is reproduced overleaf.

AM			PM		
LOS	DS	AVD	LOS	DS	AVD



# LEGEND

- TRAFFIC SIGNAL CONTROL
- △△△△ ROUNDABOUT
- ⊗ RESTRICTED TURNING MOVEMENT



## TRAFFIC CONTROLS

FIG 4

CWLR/Balmain Road *	D	0.98	44.5	C	0.96	40.4
CWLR/Norton Street	B	0.79	25.3	B	0.85	27.4

\* With proposed left turn bay

The results of the operational performance assessment for the existing peak traffic circumstances indicate that conditions at the access intersections are generally satisfactory, however the through flows along CWLR are subject to queuing consequential to capacity constraints to the east (Anzac Bridge) and west (Dobroyd Parade).

#### 4.4 TRANSPORT SERVICES

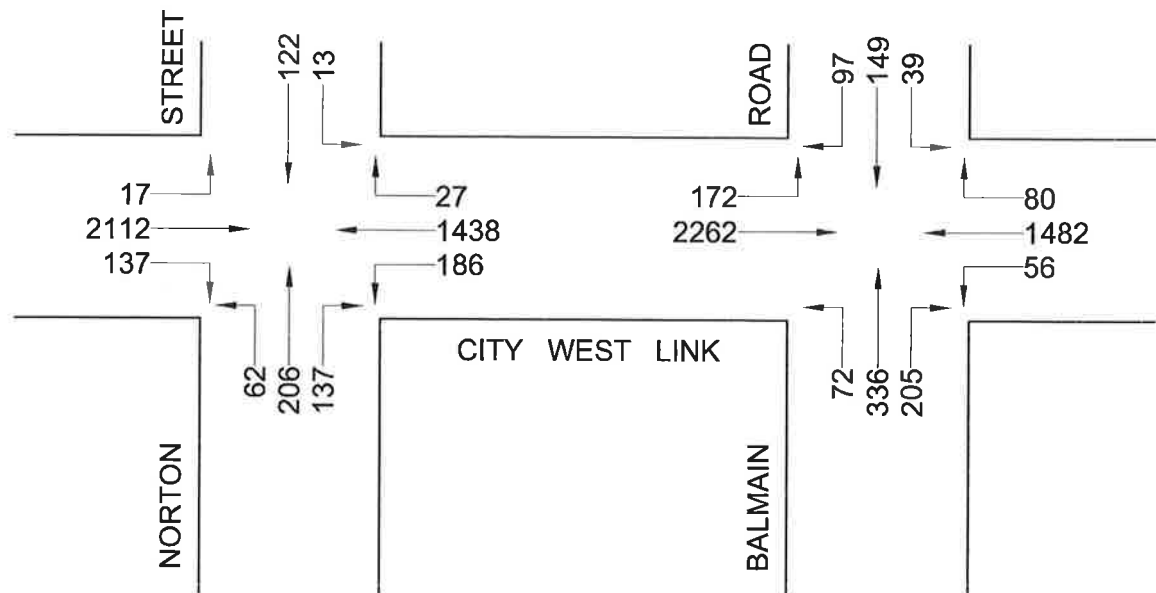
The existing public transport services in the vicinity of the site include:

##### Bus Services

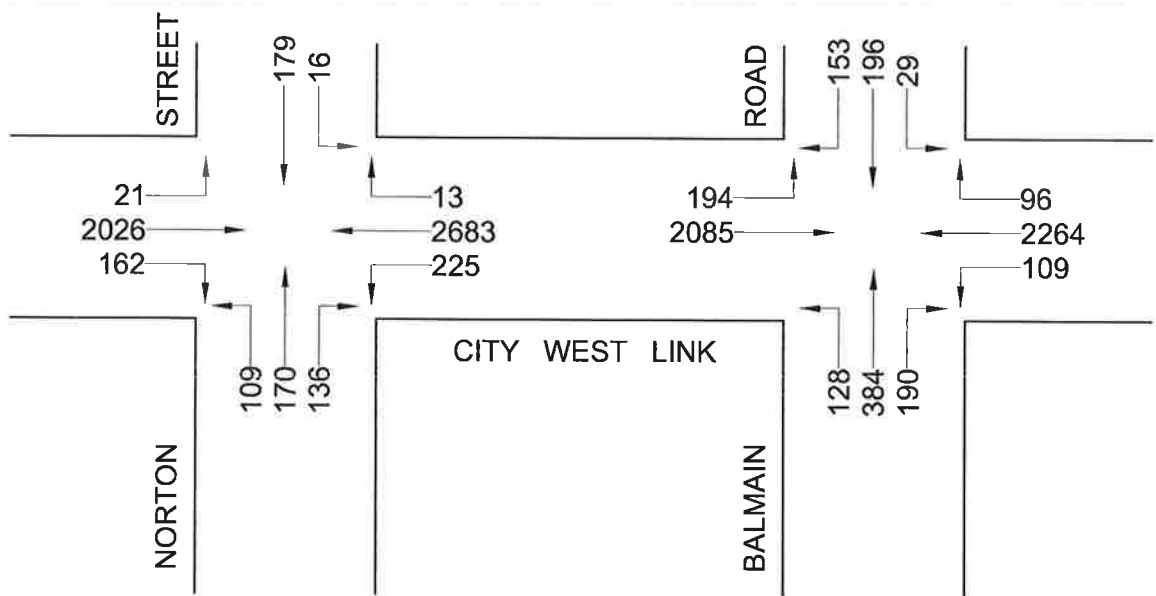
There are currently 15 bus routes provided for out of Leichhardt depot as well as school and special services. Three services operate in the near vicinity of the depot providing connections to the metropolitan transport network.

##### Light Rail

A light rail stop on the Ultimo-Pyrmont line is located at Catherine Street a short distance to the east.



**AM PEAK**



**PM PEAK**

**LEGEND**



**EXISTING PEAK  
TRAFFIC FLOWS**

**FIG 5**

## **Criteria for Interpreting Results of SCATESTraffic Modelling Analysis**

### **1. Level of Service (LOS)**

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good	Good
'B'	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
'C'	Satisfactory	Satisfactory but accident study required
'D'	Operating near capacity	Near capacity and accident study required
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode
'F'	Unsatisfactory and requires additional capacity	Unsatisfactory and requires other control mode

### **2. Average Vehicle Delay (AVD)**

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (ie inner city conditions) and on some roads (ie minor side street intersecting with a major arterial route).

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays Roundabouts require other control mode	At capacity and requires other control mode

### **3. Degree of Saturation (DS)**

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by **traffic signals**<sup>1</sup> both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a **roundabout** or **GIVE WAY** or **STOP signs**, satisfactory intersection operation is indicated by a DS of 0.8 or less.

<sup>1</sup> the values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs

## **4.5 FUTURE CIRCUMSTANCES**

The potential/proposed changes to the current road, traffic or transport arrangements in the area comprise:

- \* construction in the M4 East Link (ie City West Link Road to M4)
- \* extending the light rail system



## 5. TRAFFIC

---

The traffic implications of the proposed increase in the bus fleet essentially comprise the additional bus movements (to those existing) which will occur during the morning and afternoon peak periods (7-9 am and 4-6 pm). Bus drivers start and finish outside of these hours and the majority of buses also depart and return outside of these hours.

The assessment undertaken for the Development Application for the Depot upgrade adopted "projected" future bus movements (per hour) based on the awareness at that time (Figure 6). The actual current bus movements (per hour) during the morning and afternoon peak periods are provided in Figure 7 while the projected bus movements with the proposed increased fleet are provided in Figure 8.

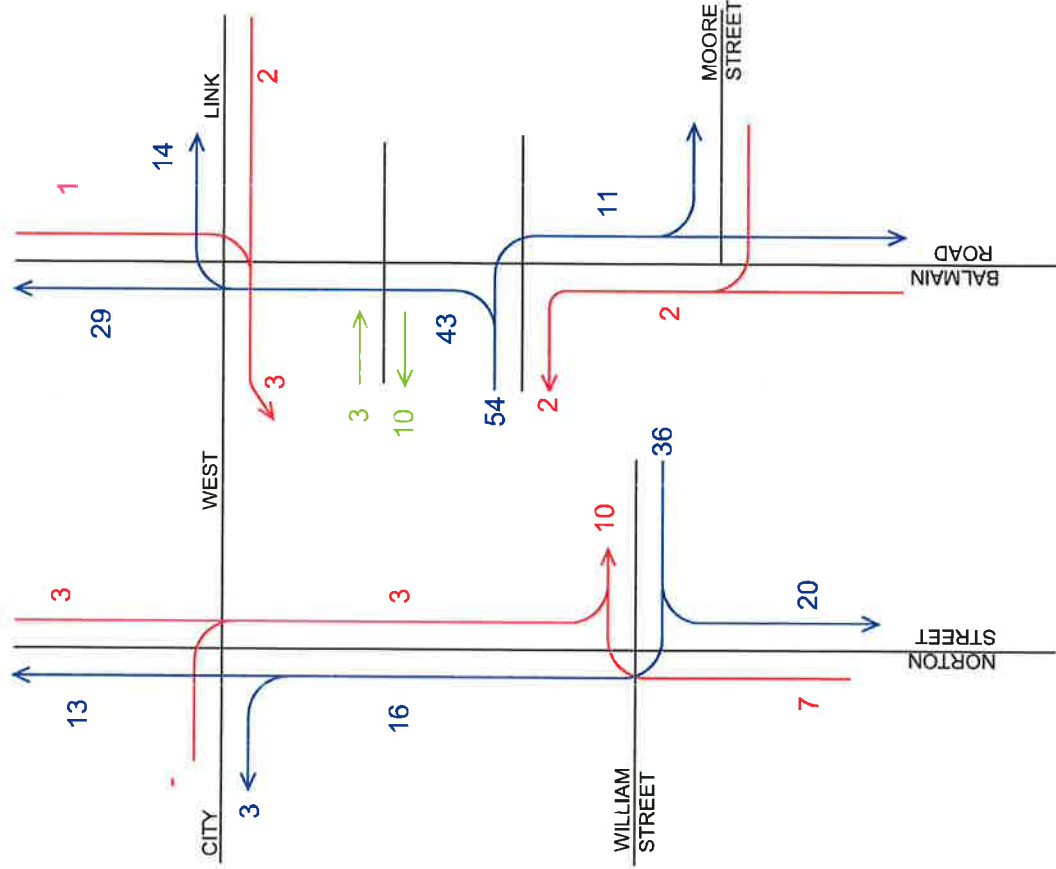
The SCATES traffic model of the intersections has been adjusted to incorporate the additional projected bus movements (converted to pcus\*) and the results are summarised in the following:

	AM			PM		
	LOS	DS	AVD	LOS	DS	AVD
CWLR/Balmain Road	D	0.98	45.1	C	0.96	40.4
CWLR/Norton street	B	0.79	25.3	B	0.85	27.4

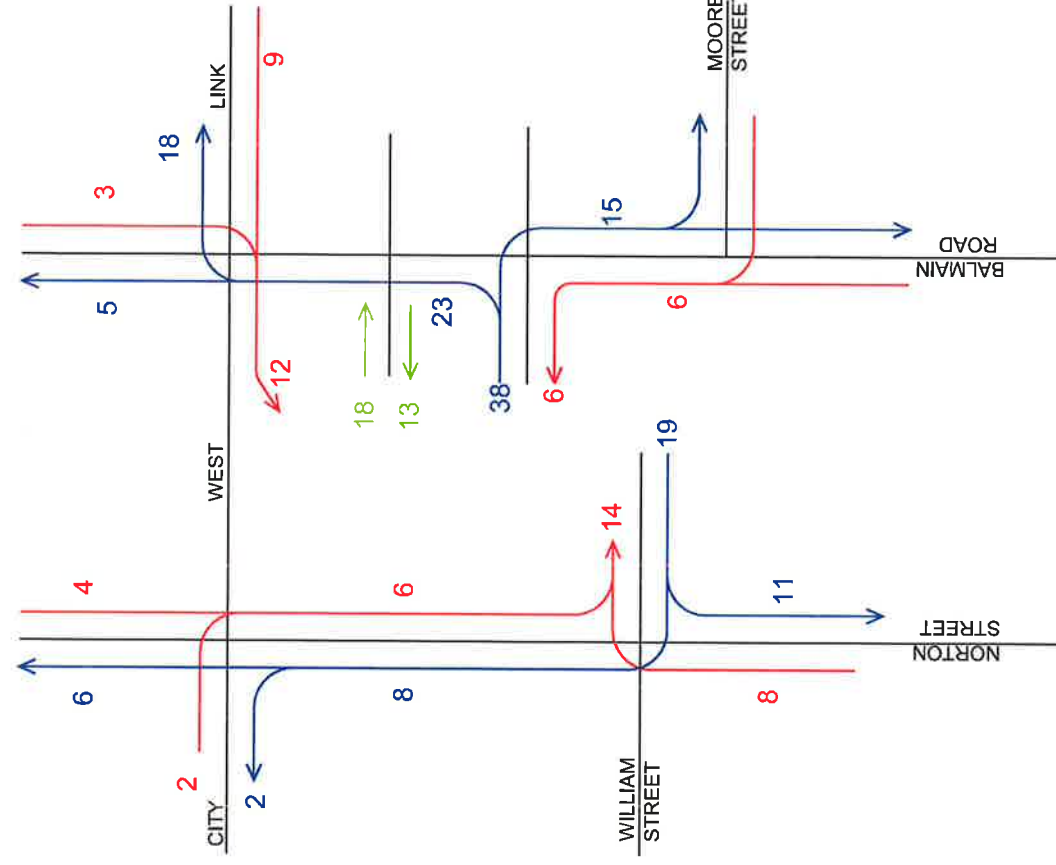
\* pcu = passenger car units

These results indicate that there will not be any perceptible change to the existing satisfactory operation of these intersections as a result of the proposal.

An electronic copy of the SCATES modelling can be provided on request.



## MORNING PEAK



## AFTERNOON PEAK

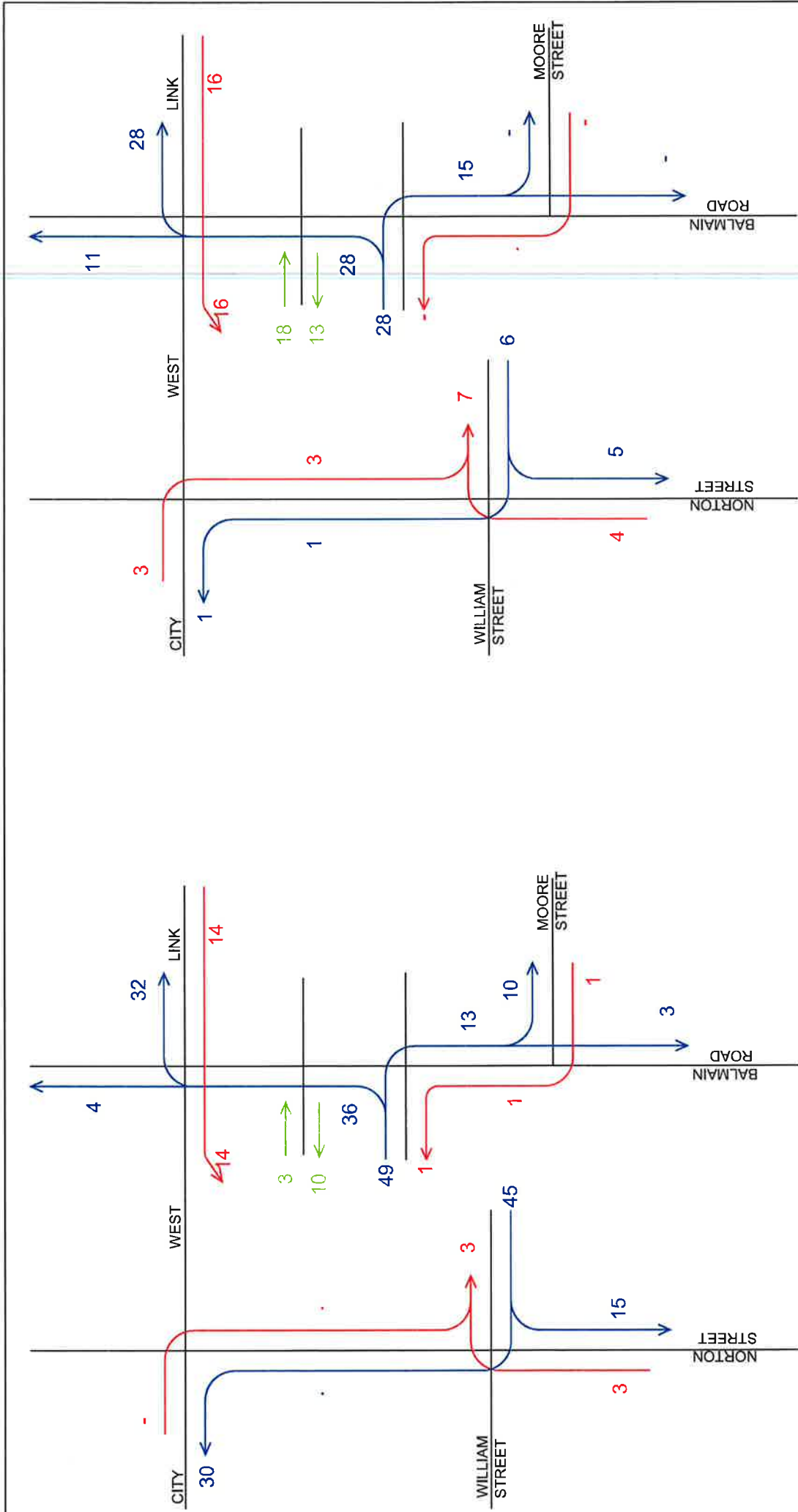
### LEGEND

- BUSES OUT
- BUSES IN
- CARS



PREVIOUS PROJECTED  
PEAK PERIOD DEPOT  
MOVEMENTS

FIG 6



# AFTERNOON PEAK

# MORNING PEAK

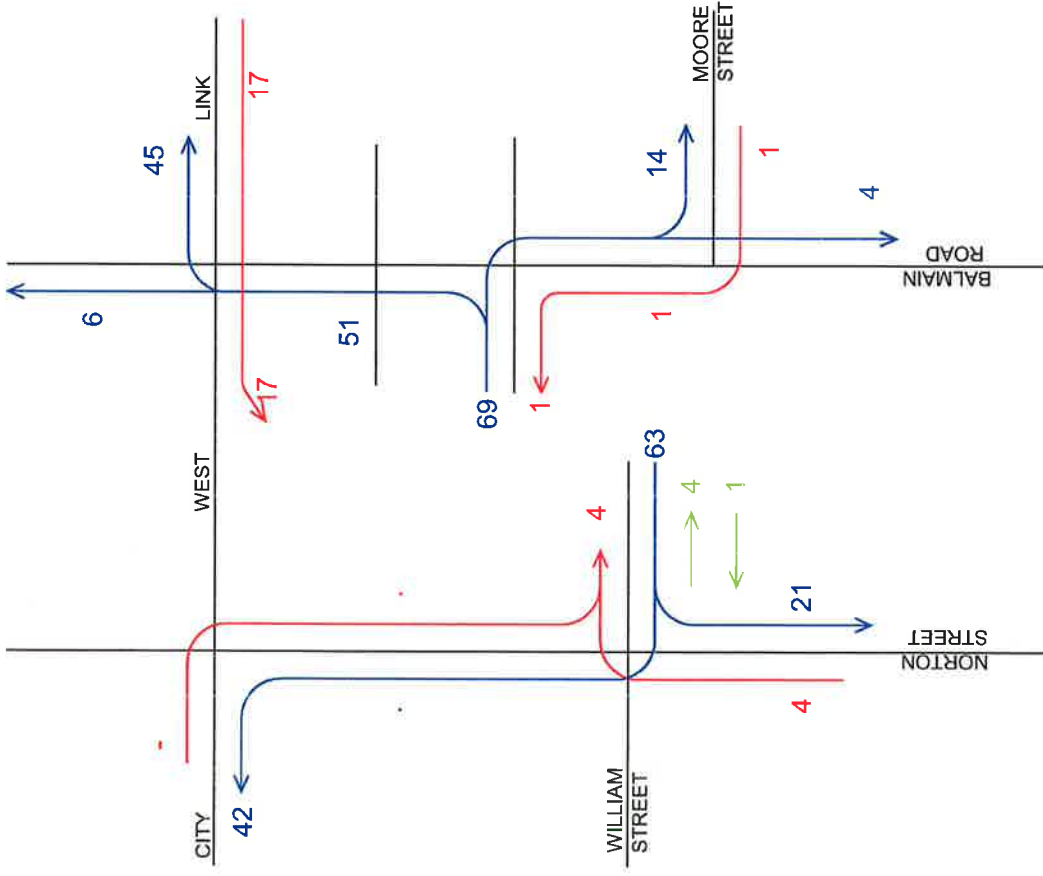
LEGEND

- BUSES OUT
- BUSES IN
- CARS

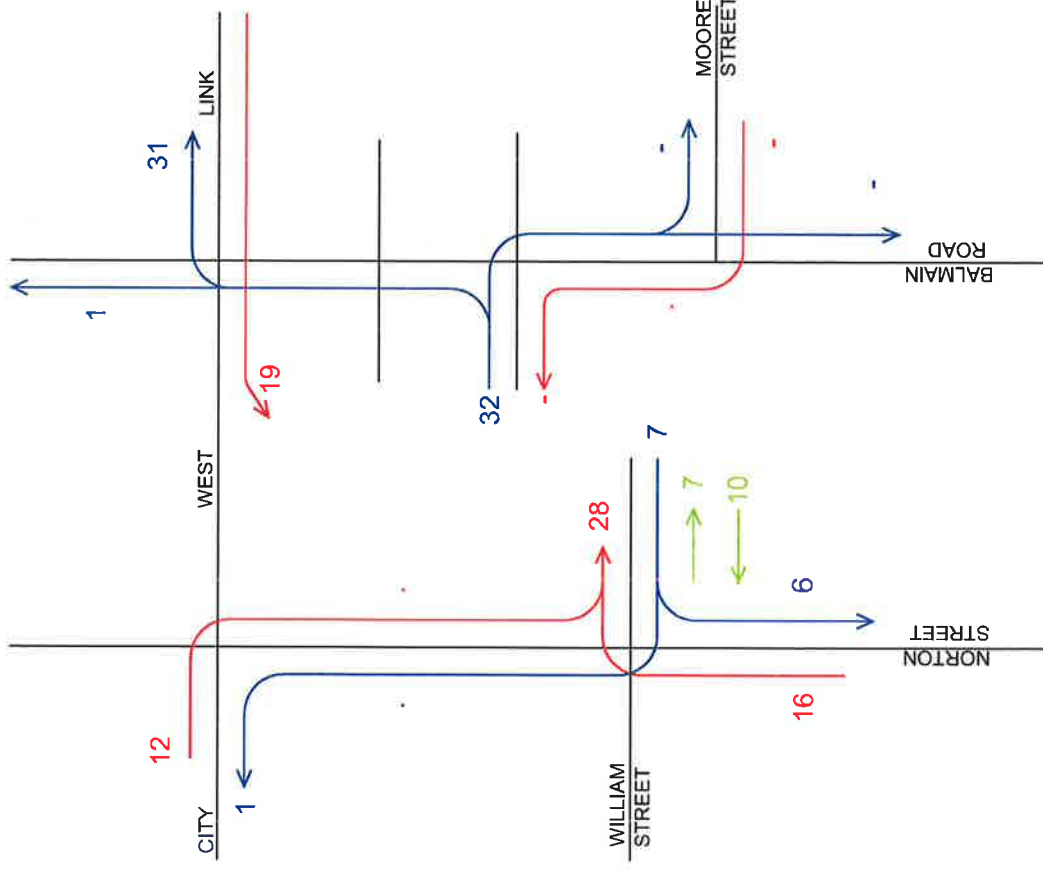


CURRENT PEAK PERIOD  
DEPOT MOVEMENTS

FIG 7



## MORNING PEAK



## AFTERNOON PEAK

### LEGEND

- BUSES OUT
- BUSES IN
- CARS



### PROJECTED FUTURE PEAK PERIOD DEPOT MOVEMENTS

FIG 8

## 6. Parking

---

The existing consent requires the provision of 125 car parking spaces on site for staff and STA vehicles (14) and this provision has proved to be adequate for the operational needs of the depot. It is proposed to relocate the 14 STA vehicle spaces out of the basement carpark to an open area adjacent to the administration building.

It is also proposed to make some adjustments to the layout of the existing basement carpark area to provide:

- 132 car spaces (ie 21 additional staff spaces)
- 38 motor cycle spaces

**Total Additional 59 spaces**

It is also proposed to upgrade and increase the provision of bicycle parking to 20 spaces. The existing maximum D/T shift staff (252) ratio to parking spaces (111) is some 2.27 persons per space while the future ratio will be maximum D/T (328) to spaces (170) being 1.93 persons per space. A significant proportion of staff travel by public transport while there is a commendable element of car sharing. It is apparent that the provision of parking with proposed fleet increase will be "in line with" (in fact slightly better) than the existing provision particularly if consideration is also given to the provision for bicycle parking and associated facilities.

## **7. Conclusion**

---

The population of the Inner Western Area is increasing as a result of urban consolidation and this is reflected in the increased demands for travel by public transport (buses). The proposal to increase the bus fleet at the Leichhardt depot will significantly enhance the ability of STA to respond to the patronage demands. Assessment of the proposal has concluded that:

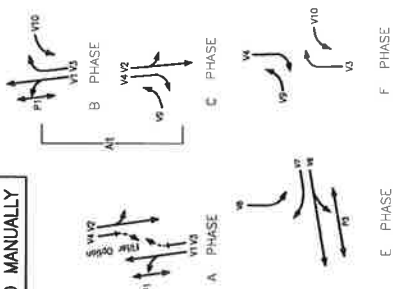
- there will not be any adverse or unsatisfactory traffic implications
- the existing vehicle access and circulation provisions will be quite suitable and adequate
- the proposed increased parking provision will be adequate and appropriate

# **APPENDIX A**

## **INTERSECTION PLANS**

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DRAWN BY CADD  
DO NOT AMEND MANUALLY



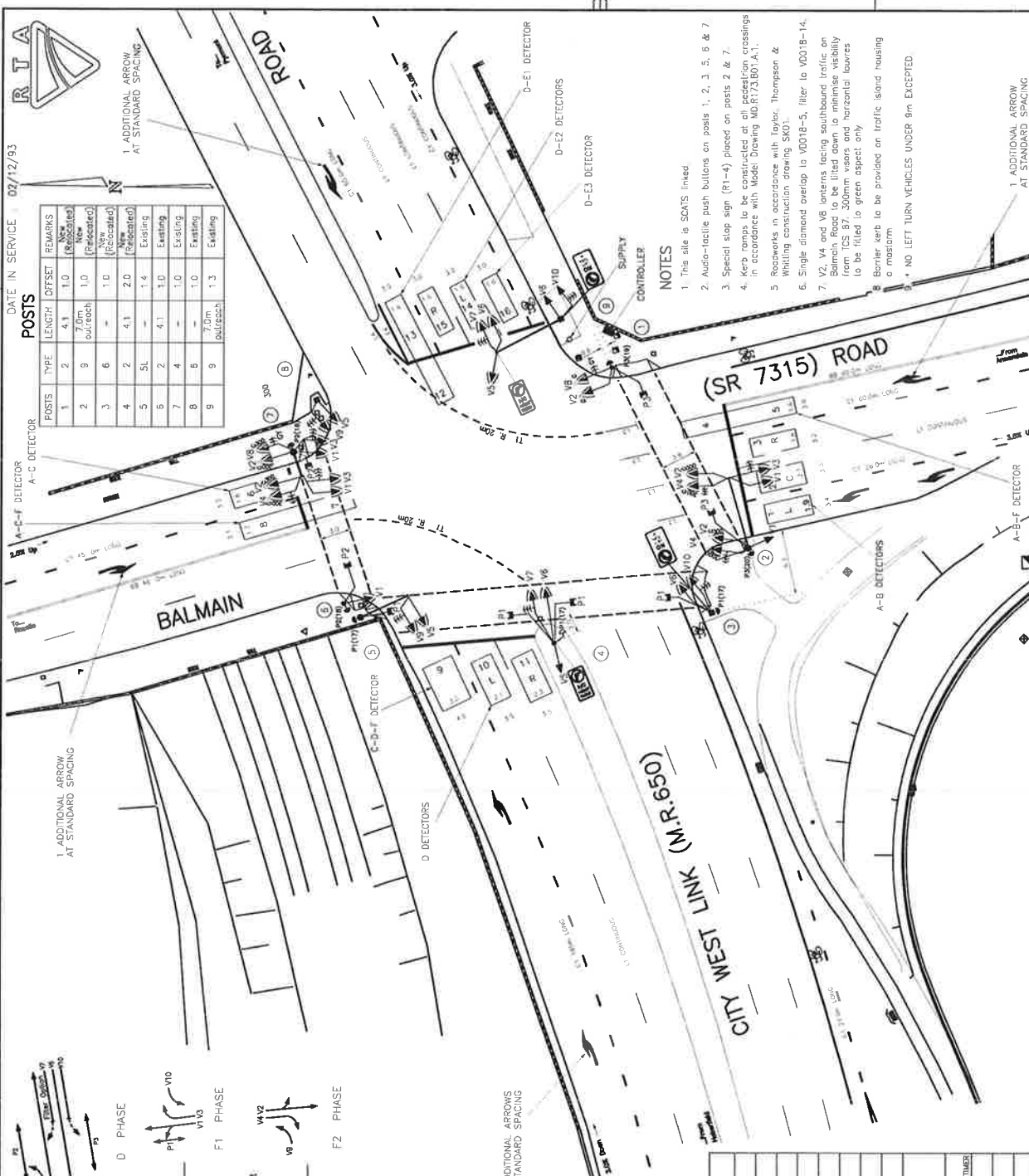
## MOVEMENTS

## DETECTOR SPECIFICATION

DETECTOR	SPECIFICATIONS				
	FN	F2(P/F2)	F2(P/F2)	F2(L)	
C-D-F	S2/P2	C/D/F2		D	
	DS	E(C/F)	F2(P/F2)	C-D-F(NEXT)	F2(L)
C-D-F	S2/P2	C	D(E3)	F(E3)	F2
CONTINUED	DS	REDNEXT	REDNEXT	REDNEXT	REDNEXT
D-E1	FN	E(P/F)			
Depart & Approach	S2/P2	S2/P2			
	DS	FSF3			
D-E1	FN	D(L/L)	E(L)	D(E2)	
Approach	S2/P2	D/E	E	D	
	DS	FSF3	FSF3	FSF1-D(P/F2/NEXT)	
D-E2	FN	D(L)	D(E1)	E(E1)	
	DS	—	—	E	
	DS	—	E(NEXT)	D(NEXT)	
	DS	D(P/F)	D(E3)	E(NEXT)	
D-E3	FN	D/P/F	D/E	E	
	DS	—	F(NEXT)	D(NEXT)	

## SIGNAL GROUP PHASE CHART

SIGNAL GROUP	PHASE DURING WHICH GREEN DISPLAYED										REMARKS
	A	B	C	D	E	F	F1	F2			
V1	X	X						X			
V2	X		X						X		
V3		X					X				
V4			X					X			
V5				X							TIMED P.A. PROTECTION FOR P1 PEDESTRIAN
V6				X							
V7				X							
V8					X						P.A. PROTECTION FOR P2 PEDESTRIAN WALK & CLEARANCE
V9		X	X <sup>1</sup>			X			X		P.A. PROTECTION FOR P2 PEDESTRIAN WALK & CLEARANCE P SUBJECT TO V7 NOT FILTERING
V10		X				X		X			P.A. PROTECTION FOR P3 PEDESTRIAN P3 ON POST 2 EXTENDS BA SUBJECT TO V9
P1	X	X							X		
P2				X							
P3			X	X							



NOTES

- This site is **SQZS**, linked
- Audio-tactile push buttons on posts 1, 2, 3, 5, 6 & 7.
- Special slip sign (R1-4) placed on posts 2 & 7.
- Key ramps to be constructed at all pedestrian crossings in accordance with Model Drawing M0717-B01(A.1).
- Roadworks in accordance with Taylor, Thompson & Whitting construction drawing SK07.
5. Single demand overlap to V019-14.
- 1 V2, V4 and V8 barriers facing southbound traffic on Cambridge Road to be lifted down to minimise visibility to the eastbound traffic.
- 1 V2, V4 and V8 barriers facing northbound traffic to be lifted to green aspect only.
- Barrier verb to be provided on traffic island housing a mastcam.
- NO LEFT TURN VEHICLES UNDER 9m EXCEPTED**

[illegible]



0650.255.W.1502

A (CHECK) SIGN



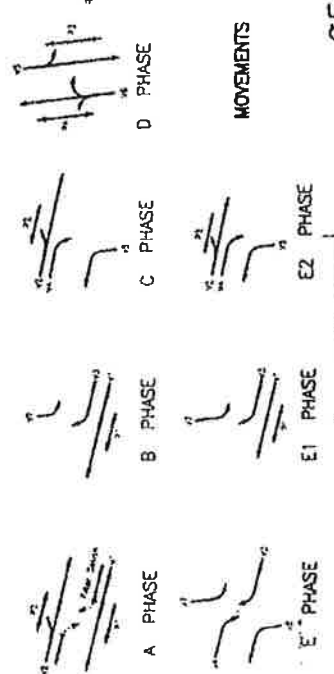
85-15-002

APPROVED  
DATE 15/12/77  
BY [Signature]  
FOR [Signature]

TRAFFIC SIGNALS AT INTERSECTION OF  
CITY WEST LINK ROAD (M.R.650)  
AND NORTON STREET  
LEICHHARDT  
DESIGN LAYOUT

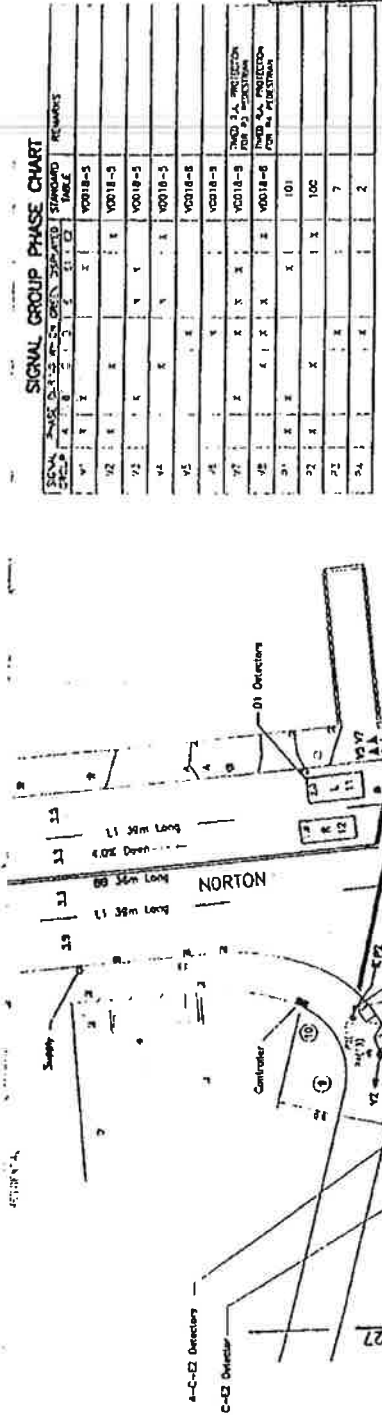
DESIGN OFFICE: N.S.W.  
LEICHHARDT COUNCIL  
TRAFFIC SIGNALS AT INTERSECTION OF  
CITY WEST LINK ROAD (M.R.650)  
AND NORTON STREET  
LEICHHARDT  
DESIGN LAYOUT

DESIGN OFFICE: N.S.W.  
LEICHHARDT COUNCIL  
TRAFFIC SIGNALS AT INTERSECTION OF  
CITY WEST LINK ROAD (M.R.650)  
AND NORTON STREET  
LEICHHARDT  
DESIGN LAYOUT



POSTS

POSTS	TYPE	LOCATION	OFFSET	HEIGHT
1	2	4.1	1.0	New
2	2	4.1	1.0	New
3	2	4.1	1.0	New
4	2	4.1	1.0	New
5	2	4.1	1.0	New
6	2	4.1	1.0	New
7	2	4.1	1.0	New
8	2	4.1	1.0	New
9	2	4.1	1.0	New
10	2	4.1	1.0	New



SIGNAL GROUP PHASE CHART

SIGNAL	PHASE	TIME	OFFSET	STANDARD	REMARKS
V1	1	2	4.1	1.0	Y0018-5
V2	2	4.1	1.0	Y0018-5	
V3	3	4.1	1.0	Y0018-5	
V4	4	4.1	1.0	Y0018-5	
V5	5	4.1	1.0	Y0018-5	
V6	6	4.1	1.0	Y0018-5	
V7	7	4.1	1.0	Y0018-5	
V8	8	4.1	1.0	Y0018-5	
V9	9	4.1	1.0	Y0018-5	
V10	10	4.1	1.0	Y0018-5	
V11	11	4.1	1.0	Y0018-5	
V12	12	4.1	1.0	Y0018-5	
V13	13	4.1	1.0	Y0018-5	
V14	14	4.1	1.0	Y0018-5	
V15	15	4.1	1.0	Y0018-5	
V16	16	4.1	1.0	Y0018-5	
V17	17	4.1	1.0	Y0018-5	
V18	18	4.1	1.0	Y0018-5	
V19	19	4.1	1.0	Y0018-5	
V20	20	4.1	1.0	Y0018-5	
V21	21	4.1	1.0	Y0018-5	
V22	22	4.1	1.0	Y0018-5	
V23	23	4.1	1.0	Y0018-5	
V24	24	4.1	1.0	Y0018-5	

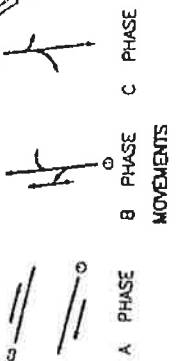
REVIEW

NAME	1/10/77
DATE	12/1/77
SIGN	

NOTES

1. The site is 500m long.
2. Audio-visual push buttons on all paths.
3. Special stop sign (R1-202) placed at points 1 & 2.
4. Provide turn ramps at all pedestrian crossings in accordance with A.S. 1428.
5. Location of power supply to be confirmed prior to construction.
6. This plan is derived from N.S.W. plan 510123.02.2313 (Provisional confirmation of completion of the works).
7. Provision to be made in building for future right turn phase from Norton Street north to east.
8. Single demand overlap to Y0018-5, clear to Y0018-14.

DO NOT REMOVE




DETECTOR SPECIFICATION.		SPECIFICATION			
DETECTOR		PM	ADU	ACCU	ACCU
A1	SC	A	A	A	
	OS				
A2	PM	ADU	ADU		
	SC	A	A		
B	PM				
	OS				
C	PM	ADU	ADU		
	SC	B	B		
A1	PM	ADU	ADU		
	SC	C	C		
P.B.	PM	ADU	ADU		
	SC	ADU	ADU		
A2	PM	ADU	ADU		
	SC	ADU	ADU		
P.B.	PM				
	SC	ADU	ADU		
B	PM	ADU	ADU		
	SC	ADU	ADU		
P.B.	PM	ADU	ADU		
	SC	ADU	ADU		

POSTS	TYPE	LENGTH	OFFSET	REMARKS
1	2	4.1	1.0	None
2	2	4.1	1.0	Special Beam
3	6	—	2.0	None
4	2	4.1	1.0	Special Beam
5	6	—	1.0	Special Beam
6	2	4.1	1.0	None
7	8	—	2.0	None
8	2	3.2	1.0	None
9	6	—	1.0	None

1. The pit is 25x15 inched.
2. Anti-heuristic path between two points 1, 4, 5, 7, 8 & 9.
3. Special step sign (R1-202) placed on points 4 & 5.
4. Possible high voltage of all individual crisscrossing at distances 200, 400, 1200
5. Location of power supply to be confirmed prior to construction.
6. This pit is derived from RGA point 3101.253 and 218 (prelates continuation of longitudinal line markings.)

PREVIEW			
NAME	DATE	SIGN	
P. Konec	3.2.07	PK	

85-TS-003

<div style="text-align: center;">  <p><b>POLICE DEPARTMENT</b></p> </div>		<div style="text-align: center;"> <p><b>TRAFFIC SIGNALS AT INTERSECTION OF</b>  <b>CITY WEST LINK ROAD (N.R.650)</b>  <b>AND JAMES STREET (S.R.652)</b></p> </div>		<div style="text-align: center;"> <p><b>LEICHHARDT COUNCIL</b></p> </div>		<div style="text-align: center;"> <p><b>Roads and Traffic Authority, N.S.W</b></p> </div>		<div style="text-align: center;"> <p><b>DESIGN OFFICE MANAGER - STREET TRAFFIC SERVICES</b></p> </div>	
<div style="text-align: center;"> <p><b>APPROVED</b></p> </div>		<div style="text-align: center;"> <p><b>DATE</b></p> </div>		<div style="text-align: center;"> <p><b>DATE</b></p> </div>		<div style="text-align: center;"> <p><b>DATE</b></p> </div>		<div style="text-align: center;"> <p><b>DATE</b></p> </div>	
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<div style="text-align: center;"> <p><b>APPROVED</b></p> </div>									

PROPOSED



### C PHASE



POST	TYPE	LENGTH	REMARKS
1	2	4.1	New
2	2	4.1	New
3	2	4.1	New
4	2	4.1	New
5	2	3.2	New
6	2	4.1	New
7	2	4.1	New
8	2	4.1	New
9	2	4.1	New
10	2	4.1	New
11	2	4.1	New

Detector	Specifications			
A	FN SG/PS	AL/L A	A(1) A	
A-B1 Depart, & Approach	FN SG/PS	B(PB) A	B(E4) B	
A-B1 Approach	FN SG/PS	AL/L A/B	A(NEXT) A	B(E3) B
A-B2	DS SG/PS	AL/L A/B	A-B1(PB) B(NEXT) A(E2) A	A(NEXT) B
B-C	FN SG/PS	B(PB) B/C	B(NEXT) A(NEXT) B(E1) B	C(E1) C
C	DS SG/PS	C C	C(NEXT) C(E2)	B(NEXT) C
D	FN SG/PS	D(L) D	D(E1) D	
P1	FN SG/PS	A(PB) PT(WALK)	C(L) A PT(WALK)	
P2 P.B.	FN SG/PS	- A(PB) A/B P2(WALK)	B,C,D C(L) A/B P2(WALK)	
P3 P.B.	FN SG/PS	C(PB) PT(WALK)	B C P3(WALK)	C,D
P4	FN SG/PS	D(PB) PT(WALK)	A(L) D P4(WALK)	
P5 P.B.	FN SG/PS	A(PB) B/C A P5(WALK)	A,B,C A P5(WALK)	C(L) A P5(WALK)

SPECIAL NAME AND NUMBER OF THE CANDIDATE	REMARKS				
	A	B	C	D	E
V1	X				1
V2	X	X			3
V3		X			41
V4			X		1
V5				X	1
V6		X	X		19
P1	X				1
P2	X	X			6
P3			X		1
P4				X	1
pc	X	X	X		6

1. This site is SCATS linked.
2. All push buttons are audio tactile.
3. Special STOP Sign (R1-4) is placed on Posts 2, 3 & 9.
4. Roadworks in accordance with Taylor Thompson Whitting construction drawing SKC01.
5. Kerb ramps are to be provided at all pedestrian crossings in accordance with Model Drawing MDR173.991A1.
6. Supply to be determined on site by Level 2/3 service provider.

[illegible]

## **APPENDIX B**

### **TRAFFIC SURVEY RESULTS**

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# R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

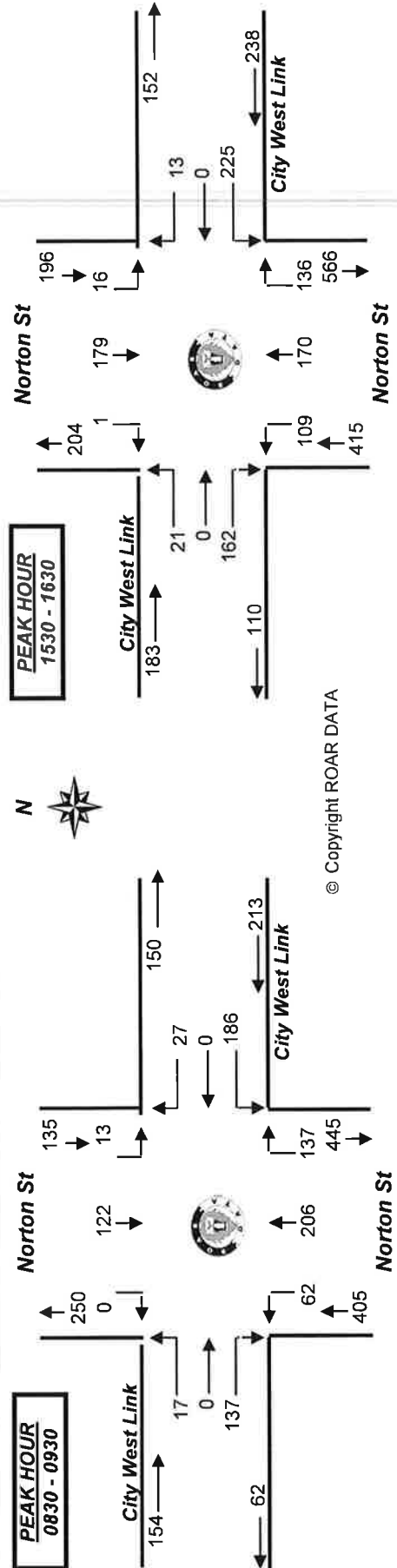
Client : T.T.P.A

Job No/Name : 3967 LEICHHARDT City West Link

Day/Date : Friday / 10th February 2012

All Vehicles		NORTH				WEST				SOUTH				EAST										
		Norton St				City West Link				Norton St				City West Link										
Time Per	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT								
	1	6	0	95	1	1	4	23	10	20	28	58	3	41	1	43								
	3	20	0	155	3	18	18	22	16	30	38	55	5	41	0	38								
	7	34	0	212	7	11	11	24	22	49	58	81	5	62	1	58								
	5	21	0	171	5	1	18	30	10	34	51	95	2	30	0	35								
	2	20	0	227	2	1	30	28	25	55	62	143	5	43	0	32								
	2	19	0	187	2	1	30	23	15	52	42	87	4	44	0	37								
	7	27	0	187	7	2	25	32	8	41	43	81	5	55	0	42								
	4	25	0	206	4	5	41	33	5	48	39	91	7	38	0	27								
	0	37	0	257	0	1	50	45	8	71	38	126	3	41	0	2								
Time Per	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT								
	3	30	0	230	3	23	34	46	23	53	30	106	3	46	0	27								
	5	32	0	207	5	3	23	38	17	47	28	92	2	45	0	51								
	5	23	0	213	5	8	30	41	14	35	41	94	3	47	0	50								
Period End		44	294	0	35	0	314	173	535	498	401	0	53	2	54	0	481	314	483	383	706	0	37	3040

All Vehicles		NORTH				WEST				SOUTH				EAST			
		Norton St				City West Link				Norton St				City West Link			
Peak Time		L	I	R	TOT	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT
1500 - 1600	15	174	2	174	633	12	0	174	114	120	168	114	114	222	0	14	1015
1515 - 1615	17	176	1	176	765	17	0	163	116	116	174	124	124	223	0	17	1028
1530 - 1630	16	179	1	179	797	21	0	182	109	170	170	136	136	225	0	13	1032
1545 - 1645	16	172	0	172	772	25	0	146	102	167	142	142	142	228	0	8	1006
1600 - 1700	21	180	0	180	807	22	0	138	102	166	142	142	142	233	0	9	1013
1615 - 1715	19	178	0	178	837	18	0	147	86	176	143	143	143	222	0	9	998
1630 - 1730	18	180	0	180	880	19	0	137	96	180	138	138	138	228	0	13	1009
1645 - 1745	15	170	0	170	900	20	0	146	92	171	127	127	127	233	0	16	990
1700 - 1800	11	179	0	179	907	20	0	169	92	149	127	127	127	251	0	14	1012
PEAK HOUR	16	179	1	179	907	21	0	162	109	170	136	136	136	225	0	13	1032



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# R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client : T.T.P.A

Job No/Name : 3967 LEICHHARDT City West Link

Day/Date : Friday / 10th February 2012



Norton St

## Intersection Details

Observed via satellite  
may be incorrect

AM PEAK HOUR  
0830 - 0930

\* NO Right Turn

City West Link

	R	T	L
AM	0	122	13
PM	1	179	16

	AM	PM
L	17	21
T	0	0
R	137	162

	PM	AM
L	109	62
T	170	206
R	136	137

	PM	AM
R	13	27
T	0	0
L	225	186

City West Link

PM PEAK HOUR  
1530 - 1630



Weather >>>

Norton St





# R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client

: T.T.P.A

Job No/Name : 3967 LEICHHARDT City West Link

Day/Date : Friday / 10th February 2012

All

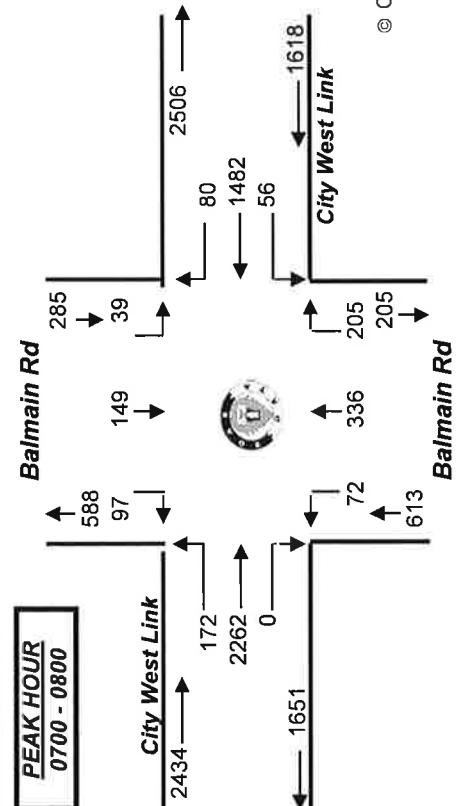
Vehicles	NORTH				WEST				SOUTH				EAST			
	Balmain Rd		City West Link		City West Link		Balmain Rd		Balmain Rd		City West Link		City West Link		City West Link	
Time Per	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT
0630 - 0645	4	15	12	31	26	627	0	19	61	52	12	273	7	1108		
0645 - 0700	6	27	15	48	32	628	0	10	52	59	12	312	10	1163		
0700 - 0715	15	44	26	85	34	527	0	20	77	46	12	317	13	1131		
0715 - 0730	5	30	15	50	40	607	0	18	70	55	8	363	19	1230		
0730 - 0745	9	37	33	79	44	573	0	21	93	57	15	399	28	1309		
0745 - 0800	10	38	23	71	54	555	0	13	96	47	21	403	20	1280		
0800 - 0815	9	35	30	64	60	403	0	25	106	42	27	400	30	1167		
0815 - 0830	3	34	31	68	64	431	0	20	104	53	14	397	20	1171		
0830 - 0845	3	39	16	58	78	509	0	16	98	46	23	389	24	1241		
0845 - 0900	2	58	32	92	49	479	0	23	97	48	24	373	24	1209		
0900 - 0915	10	45	24	79	47	435	0	19	87	38	37	352	20	1114		
0915 - 0930	10	47	27	84	42	484	0	32	82	42	25	406	32	1229		
Period End	86	449	284	1739	570	6258	0	236	1023	585	230	4384	247	14352		

Vehicles	NORTH				WEST				SOUTH				EAST			
	Balmain Rd		City West Link		City West Link		Balmain Rd		Balmain Rd		City West Link		City West Link		City West Link	
Time Per	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT	L	I	R	TOT
1500 - 1515	11	47	32	90	45	450	0	40	63	33	22	545	11	1299		
1515 - 1530	9	41	27	77	43	514	0	42	60	28	25	556	23	1468		
1530 - 1545	9	48	34	91	54	490	0	44	93	45	24	589	12	1442		
1545 - 1600	8	50	30	88	46	465	0	47	89	37	30	619	25	1446		
1600 - 1615	9	50	27	86	53	484	0	43	58	37	42	592	23	1428		
1615 - 1630	9	46	38	93	30	481	0	38	51	37	28	634	17	1449		
1630 - 1645	13	45	34	92	39	490	0	37	62	36	38	576	19	1389		
1645 - 1700	11	51	24	86	35	504	0	26	92	37	29	540	19	1368		
1700 - 1715	8	46	32	86	50	499	0	38	96	42	15	543	20	1389		
1715 - 1730	10	55	38	103	53	525	0	28	104	54	34	590	29	1520		
1730 - 1745	8	37	41	86	56	538	0	34	87	41	19	585	21	1467		
1745 - 1800	3	58	42	103	35	523	0	28	97	53	41	546	26	1452		
Period End	108	574	399	2081	539	5973	0	445	992	480	347	7015	245	17117		

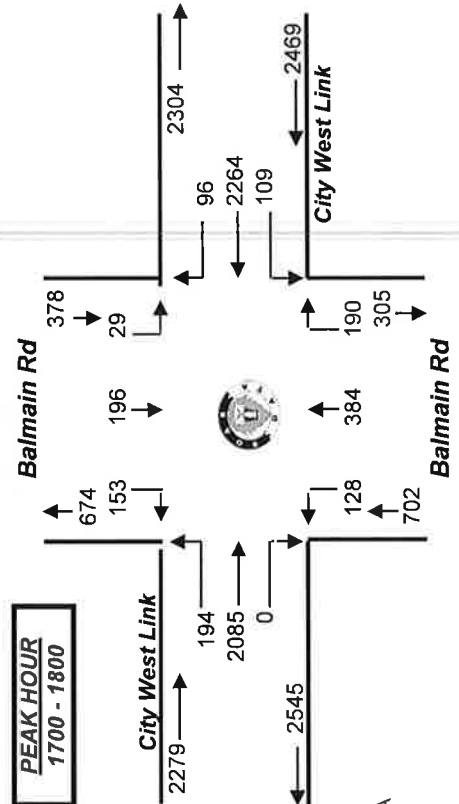
Peak Time	NORTH				WEST				SOUTH				EAST			
	Balmain Rd		City West Link		City West Link		Balmain Rd		Balmain Rd		City West Link		City West Link		City West Link	
0630 - 0730	30	116	68	314	132	2389	0	67	260	212	44	1265	49	4632		
0645 - 0745	35	138	89	362	150	2335	0	69	292	217	47	1391	70	4930		
0700 - 0800	39	149	97	385	172	2262	0	72	336	205	56	1482	80	4850		
0715 - 0815	33	140	101	374	198	2138	0	77	365	201	71	1565	97	4986		
0730 - 0830	31	144	117	392	222	1962	0	79	399	199	77	1599	98	4927		
0745 - 0845	25	146	100	371	256	1998	0	74	404	188	85	1589	94	4859		
0800 - 0900	17	166	109	292	251	1822	0	84	405	189	88	1559	98	4788		
0815 - 0915	18	176	103	297	238	1854	0	78	386	185	98	1511	88	4735		
0830 - 0930	25	189	99	393	216	1907	0	90	364	174	109	1520	100	4793		
PEAK HOUR	39	149	97	385	172	2262	0	72	336	205	56	1482	80	4950		

Peak Time	NORTH				WEST				SOUTH				EAST			
	Balmain Rd		City West Link		City West Link		Balmain Rd		Balmain Rd		City West Link		City West Link		City West Link	
1500 - 1600	37	186	123	346	188	1919	0	173	305	143	101	2409	71	5655		
1515 - 1615	35	189	118	342	196	1963	0	176	300	147	121	2456	83	5784		
1530 - 1630	35	194	129	358	183	1930	0	172	331	156	124	2434	77	5765		
1545 - 1645	39	191	129	359	168	1930	0	165	300	147	138	2421	84	5712		
1600 - 1700	42	192	123	357	157	1969	0	144	303	147	137	2342	78	5634		
1615 - 1715	41	188	128	357	154	1974	0	139	341	152	110	2293	75	5595		
1630 - 1730	42	197	128	367	177	2018	0	129	354	169	116	2249	87	5666		
1645 - 1745	37	189	135	361	194	2066	0	126	379	174	97	2258	89	5744		
1700 - 1800	29	196	153	388	194	2085	0	128	384	190	109	2264	96	5828		
PEAK HOUR	29	196	153	388	194	2085	0	128	384	190	109	2264	96	5828		

PEAK HOUR  
0700 - 0800



PEAK HOUR  
1700 - 1800



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# R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph. 88196847, Fax 88196849, Mob. 0418-239019

Client : T.T.P.A

Job No/Name : 3967 LEICHHARDT City West Link

Day/Date : Friday / 10th February 2012

## Intersection Details

Observed via satellite

may be incorrect

AM PEAK HOUR  
0700 - 0800



Balmain Rd

City West Link

NO Right Turn

R	T	L	AM	PM
97	149	39	39	29
153	196	29		

AM	PM	L	T	R
172	194	194	2085	0
2262	2085	0		

PM	AM	L	T	R
128	384	190	336	205
72	336			

R	T	L	AM	PM
96	80	80	1482	56
2264	1482	56		

City West Link

PM PEAK HOUR  
1700 - 1800



Weather >>>

Balmain Rd



## **APPENDIX C**

### **SCATES TRAFFIC MODEL RESULTS**

---

Intersection with City West Link		SCATES ANALYSIS – CITY WEST LINK, LEICHHARDT Comparison - Existing against proposed changes with cycle length minimum 120 seconds			
		AM Peak		PM Peak	
		Exist	Prop	Exist	Prop
<b>James Street # 1527</b>	LOS	C	C	C	C
	DS	0.98	0.98	0.94	0.94
	AVD	42.9	42.9	37.6	37.7
<b>Norton Street # 1502</b>	LOS	B	B	B	B
	DS	0.79	0.79	0.85	0.85
	AVD	25.3	25.3	27.4	27.4
<b>Balmain Rd # 546</b>	LOS	D	D	C	C
	DS	0.98	0.98	0.96	0.96
	AVD	44.5	45.1	40.0	40.4
<b>Catherine Street # 9998 (not actual TCS number)</b>	LOS	A	A	A	A
	DS	0.80	0.80	0.75	0.75
	AVD	11.9	11.9	10.0	10.0
Filename		CITYWSTE	CITYWSTP	CITYWSTE	CITYWSTP

# **ATTACHMENT 3**



Our Ref: 11037/0407A

4 July 2012

The General Manger  
Leichhardt Municipal Council  
PO Box 45  
Leichhardt NSW 2040

By Email

Attention: Mr Brendon Glendenning

Dear Brendon,

**DEVELOPMENT APPLICATION NO 295/2012**  
**LEICHHARDT BUS DEPOT – ACCOMMODATION OF ADDITIONAL BUSES**

I refer to your request in relation to additional information for the above proposal and outline the following. Please note that this information is also to be read in conjunction with the Statement of Environmental Effects dated 7 June 2012 and its attachments including the Traffic Impact Assessment dated May 2012 (Revision B) previously lodged with Council.

As outlined in the Statement of Environmental Effects, the Leichhardt Bus Depot is able to accommodate additional buses within the existing hardstand area that is already approved for the accommodation of buses.

This development application is therefore seeking approval for:

- the reconfiguration of the bus parking and bus circulation areas to cater for a total of 281 buses being an additional 81 buses from the current development approval and to provide an additional 14 carparking spaces; and
- reconfiguration of the basement car park to accommodate an additional 7 car parking spaces and additional motorbike spaces for staff.

Therefore, bringing the total additional number of car parking spaces subject to this development application to 21 spaces.

The bus depot was the subject of major upgrading works in 2009 and incorporated:

- parking for some 200 buses (ie 190 operational)
- service and refueling facilities
- bus wash facility
- administration building
- parking for 125 cars
- total staff of some 465 persons with a maximum D/T shift of 252 including 190 drivers
- vehicle access provisions comprising
  - traffic signal controlled intersection ingress/egress on Balmain Road at Allied Street
  - ingress only of City West Link Road (CWLR)
  - ingress/egress on William Street at Derby Shire Road
  - service access on Balmain

This development application is seeking to increase the number of buses accommodated in the depot to 281 including 266 operational. The total staff will increase to 557 with a maximum daytime staff shift of 328 including 266 drivers. There will be some modifications to the existing parking provisions to increase the number of car, motorbike and bicycle spaces as follows:

- 146 car spaces (132 in basement)
- 38 motorbike spaces
- 20 bicycle spaces

As outlined in the Statement and the Traffic Assessment, it concludes that the existing provision has proved to be adequate for the operational needs of the depot. The existing maximum D/T shift staff (252) ratio to parking spaces (111) is some 2.27 persons per space while the future ratio will be maximum D/T (328) to spaces (170) being 1.93 persons per space. It is apparent that the provision of parking with the proposed fleet increase will be "in line with" (in fact slightly better) than the existing provision.

The following provides further information in relation to the car parking and bus parking spaces:

#### **Basement Carpark**

Attachment 1 to this letter includes the following plans:

- The existing basement carparking layout, which incorporates
  - 125 carparking spaces inclusive of 4 disabled spaces; and
  - A bicycle storage area.
- The proposed basement carparking layout that is subject to this development application, which incorporates
  - 132 carparking spaces including 2 disabled spaces; and
  - 38 motorbike parking spaces; and
  - A larger bicycle storage area.

To gain the additional car parking spaces in the basement, some spaces will be reconfigured and additional spaces within areas that have not been utilised in the carpark.



---

### **External Parking**

It is also proposed that additional car parking be provided on the existing hardstand area incorporating 14 carparking spaces. These carparking spaces will be utilised once the buses within this area are in service, which will generally be the first bus services commencing at 4am. These carparking spaces will be allocated for STA authorised vehicles only. Attachment 2 to this letter includes the following plans:

- A plan showing the proposed 14 carspaces; and
- A plan of the existing hardstand area showing the location of the these 14 carspaces.

### **Bus Layout (existing hardstand area)**

The existing hardstand for the buses and the current development consent is for the parking of 200 buses. A review of the existing hardstand shows that it is capable of parking of 281 buses within the existing hardstand area incorporating the aisles and the maintenance area. The bus parking is managed to ensure that buses within the aisle areas are the buses that are first out and last in.

As stated in the Statement, the additional buses are required as a result of an increase in overall patronage by 10.5% on services operated from Leichhardt Depot. Further, it is expected that demand will continue to increase due to future developments at Harold Park, Terry Street Rozelle, the Balmain Leagues Club site, Central Park (Broadway), White Bay and Barangaroo will rely on key government infrastructure such as Leichhardt Depot to deliver the services required to meet the customers demands.

Attachment 3 to this letter includes the following plans:

- The existing bus parking layout showing the bus spaces and the maintenance area; and
- The proposed bus parking layout, which incorporates parking in the aisles and the maintenance area. These areas are identified on the plan.

If you require any further information please do not hesitate to contact me.

Yours faithfully,

Vanessa Colclough  
Director  
Peter Andrews + Associates Pty Ltd

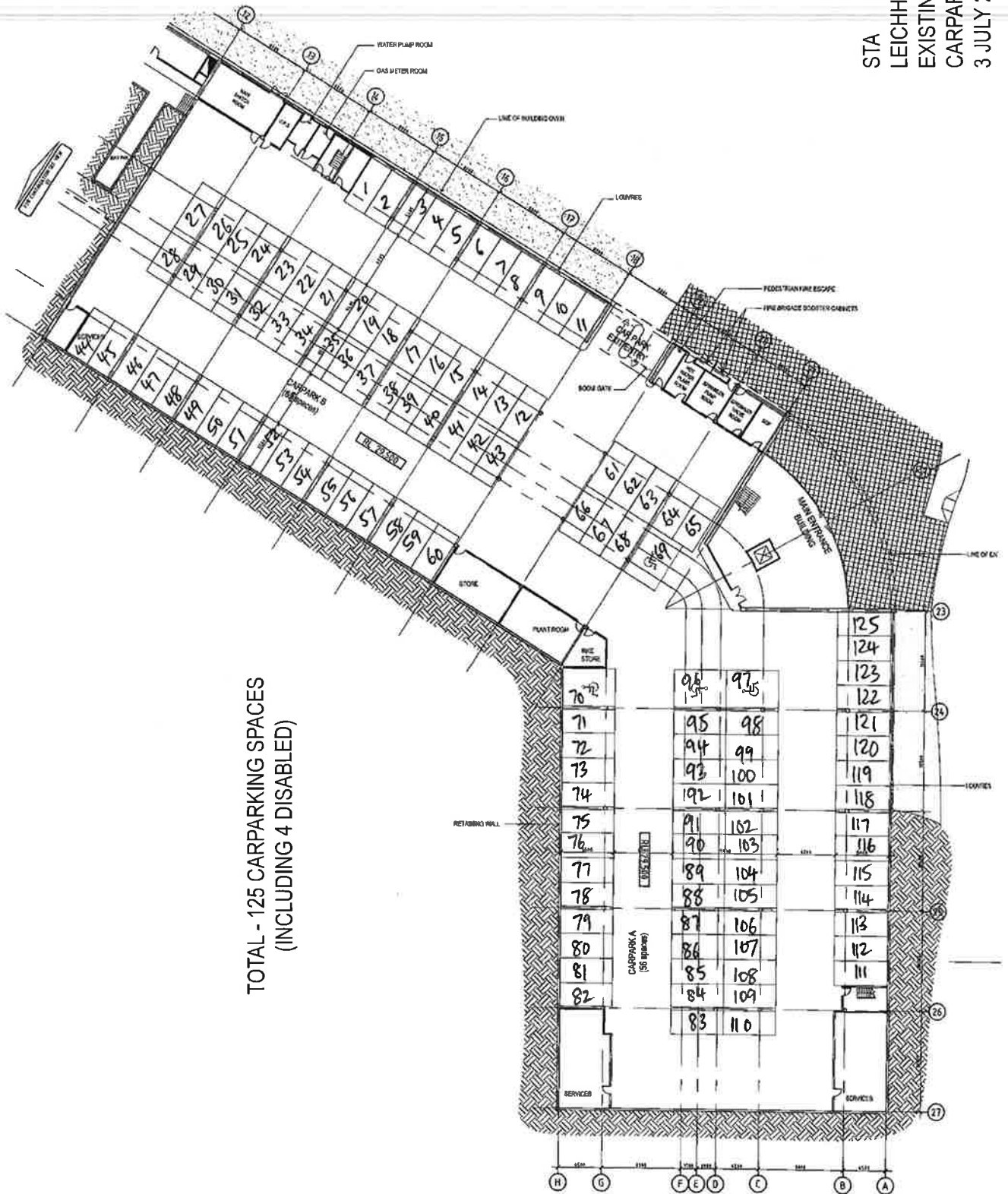
Enc.

# **ATTACHMENT 1**

## **Basement Carpark**

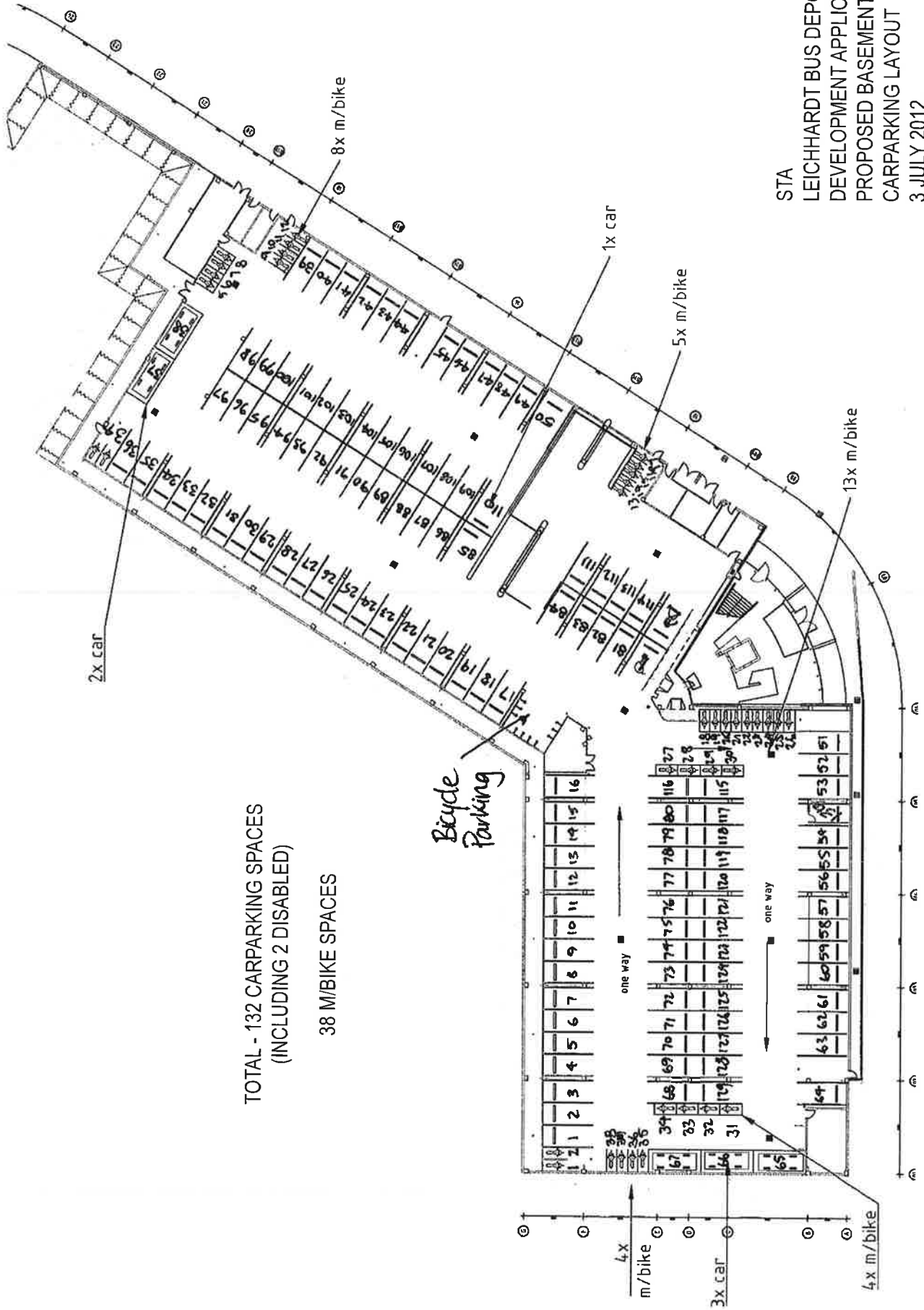
1. The existing basement carparking layout
2. The proposed basement carparking layout

STA  
LEIGHARDT BUS DEPOT  
EXISTING BASEMENT  
CARPARKING LAYOUT  
3 JULY 2012



TOTAL - 125 CARPARKING SPACES  
(INCLUDING 4 DISABLED)

STA  
LEICHHARDT BUS DEPOT  
DEVELOPMENT APPLICATION  
PROPOSED BASEMENT  
CARPARKING LAYOUT  
3 JULY 2012



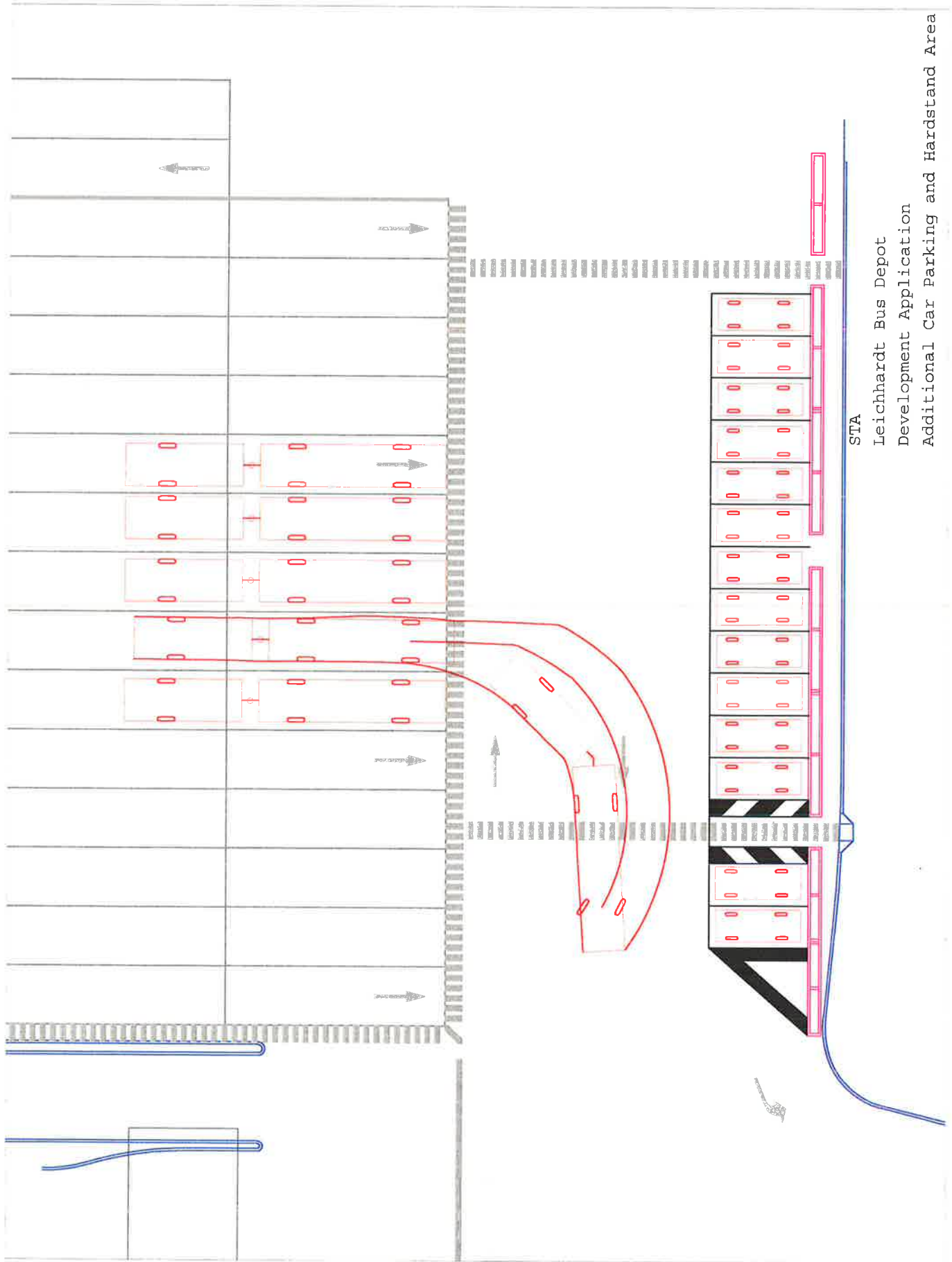
TOTAL - 132 CARPARKING SPACES  
(INCLUDING 2 DISABLED)

38 M/BIKE SPACES

## **ATTACHMENT 2**

### **External Parking**

1. The proposed 14 external carspaces (enlarged view)
2. The existing hardstand area showing the location of the these 14 carspaces



STA

Leichhardt Bus Depot

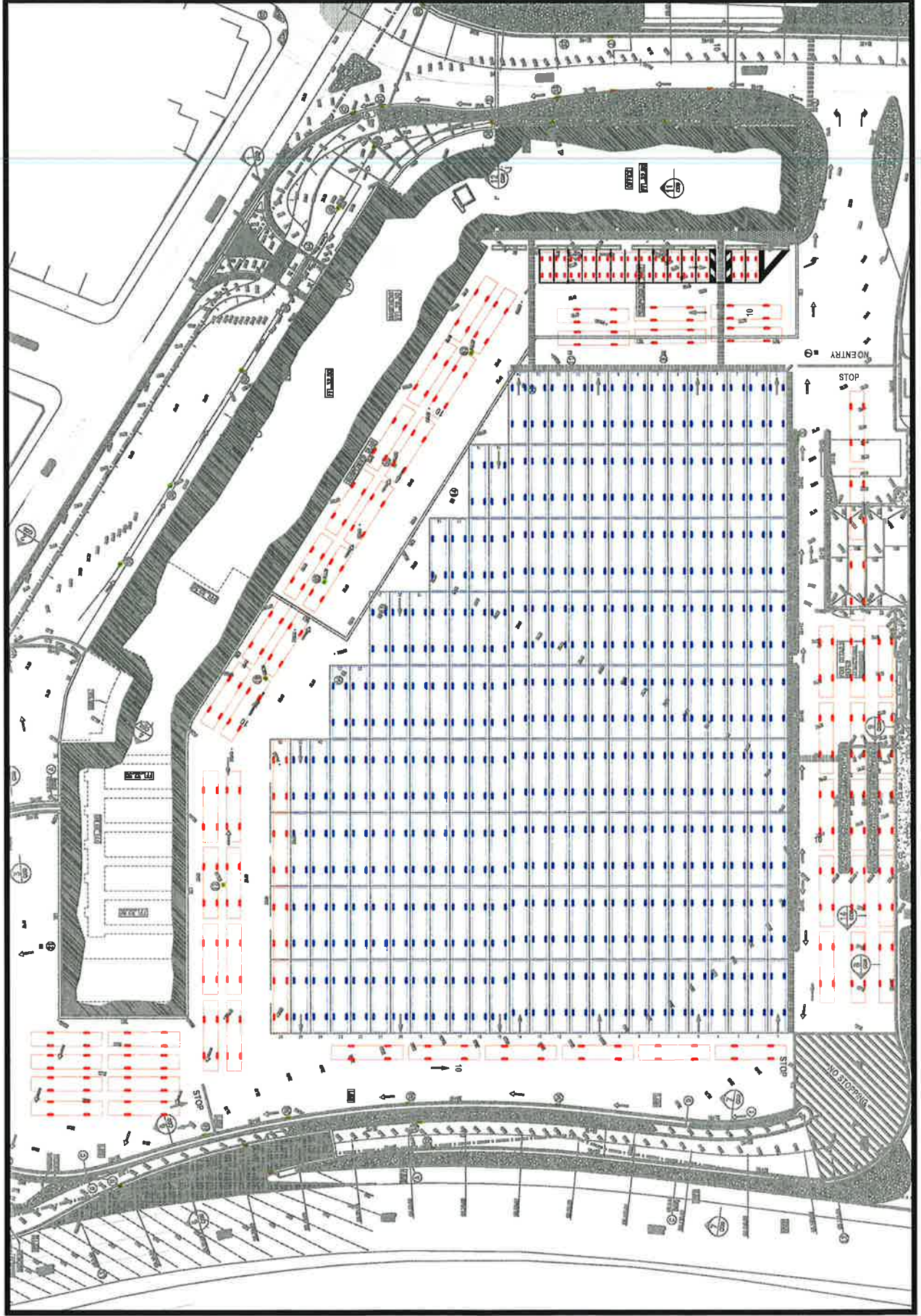
Development Application

Additional Car Parking and Hardstand Area

03 May 2012



**MARKED BAYS = 192**  
**AISELE AREAS = 64**  
**MAINTENANCE = 25**  
**TOTAL = 281**

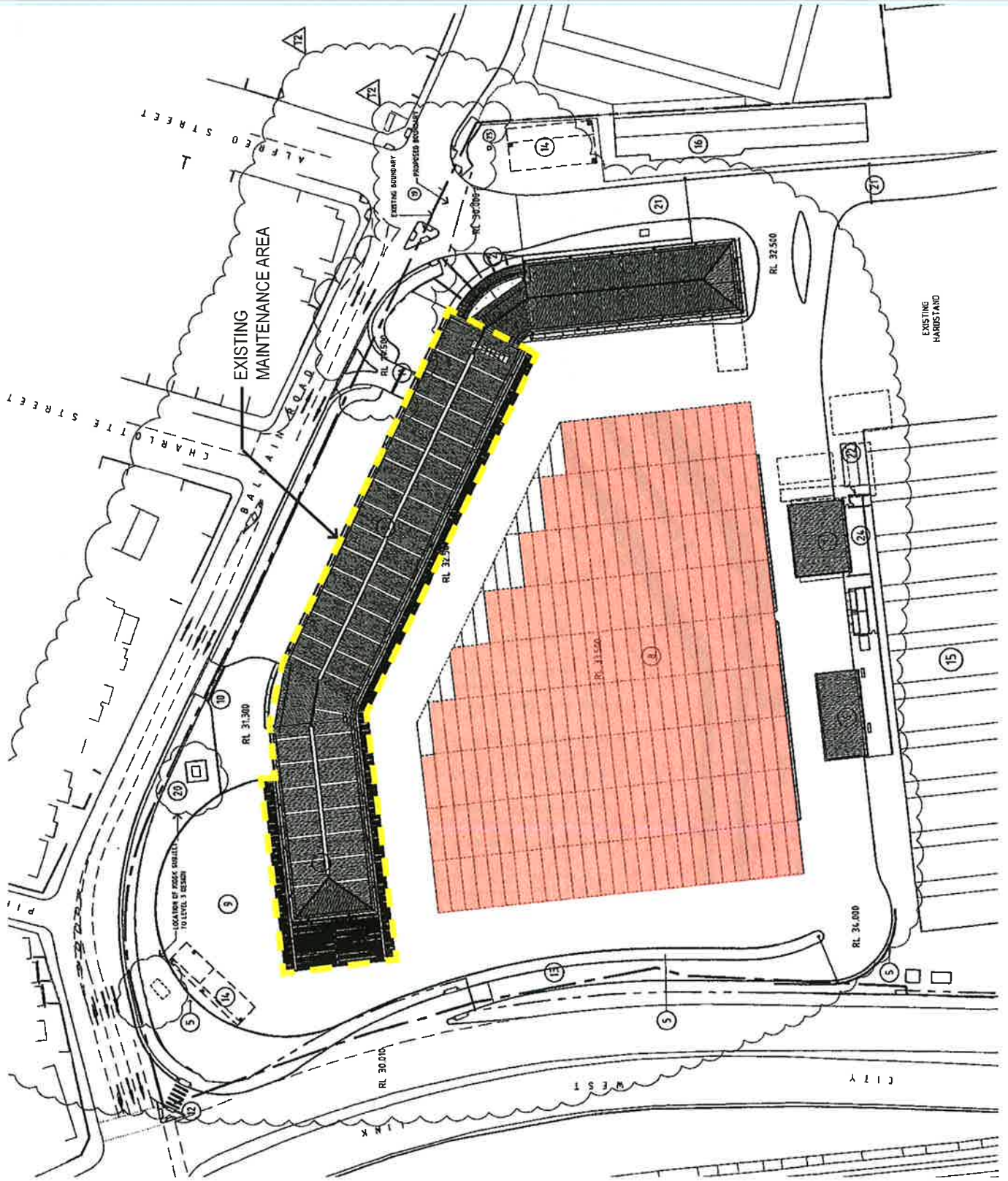


## **ATTACHMENT 3**

### **Bus Layout (existing hardstand area)**

1. The existing bus parking layout showing the bus spaces and the maintenance area; and
  2. The proposed bus parking layout, which incorporates parking in the aisles and the maintenance area.
-

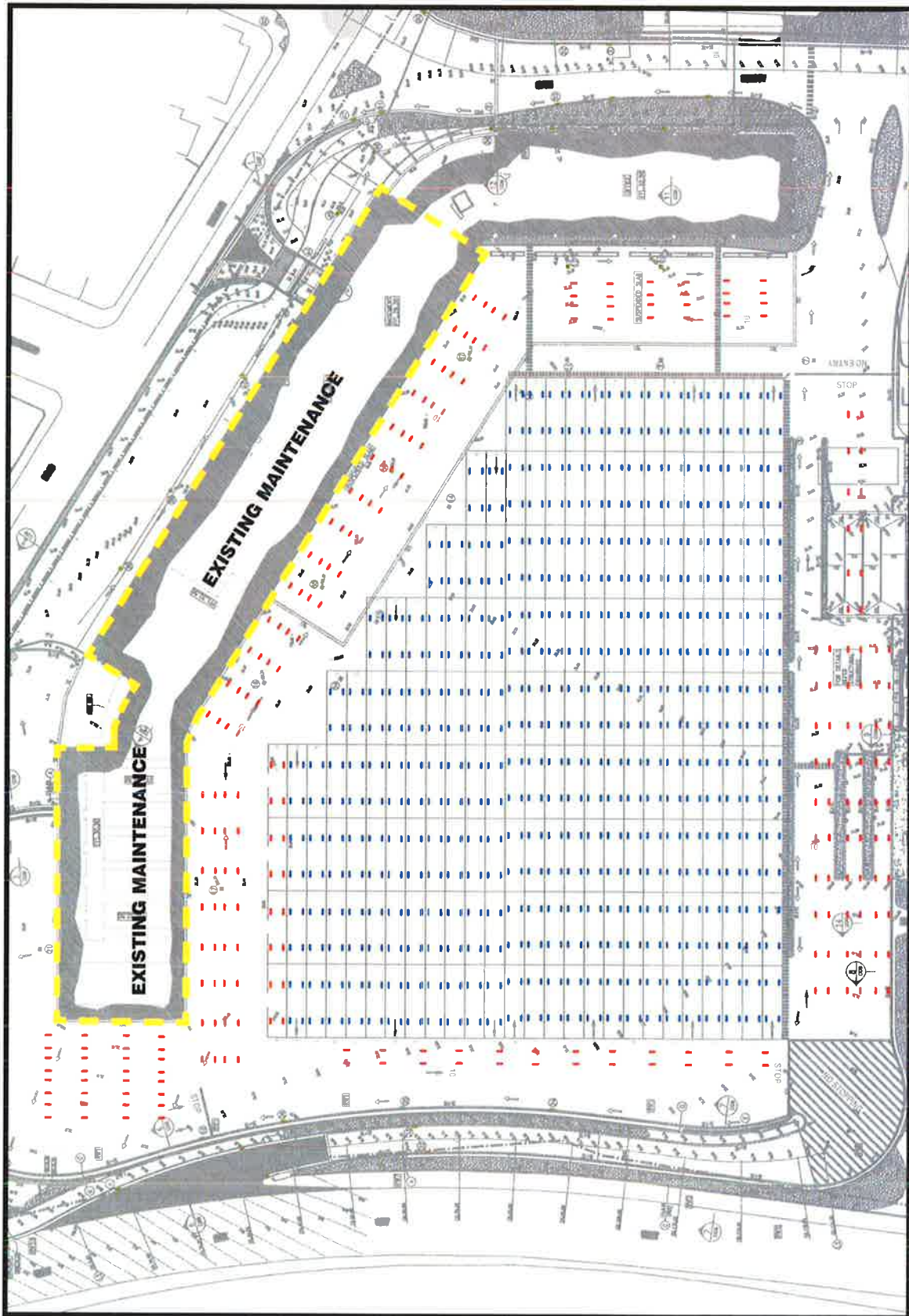




TOTAL - 200 BUS  
PARKING SPACES

STA  
LEICHHARDT BUS DEPOT  
EXISTING BUS PARKING  
LAYOUT  
3 JULY 2012

**MARKED BAYS = 192**  
**AISSLE AREAS = 64**  
**EXISTING MAINTENANCE = 25**  
**TOTAL = 281**



STA  
LEICHHARDT BUS DEPOT  
DEVELOPMENT APPLICATION  
PROPOSED BUS PARKING  
LAYOUT  
3 JULY 2012



Our Ref: 11037/1607A

16 July 2012

The General Manger  
Leichhardt Municipal Council  
PO Box 45  
Leichhardt NSW 2040

By Email

Attention: Mr Brendon Clendenning

Dear Brendon,

**DEVELOPMENT APPLICATION NO 295/2012**  
**LEICHHARDT BUS DEPOT – ACCOMMODATION OF ADDITIONAL BUSES**

I refer to the above development application and provide further clarification in relation to the maintenance area and the parking of additional buses in this area at the Leichhardt Depot. Please note that this information is also to be read in conjunction with the Statement of Environmental Effects dated 7 June 2012 and its attachments including the Traffic Impact Assessment dated May 2012 (Revision B) previously lodged with Council.

The maintenance area for buses, which includes individual bays at the Leichhardt Depot was approved under Development Consent DA06/0660 dated 19 July 2007. The maintenance area adjoins the administration building as shown on Figure 1. The current approval for the Leichhardt Bus Depot includes parking of 200 buses. This also includes buses that may be parked in the maintenance bay.

The current practice at the Leichhardt Depot is for a bus to drive into the maintenance area and to be maintained. The bus then reverses or drives out dependent on the maintenance bay. Two maintenance bays at the northern end of the facility are open at either end. Figure 2 shows photographs of the existing maintenance area.

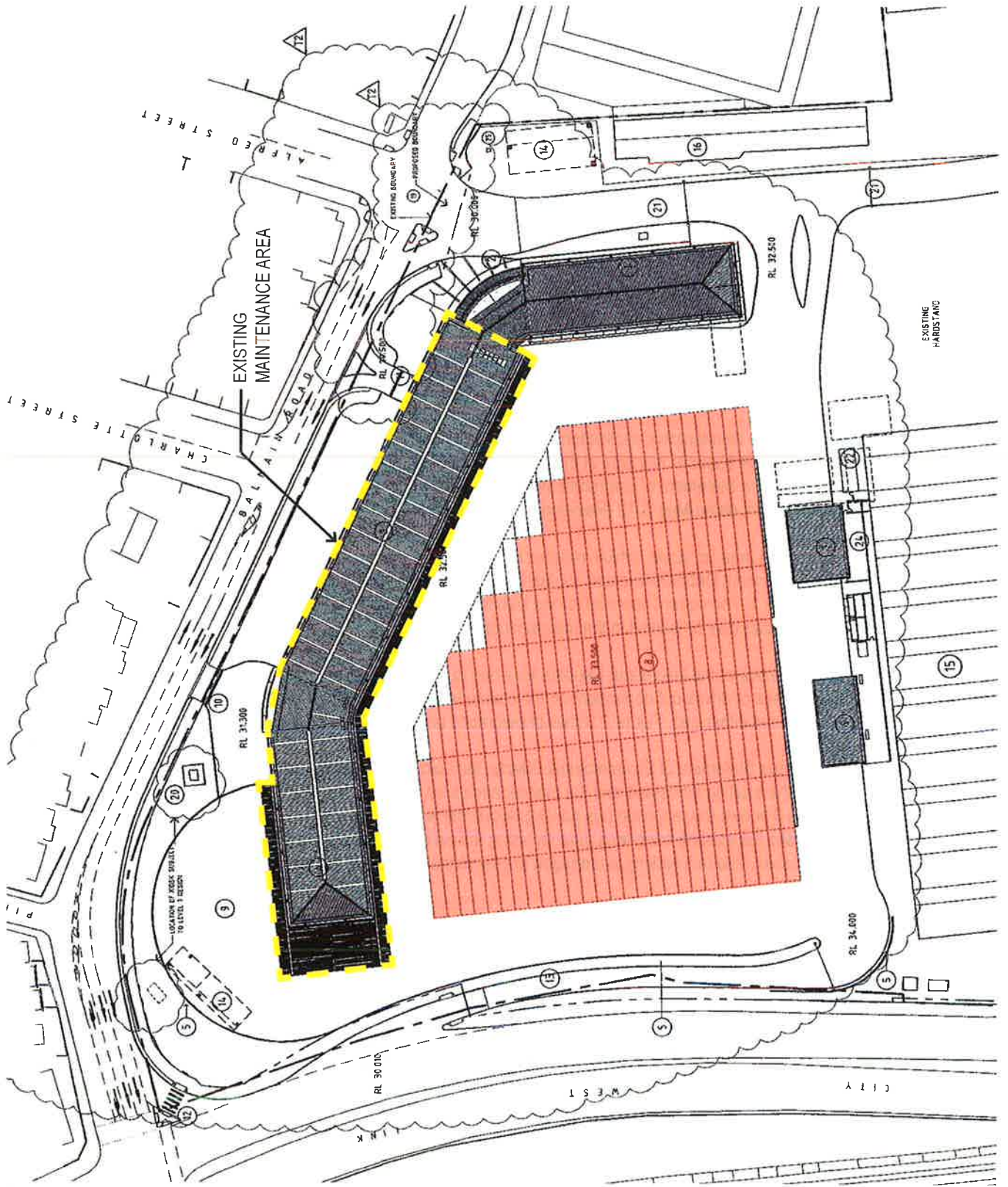
As outlined in the Statement of Environmental Effects, the Leichhardt Bus Depot is able to accommodate additional buses within the existing hardstand and the maintenance area that is already approved for the accommodation of buses. Figure 3 shows the proposed bus parking layout that is subject to the new development application. The proposal utilises the existing hardstand area including the aisles and the maintenance bays to provide parking for a total of 281 buses. The bus parking is managed to ensure that buses within the aisle areas are the buses that are first out and last in.

If you require any further information please do not hesitate to contact me.

Yours faithfully,

Vanessa Colclough  
Director  
Peter Andrews + Associates Pty Ltd

Enc.



TOTAL - 200 BUS  
PARKING SPACES

FIGURE 1  
LOCATION OF EXISTING  
MAINTENANCE AREA

STA  
LEICHHARDT BUS DEPOT  
EXISTING BUS PARKING  
LAYOUT  
6 JULY 2012



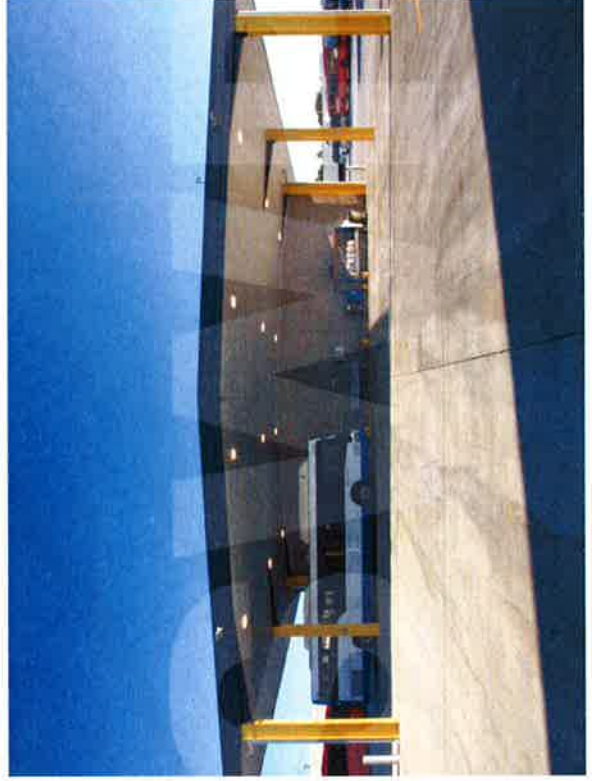


FIGURE 2  
PHOTOS OF EXISTING  
MAINTENANCE AREA  
STA  
LEICHHARDT BUS DEPOT  
DEVELOPMENT APPLICATION  
PROPOSED BUS PARKING  
LAYOUT  
6 JULY 2012

**MARKED BAYS = 192**  
**AISLE AREAS = 64**  
**EXISTING MAINTENANCE = 25**  
**TOTAL = 281**

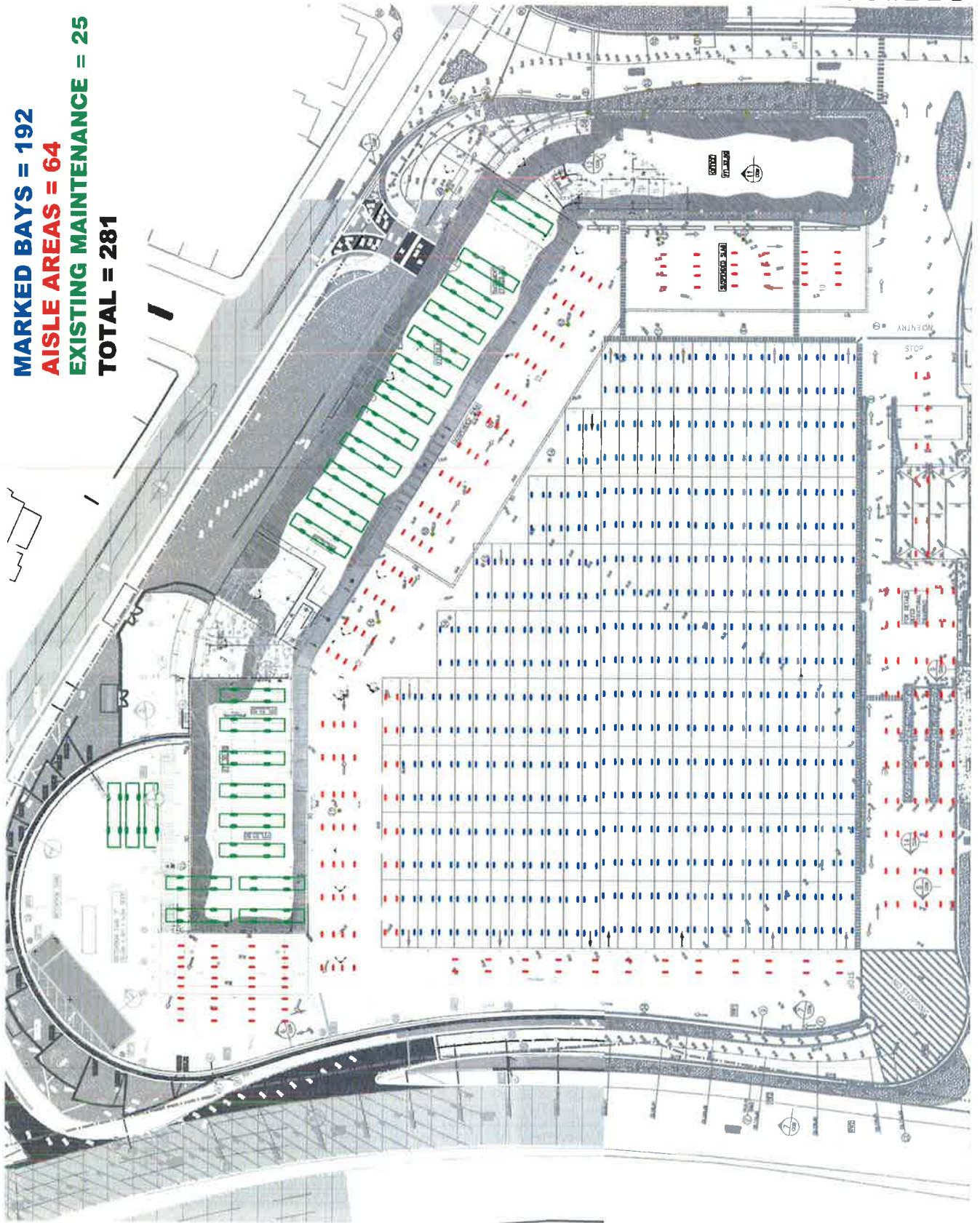


FIGURE 3  
 PROPOSED BUS PARKING  
 AREA  
 STA  
 LEICHHARDT BUS DEPOT  
 DEVELOPMENT APPLICATION  
 PROPOSED BUS PARKING  
 LAYOUT  
 6 JULY 2012



# **ATTACHMENT 4**



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**BUILDING & DEVELOPMENT COUNCIL****DECEMBER 2012**

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<b>Development Application No.</b>	➤ D/2012/295
<b>Address</b>	➤ 25 Derbyshire Road; 230 Balmain Road; 27 Derbyshire Road; 240 Balmain Road; 182 Balmain Road; 29 Derbyshire Road Leichhardt (also known as Leichhardt Bus Depot)
<b>Description of Development</b>	➤ Re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot.
<b>Date of Receipt</b>	➤ 19 June 2012
<b>Value of Works</b>	➤ N/A
<b>Applicant's Details</b>	➤ State Transit Authority Mary Macken/Sydney Buses Level 1, 219 Cleveland St STRAWBERRY HILLS NSW 2012
<b>Owner's Details</b>	➤ State Transit Authority Of NSW PO BOX 2557 STRAWBERRY HILLS NSW 2012
<b>Notification Dates</b>	➤ 12th July 2012 to 10th August 2012
<b>Number of Submissions</b>	➤ 45 in opposition
<b>Building Classification</b>	➤ Class 5 and Class 7(a)
<b>Integrated Development</b>	➤ No
<b>Reason for referral to Council Meeting</b>	➤ Number of submissions

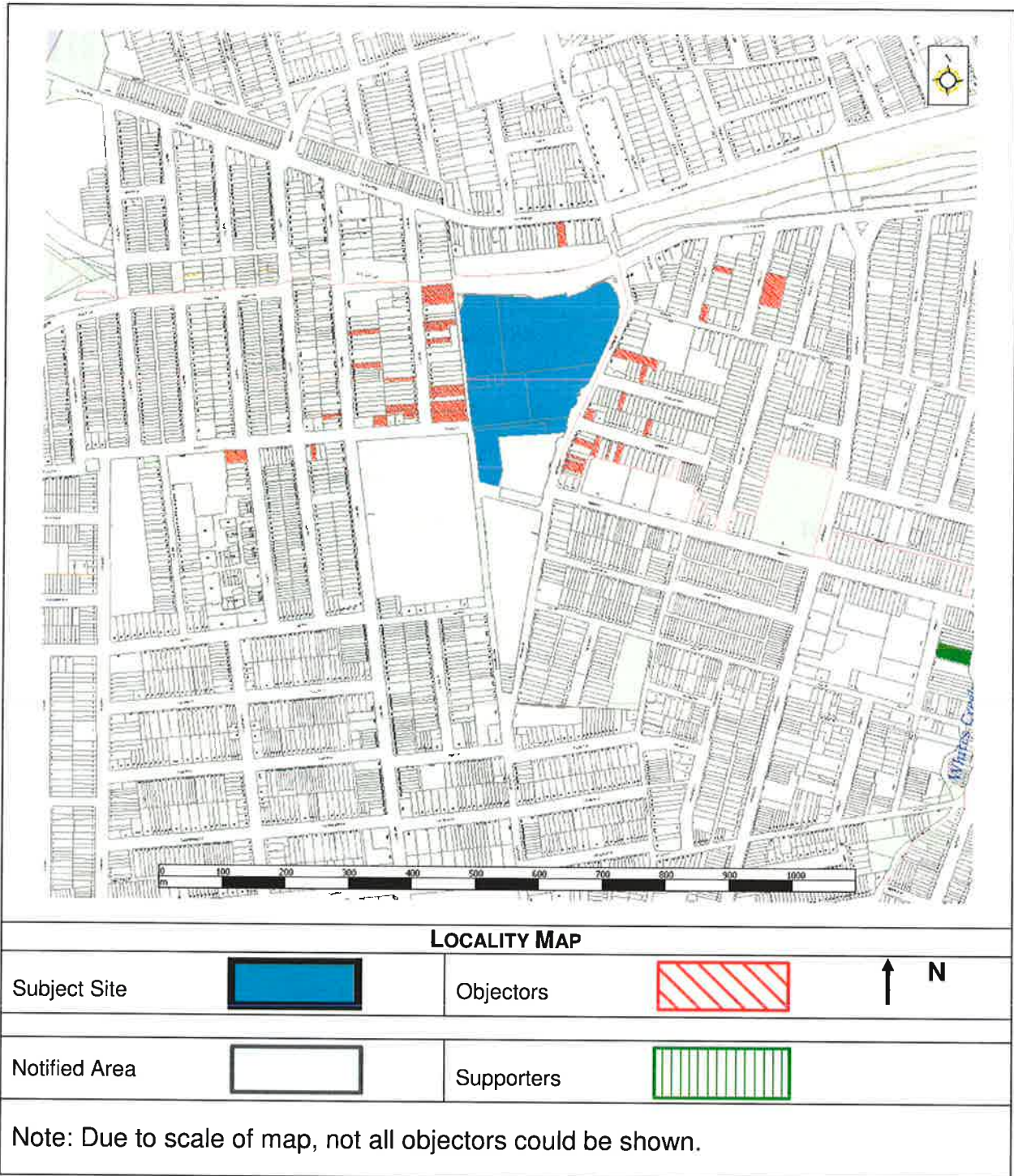
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<b>Main Issues</b>	➤ Parking ➤ Traffic ➤ Building Code of Australia Compliance
<b>Recommendation</b>	➤ Referral of the application to the Joint Regional Planning Panel (JRPP) with a recommendation of refusal.

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<b>Attachment A</b>	➤ Plans of proposal
<b>Attachment B</b>	➤ Extract of Traffic and Parking Study

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## **1. PROPOSAL**

This application seeks consent for re-configuration of parking to provide for additional bus and car parking at the Leichhardt Bus Depot. Specifically, the application seeks the following:

- Increase bus parking capacity from 200 to 281 (an increase of 81).
- Increase car parking capacity from 125 to 146 spaces (132 at basement level and 14 at the bus parking level; the latter of which may only be used during daytime hours after the first buses have left for the morning and before the last buses have returned for the evening).
- Increased bicycle parking capacity.
- An increase in the number of employees, including an overall increase in daytime staff, and bus drivers.
- Increase in the number of employees such that:
  - Total staff increase from 465 to 557 (an increase of 92)
  - Daytime shift staff to increase from 252 to 328 (an increase of 76)
  - Bus drivers to increase from 190 to 266 (an increase of 76).

## **2. SITE DESCRIPTION**

The site is the Leichhardt Bus Depot, located within the former Tram Depot site, bounded by Balmain Road, Derbyshire Road, the City West Link, and the Sydney Secondary College Leichhardt Campus. The Leichhardt Bus Depot comprises the following properties:

- 25 Derbyshire Road
- 230 Balmain Road
- 27 Derbyshire Road
- 240 Balmain Road
- 182 Balmain Road
- 29 Derbyshire Road

The site accommodates a number of buildings, including the existing Leichhardt Bus Depot, the Tramshed building (approved to be the Sydney Bus Museum), Former Traffic Offices building and Former Cable Store building.

The site presently contains Items of Environmental Heritage of State Significance under Leichhardt Local Environmental Plan 2000 being the SRA Stores Branch Building, former Tram Depot Office, Tramshed, Cable Store. A Landscape Item of Local significance is also situated on the site being a large Moreton Bay Fig tree.

The site is zoned Public Purposes under Leichhardt Local Environmental Plan 2000. However, two of the allotments are zoned in accordance with Leichhardt Planning Scheme Ordinance, being 25 Derbyshire Road, which is zoned 5(a) Public Transport Depot and 240 Balmain Road, which is zoned 5(b) Railways

The site is located within the distinctive neighbourhood of Helsarmel.



### 3. SITE HISTORY

Various applications have been lodged with Council since 21 April 1964 and the use of the site as a Bus Depot appeared to commence in approximately 1935. The following applications have been lodged with Council since 2001:

<b>Date</b>	<b>Application Details</b>
D/2001/130	Removal of underground storage tanks and remediation of site – approved.
D/2001/376	New vehicle access opposite Charlotte Street. – APPROVED (19 December 2002).
D/2001/726	Construction of a compressed natural gas refuelling facility to refuel buses and construction of the associated electricity substation - APPROVED (23 January 2002).
D/2006/660	<p>Location and siting of the new Leichhardt Bus Dept and STA Regional Office, use of the Former Tram Shed for STA office use. Use of the Former Traffic Office Building for STA office use, use of the Former Cable Store Building for storage purposes and associated works.</p> <p>Stage 1 of the development is for demolition of refuelling and bus wash facilities, a new Leichhardt Bus Depot and STA Regional Office comprising commercial building with an office function, workshop/maintenance area, basement parking for 125 vehicles and loading dock, hardstand and circulation area for the parking of 200 buses. freeway wall, bulk earth works, ancillary landscaping and drainage works, new access road off Balmain Road (opposite Alfred Street), new access road off City West Link, consolidation and associated works – APPROVED (19 July 2007).</p>
D/2010/663	Redevelopment of the site to accommodate new Leichhardt Police Station. Works include alterations and fitout of the existing tram cable-store building; construction of a new three-storey building; new off-street parking and altered on-street parking on Derbyshire Road. Proposed hours of operations are 24 hours per day, 7 days per week – WITHDRAWN (29 September 2011).
D/2011/540	Use of an existing building and its surrounds as a public transport museum – APPROVED (12 March 2012).
D/2012/415	Installation of additional equipment on an existing telecommunications facility – WITHDRAWN (1 November 2012).

The following table outlines relevant history of the surrounding properties.

160-180 Balmain Road (Leichhardt Secondary College)

Date	Application Details
D/2001/366	Closure of Moore St West for construction of new playing fields for school.

#### **4. CROWN DEVELOPMENT ASSESSMENT PROCESS**

Section 89 of the Environmental Planning & Assessment Act 1979 applies to this application as it pertains to Crown land. Section 89 and Section 89A are reproduced below

*"89 Determination of Crown development applications*

- (1) A consent authority (other than the Minister) must not:*
  - (a) refuse its consent to a Crown development application, except with the approval of the Minister, or*
  - (b) impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.*
- (2) If the consent authority fails to determine a Crown development application within the period prescribed by the regulations, the applicant or the consent authority may refer the application:*
  - (a) to the Minister, if the consent authority is not a council, or*
  - (b) to the applicable regional panel, if the consent authority is a council.*
- (2A) A Crown development application for which the consent authority is a council must not be referred to the Minister unless it is first referred to the applicable regional panel.*
- (3) An applicable regional panel to which a Crown development application is referred may exercise the functions of the council as a consent authority (subject to subsection (1)) with respect to the application.*
- (4) A decision by a regional panel in determining a Crown development application is taken for all purposes to be the decision of the council.*
- (5) If an applicable regional panel fails to determine a Crown development application within the period prescribed by the regulations, the applicant or the panel may refer the application to the Minister.*
- (6) The party that refers an application under this section must notify the other party in writing that the application has been referred.*
- (7) When an application is referred under this section to an applicable regional panel or the Minister, the consent authority must, as soon as practicable, submit to the panel or the Minister:*
  - (a) a copy of the development application, and*
  - (b) details of its proposed determination of the development application, and*
  - (c) the reasons for the proposed determination, and*
  - (d) any relevant reports of another public authority.*
- (8) An application may be referred by a consent authority or applicable regional panel before the end of a relevant period referred to in subsection (2) or (5).*

#### **89A Directions by Minister**

*(1) On a referral being made by a consent authority or an applicable regional panel, or an applicant, to the Minister under this Division, the Minister may direct the relevant consent authority, within the time specified in the direction:*

*(a) to approve the Crown development application, with or without specified conditions, or*

*(b) to refuse the Crown development application.*

*(2) A consent authority must comply with a direction by the Minister.*

*(3) If the consent authority fails to comply, the consent authority is taken, on the last date for compliance specified in the direction, to have determined the Crown development application in accordance with the Minister's direction.*

*(4) Despite subsection (2), a consent authority may vary a condition specified by the Minister with the approval of the applicant".*

Thus, pursuant to Section 89(1) if Council seeks to impose a condition of consent on this application, or refuse this application, concurrence must first be sought from the Minister. However, pursuant to Section 89(2A), the application must first be referred to the Joint Regional Planning Panel.

## **5. ASSESSMENT**

The following is a summary of the assessment of the application in accordance with Section 79C of the Environmental Planning & Assessment Act 1979.

### **(a)(i) Environmental Planning Instruments**

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy (Infrastructure) 2007
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Leichhardt Local Environmental Plan 2000

The following summarises the assessment of the proposal against the development standards and lists the other relevant clauses of the Leichhardt Local Environmental Plan 2000.

- Clause 12 – Vision of the plan
- Clause 13 – General Objectives
- Clause 15 – Heritage Objectives
- Clause 16(7) – Development in the Vicinity of a heritage item
- Clause 16(8) – Development in Conservation Areas
- Clause 20 -Employment Objectives
- Clause 35 – Suspension of Covenants, Agreements and Instruments

The application satisfies the provisions of the above Environmental Planning Instruments with the exception of the following.

### Employment Objectives

Clause 20 of the Leichhardt Local Environmental Plan 2000 requires buildings used for employment to be “appropriately located and designed to minimise the generation of noise, traffic, car parking, waste, pollution and other adverse impacts, to maintain the amenity of surrounding land uses, and avoid harm to the environment”.

It is considered that the proposal does not meet the above requirement. Further discussion on these matters is provided in Section 5(a)(iii) of this report.

### **(a)(ii) Draft Environmental Planning Instruments**

There are no Draft Environmental Planning Instruments applicable to the subject application.

### **(a)(iii) Development Control Plans**

The application has been assessed against the relevant Development Control Plans listed below:

- Leichhardt Development Control Plan 2000
- Leichhardt Development Control Plan No.32 – Equity of Access
- Leichhardt Development Control Plan No.36 – Notifications
- Leichhardt Development Control Plan No.38 – Waste: Avoid, Reuse, Recycle
- Leichhardt Development Control Plan No.42 – Contaminated Land Management

More specifically, the application has been assessed against the following clauses of Development Control Plan 2000.

- Part A2.0 – Urban framework plans
- Part A3.0 – Principles of ecologically sustainable development
- Part A3a.0 – Sustainable water and risk management
- Part A4.0 – Urban form and design
- Part A5.0 – Amenity
- Part A6.0 – Site analysis
- Part A7.0 – Heritage conservation
- Part A8.0 - Parking standards & controls
- Part A10.2.4. – Hellsmer distinctive neighbourhood
- Part C1.1- Site layout & building design
- Part C1.2 - Parking layout, servicing & manoeuvring
- Part C1.5 - Site facilities
- Part C2.1 - Site drainage & stormwater control
- Part C2.9 - Appliances & equipment
- Part C3.1 - Noise & vibration generation
- Part C3.2 - Air pollution
- Part C3.3 - Water pollution
- Part C3.4 - Working hours

The application satisfies the provisions of the above Development Control Plans with the exception of the following

Part A8.0 Parking standards & controls and Part C1.2 – Parking layout, servicing & manoeuvring:

At its meeting of 26 June 2012, Council resolved as follows:

*.....That Council undertake a new parking availability survey in surrounding residential streets to be incorporated into the Council assessment report.*

That survey was undertaken, and the main body of this study is attached as 'Attachment B'. For brevity, the lengthy appendices to that study have not been provided however are readily available for viewing on Council's on-line DA tracking system.

It is advised that the study was reviewed and considered by Council's Traffic Engineer. The following comments were provided:

*"Council engaged GTA Consultants to undertake a Transport Impact Assessment Peer Review of the Leichhardt Bus Depot.*

*The purpose of the report was to assess the anticipated transport implications of the bus depot upgrades considering the following:*

- Existing traffic and parking conditions surrounding the site*
- Suitability of the proposed parking in terms of supply and layout*
- The parking impact of the proposed development on the surrounding streets*
- The traffic generating characteristics of the proposed development*
- The transport impact of the development proposal on the surrounding road network*

*The main findings of the report are as follows:*

- Conservatively estimates that a total of 81 bus movements and 21 vehicles movements will occur in the AM and PM peak hour.*
- Against existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network. Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.*
- The additional car parking demand as a result on the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets however existing demand profile indicate that these can be accommodated within the study area streets. It is likely, however, that this would further reduce the on street parking availability in close proximity to the bus depot, thereby reducing the availability for residents and other local users. It would also increase the circulation of vehicles searching for parking in local streets and increase walking distances for residents and other local users.*

- *To provide an approximation of the likely parking impact of the additional bus depot staff, the 2006 Census data indicates that the Journey to Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. On this basis 56 of the additional 76 staff would arrive by car. When accounting for the additional parking spaces on site this would result in around 40 additional vehicles parked on street in the vicinity of the site.*

*Given the findings of the report, the development is not supported as a result of the insufficient on site parking proposed and its subsequent impact on parking in the surrounding residential streets”.*

Furthermore, as well as a deficiency in the gross amount of parking there is the related problem that parking for residents is being pressured to the extent that often residents are unable to park near their homes. The parking demand generated by the proposed use cannot be readily incorporated into the nearest streets without exacerbating detrimental impacts on local residents.

Adding to the parking concerns above is the fact that this area is also used to accommodate parking from the high school, the nearby function centre, park users (discussed in greater detail in Section 7 of this report), sports teams using the playing fields and the Greek Church on Henry Street. This means that the parking shortfall may be further exacerbated during periods when events and functions are taking place within the vicinity of the site.

On the basis of the above, the expected parking impacts on the surrounding street network are not supported, and the application is recommended for refusal on these grounds.

#### **(a)(iv) Environmental Planning and Assessment Regulation 2000**

The Development Application has been assessed against the relevant clauses of the Environmental Planning and Assessment Regulation 2000. The Development Application fully complies with the Environmental Planning and Assessment Regulation 2000.

#### **(b) The likely environmental both natural and built environment, social and economic impacts in the locality**

The assessment of the Development Application demonstrates that the proposal will have an adverse impact on the locality in the following way:

- Parking demand cannot be accommodated on the site, and cannot be readily absorbed into the surrounding street network without affecting the amenity of nearby residents, and other users of street parking in the vicinity.

#### **(c) The suitability of the site for the development**

The site is zoned Public Purpose in accordance with Leichhardt Local Environmental Plan 2000 and 5(a) Public Transport Depot and 5(b) Railways in accordance with the Leichhardt Planning Scheme Ordinance. It is considered that the proposal will have an adverse impact on the surrounding area for those reasons outlined elsewhere in

this report and therefore it is considered that the site is unsuitable to accommodate the proposed development.

**(d) Any submissions made in accordance with the Act or the regulations**

The Development Application was notified for a period of 30 days.

The notification period was from 12th July 2012 to 10th August 2012. The notification of the application included:

- Approximately 2200 letters sent to nearby properties.
- A yellow site notice placed on the site.
- Listing under the notification section on Council's website.

45 objections were received during the advertising period.

The following information is provided in response to the issues raised in the objections.

Issue: Impact on on-street parking in nearby residential streets, particularly given that proposal does not seek sufficient on site parking to accommodate the increased parking demand. Concerns also related to impact of proposal in conjunction with the various public facilities in the area, and the pending upgrades to the light rail system and opening of the Leichhardt Bus Museum.

Comment: Refer to Section 5(a)(iii) of this report in relation to parking.

Issue: Impact on traffic congestion, particularly at the intersection of the City West Link and Norton Street and the City West Link and Balmain Road.

Comment: An independent assessment of the impacts of the proposal on traffic in the locality has been undertaken. It was concluded that *"whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays"*. Subsequently it is considered that the proposal is satisfactory in this regard.

Issue: Additional bus and car movements being a hazard for vehicle and pedestrian safety.

Comment: As a result of the proposal there will be an increase in the number of bus and car movements to and from the site. While it is not considered that this issue is so significant as to warrant refusal of the proposal, the additional on-street parking impacts in the locality are significant and the application is not supported.

Issue: Impact on property values

Comment: There is no evidence to suggest that the proposal will impact on nearby property values.



Issue: Acoustic impacts created by the additional bus and car movements, and from the existing public address (PA) system used at the site. It has been suggested that the PA system currently operates as late as 11:00pm.

Comment: Given that buses currently operate from the site, it is not considered that the current proposal would give rise to significant additional acoustic impacts on nearby properties. That said, no acoustic analysis has been undertaken which would confirm (or not) this situation. Given the application is recommended for refusal on the basis of a substantial on-site parking shortfall, this is not considered warranted at this time.

The premises are currently permitted to operate 24 hours per day. Were the application recommended for approval, a condition of consent relating acoustic output emanating from the site may have been recommended.

Issue: *"(The residents) were not notified last time 90 people were employed and after the event we lodged our complaint".*

Comment: There is no record of an additional 90 people being employed at the site, other than this application being considered.

Issue: *"(Residents were not notified) when the changes were made to altering the plans by having lights instead of a round about on the corner of Alfred St and Balmain Rd, citing the buses needed a larger turning circle than the original plans (to accommodate a bicycle path)"*

Comment: The traffic lights were a condition of consent which were endorsed by the then Roads and Traffic Authority and the applicant. No notification was required.

Issue: *"The lack of information from the State Transit Authority on the need for such a massive, rapid expansion just a few years after the Leichhardt Bus Depot's substantial redevelopment is also of concern, especially with extra public transport planned for the area with the upcoming expansion of the Light Rail service".*

Issue: *"I am also concerned that this Development Application has been submitted ahead of any feasibility study on public transport in the Leichhardt area".*

Comment: The information dispersed to the public from the applicant is not a matter for the assessment of the proposal.

Issue: The high volume of bus traffic causes damage to nearby roads.

Comment: Noted.

Issue: *"We were not informed that a major new bus route, the M10, would be using William Street to both exit and enter the bus depot".*

Comment: Council is not aware of any requirement for the applicant to notify residents of changes to bus services.

Issue: *“How many more buses are to drive up and down William Street each day if you give this D.A. the go-ahead?”*

Comment: Condition 29 of D/2006/660 does not permit any additional buses departing the bus depot from William Street towards the City West Link between 7:30am and 8:30am Monday to Friday. Thus, no additional buses would be permitted during this period. Beyond this condition, there are no restrictions as to the amount of bus movements from the depot.

Issue: Various additional requests and suggestions were received in relation to the traffic and parking impacts of the proposal. These suggestions are outlined below:

- Examination of speeds of buses travelling on William Street is required.
- Traffic survey of Norton Street and Balmain Road is required.
- No traffic should use the William Street exit.
- Reconfiguration of the depot such that buses come off the Western Distributor.
- Another access point to the City West Link being provided.
- The removal of all bus traffic from William Street.
- The bus depot entrance/exit points to be moved from William Street and Balmain Road to the City West Link, where there is no residential housing.
- A "turn-right" light to be provided at the corner of Norton Street and the Western Distributor.
- The Burwood Bus Depot being more suitable for an upgrade.

Comment: These suggestions relate primarily to the current operations of the bus depot and traffic movements within the vicinity and are outside the scope of this application.

#### **(e) The public interest**

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal is contrary to the public interest.

### **6. SECTION 94 CONTRIBUTIONS**

Section 94 contributions are not payable for the proposal.

### **7. INTERNAL REFERRALS**

The Development Application was referred to the following Council Officers:

#### Building Surveyor

The application was referred to Council's Building Surveyor who provided the following comments:

*“A Building Code of Australia Assessment Report is to be provided confirming the location of the proposed vehicles and bike storage areas (to) maintain compliance with the following Parts of the BCA.*

- Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
- The number of required exits remain compliant with D1.2.
- Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
- The proposed location and number of the Disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.

*Design changes may be proposed by the applicant being subjected to addressing the comments raised above particularly in regards to internal and external changes to address egress, fire services and disabled access requirements”.*

The application has not satisfactorily demonstrated the above. However, given that Council does not support the proposal, this information has not been requested.

#### Development Engineer

The application was referred to Council's Development Engineer. Refer to comments from Council's Traffic Engineer for further information.

#### Strategic Planning (Parks)

The application was referred Strategic Planning (Parks) who provided the following comments:

*“Current and proposed car parking arrangements in Williams Street and Derbyshire Road are significant issues which are negatively affecting the use and enjoyment of Pioneers Memorial Park. These two roads are already congested during day light hours by employees’ cars from the STA site. Since the opening of the new bus facility in 2009 the use of Williams Street has changed dramatically. The Park Plan of Management developed for Pioneers Memorial Park highlights significant problems associated with car parking arrangements in Williams Street.*

*There are substantial issues with the lack of car parking available for park users and visitors to Pioneers Memorial Park (this is a significant issue for young mothers and family groups visiting the park, its playground and passive open space enjoyment) for visitors to the park. These problems have arisen as a direct result of the Original Development Application Approval. A large area of the eastern section of William Street is unrestricted in terms of car parking arrangements. This has had a negative impact on the use of the park as a whole as all available on street car parking is currently being occupied by STA staff during the day restricting access for park users. Further to this safety issues have also been raised in relation to children accessing the park crossing Williams Street with the speed, size and frequency of buses.*

*Parks Planning would like to see parking restrictions for non residents brought into the entire William Street precinct to regulate parking and provide parking arrangements for residents and park users/visitors to Pioneers Memorial Park. The STA needs to recognise that car parking facilities need to be provided on site for STA employees and not in the adjacent residential area. As a possible solution to this dilemma Parks Planning would like to see the current hard surfaced parking area which is confined within the former Cable Store site opened up for parking arrangements to support the STA site. This coupled with parking restrictions in*

*Williams Street would assist in reducing the current congestion along William Street and facilitate greater use and enjoyment of Pioneers Memorial Park. In addition to this speed and the size and volume of buses entering William Street also needs to be reviewed.*

*Finally the Roundabout on the corner of Norton Street and Williams Street has been severely damaged by large buses (bendy buses) cutting across the roundabout to enter Williams Street and this issue also needs to be addressed from a place making, maintenance and safety perspective”.*

The proposal is not supported given the impacts on parking within the vicinity of the site.

#### Traffic Engineer

The application was referred to Council’s Building Surveyor who provided comments, which are outlined within Section 5(a)(iii) of this report in relation to parking and traffic.

### **8. EXTERNAL REFERRALS**

#### Roads and Maritime Services

In accordance with the requirements of Reg. 104 of SEPP (Infrastructure) 2007, the Development Application was referred to Roads and Maritime Services who provided the following comments.

*“RMS has reviewed the proposal and provides following advisory comments to Council for consideration in the determination of the application:*

- 1. The layout of the proposed modified parking areas should be in accordance with AS2890.1-2004 and AS2896.2-2002.*
- 2. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.*
- 3. All works / regulatory signage associated with the proposed development are to be at no cost to the RMS”*

Given that Council does not support the proposal, these recommendations have not been incorporated as draft conditions of consent.

### **9. CONCLUSION**

The Development has been assessed in accordance with Section 79C(1) of the Environmental Planning and Assessment Act 1979 and all relevant instruments and policies. The proposal is unsatisfactory in respect of parking impacts, and will result in adverse impacts on the locality. Additionally, the proposal provides insufficient detail to ensure compliance with the Building Code of Australia. Accordingly, it is

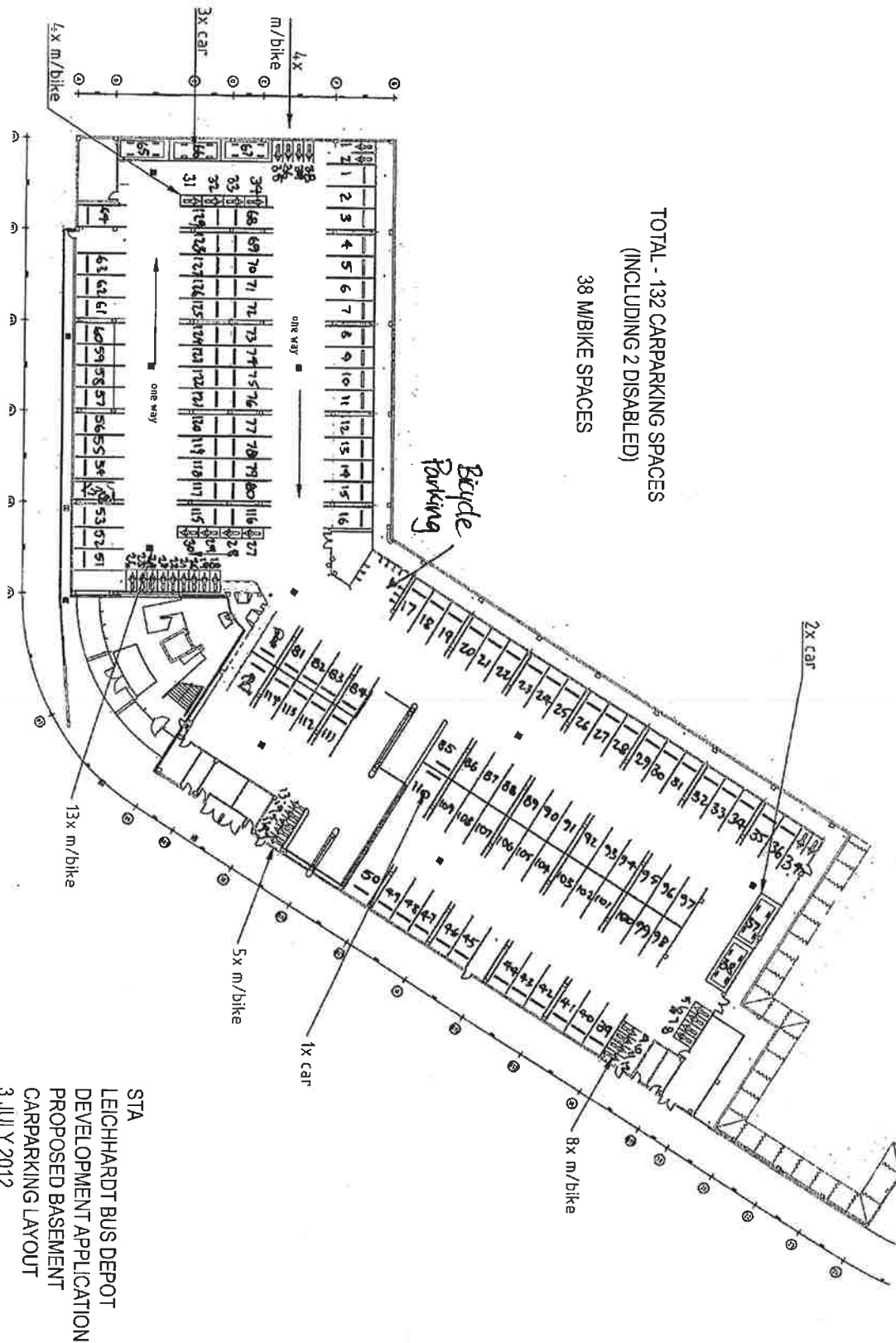
recommended that Council refer this application to the Joint Regional Planning Panel with a recommendation for refusal.

## **10. RECOMMENDATION**

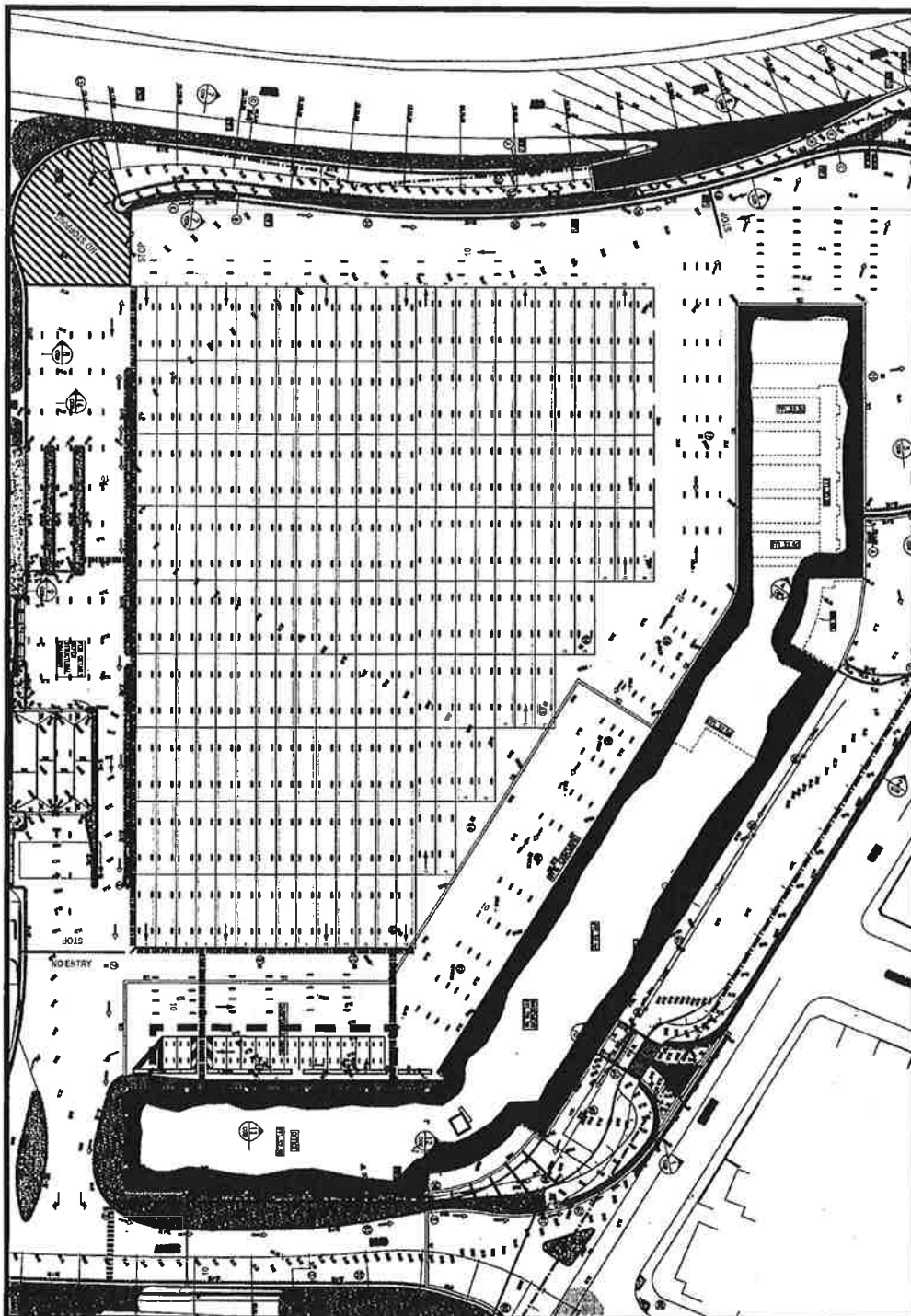
That Council as the consent authority pursuant to s89(1)(a) of the Environmental Planning and Assessment Act 1979 refer the application to the Joint Regional Planning Panel, with a recommendation for refusal of the Development Application No. D/2012/295 for the re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot for the following reasons:

1. The proposal is inconsistent with the Employment objectives of Clause 20 and of the Leichhardt Local Environmental Plan 2000, as the impact on car parking in surrounding residential area is detrimental to the amenity of those surrounding residential properties pursuant to Section 79C (1)(a)(i) of the Environmental Planning and Assessment Act 1979.
2. The proposal fails to comply with the provisions of the Leichhardt Development Control Plan 2000, pursuant to Section 79C (1)(a)(iii) of the Environmental Planning and Assessment Act 1979 as follows:
  - (a) Part A8.0 & Part C1.2 – As the proposal is unable to accommodate the increased parking requirements and will result in an additional 40 vehicles being parked on nearby residential streets.
3. Insufficient information has been provided to demonstrate that the following elements achieve compliance with the requirements of the Building Code of Australia.
  - Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
  - The number of required exits remain compliant with D1.2.
  - Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
  - The proposed location and number of the disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.
4. Given the adverse impacts the proposal would have on the residential amenity of adjoining properties, the subject site is not considered suitable to accommodate the proposed development in its current form, pursuant to Section 79C (1)(c) of the Environmental Planning and Assessment Act 1979.
5. The proposal is not considered to be in the public interest, pursuant to Section 79C (1)(e) of the Environmental Planning and Assessment Act 1979.

# ATTACHMENT 'A' – PLANS OF PROPOSAL



MARKED BAYS = 192  
 AISLE AREAS = 64  
 MAINTENANCE = 25  
 TOTAL = 281



TOTAL - 14 CAR  
 PARKING SPACES

STA  
 LEICHHARDT BUS DEPOT  
 PROPOSED ADDITIONAL  
 CARPARKING  
 3 JULY 2012



## ATTACHMENT 'B' – EXTRACT OF TRAFFIC AND PARKING STUDY



1351015000 09/11/12



# Leichhardt Bus Depot

## Transport Impact Assessment Peer Review

Issue: B 08/11/12

Client: Leichhardt Municipal Council

Reference: 13S1015000

GTA Consultants Office: NSW

### Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By
A	08/10/12	Final	Sarah Court, Rhys Hazell	Rhys Hazell	<i>B.R. Hazell</i>
B	08/11/12	Final – Amended	Sarah Court, Rhys Hazell	Rhys Hazell	<i>B.R. Hazell</i>

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## 1. Introduction

### 1.1 Background

It is understood that NSW Transport, State Transit (STA) has lodged a Development Application (DA) (D/2012/295) with Leichhardt Municipal Council for a proposed reconfiguration of the Leichhardt Bus Depot, located at 230-240 Balmain Road, Leichhardt. The proposed reconfiguration will incorporate an increase in on-site bus storage capacity to accommodate an additional 81 buses within the existing bus hardstand area. A further 21 on-site staff car parking spaces are also proposed within the basement level car park and hardstand area.

GTA Consultants was commissioned by Leichhardt Municipal Council in July 2012 to undertake a transport impact assessment for the proposed development.

### 1.2 Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

- i existing traffic and parking conditions surrounding the site
- ii suitability of the proposed parking in terms of supply (quantum) and layout
- iii the parking impact of the proposed development on the surrounding streets
- iv the traffic generating characteristics of the proposed development
- v the transport impact of the development proposal on the surrounding road network.

### 1.3 References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds
- Leichhardt Municipal Council Development Control Plan (DCP) 2000
- Leichhardt Municipal Council Local Environment Plan (LEP) 2000
- Leichhardt Bus Depot Development Application Report prepared by Peter Andrews and Associates, May 2012
- plans and swept paths for the proposed development prepared by Peter Andrews and Associates as referenced in the context of the Development Application
- Assessment of Traffic and Parking implications – Leichhardt Bus Depot, prepared by Transport and Traffic Planning Associates, May 2012
- traffic and car parking surveys undertaken by ROAR Data as referenced in the context of this report
- other documents and data as referenced in this report.

## 2. Existing Conditions

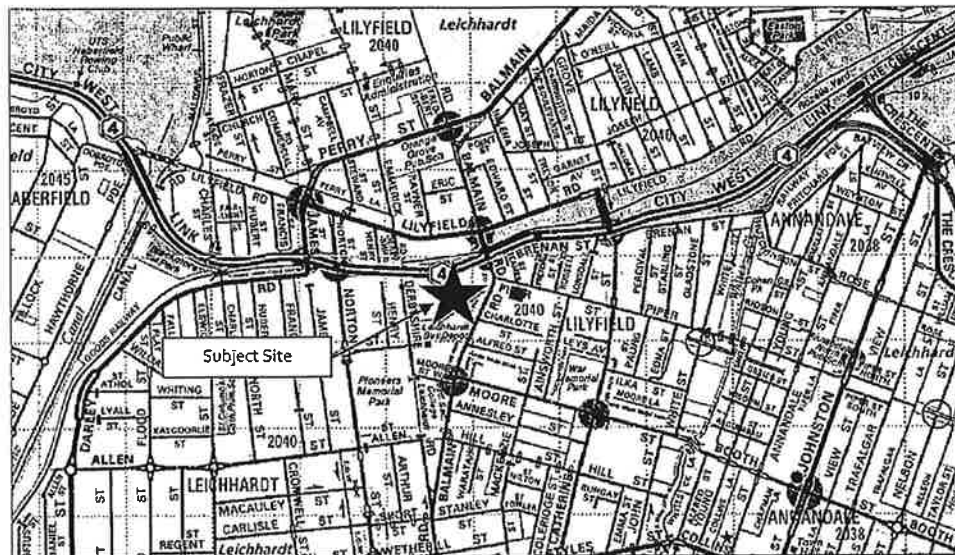
The subject site is located at 230-240 Balmain Road, Leichhardt. The site has a land use classification of 5(B) Railways and Public Purpose under the Leichhardt Local Environment Plan 2000. The site is occupied by the Leichhardt Bus Depot and currently accommodates approximately 200 buses.

The site is bound by the City West Link to the north, Balmain Road to the east, Derbyshire Road to the west and a bus only access via William Street to the south. Bus access is restricted to William Street, which is boom gate controlled, and a left-in only slip lane access via the City West Link. Staff access via a left-in/ left-out driveway to a basement car park is provided via Balmain Road. The surrounding properties predominantly include residential uses, with Sydney Bus Museum located along the western boundary and not considered as part of the site. Pioneers Memorial Park and Sydney Secondary College are located south of the site, and War Memorial Park is located to the east.

A DA for the redevelopment of two vacant tram buildings as a police station on land located south of the site was lodged with Leichhardt Municipal Council in 2010. It is understood that this development is not proceeding and as such, the traffic and parking impacts associated with the redevelopment of this site have not been considered as part of this assessment.

The location of the subject site and its surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject Site and Its Environs



Basemap source: Reproduced with permission from Sydney Publishing Pty Ltd



## 2.1 Road Network

### 2.1.1 Adjoining Roads

#### City West Link

The City West Link is classified as a State Road and provides a major east-west arterial route along the northern boundary of the site. It links Anzac Bridge in the east with Parramatta Road and beyond in the west and is configured with 3 traffic lanes in each direction with additional turning bays at major intersections. The City West Link narrows to 2 traffic lanes in each direction west of Norton Street and east of Balmain Road.

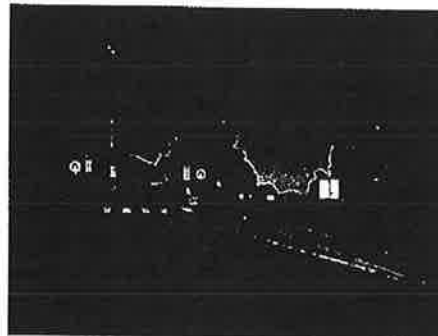
The City West Link intersects with Norton Street west of the site and Balmain Road in the north-east corner of the site, at a 4-way signalised intersection at each location. Leichhardt Bus Depot also provides direct access for westbound buses via a slip lane entry, west of Balmain Road. No kerbside parking is permitted along City West Link.

The City West Link is shown in Figure 2.4 and Figure 2.5 and carries approximately 50,000 vehicles per day<sup>1</sup>.

Figure 2.2: City West Link (looking west)



Figure 2.3: City West Link (looking west at Bus Depot slip lane entry)



#### Balmain Road

Balmain Road is classified as a Regional Road and is aligned in a north-south direction along the eastern boundary of the site. It is a two-way road generally configured with a 2-lane, 10 metre wide carriageway, set within a 15 metre wide road reserve (approx). Additional lanes are provided at major intersections, including Alfred Street and City West Link.

The posted speed limit on Balmain Road is 50km/h however it is restricted to 40km/h during the AM and PM school times (8.00am-9.30am and 2.30pm-4.00pm). No on-street parking is permitted along Balmain Road north of Alfred Street, with a limited supply of unrestricted parking permitted along the eastern side of Balmain Road south to Annesley Street.

Balmain Road is shown in Figure 2.4 and carries approximately 10,000 vehicles per day<sup>1</sup>.

<sup>1</sup> Based on the peak hour traffic counts undertaken by GTA in August 2012 and assuming a peak-to-daily ratio of 8% for arterial roads and 10% for local roads.

### Norton Street

Norton Street is classified as a collector road and in the vicinity of the site is aligned in a north-south direction. It is a two-way road configured with a 4-lane (2 parking lanes), 15 metre wide carriageway, set within a 20 metre wide road reserve (approx).

Norton Street has a posted speed limit of 50km/h, with kerbside parking permitted along the eastern and western kerbs, subject to time restrictions.

Norton Street is shown in Figure 2.5 and carries approximately 10,000 vehicles per day<sup>2</sup>.

Figure 2.4: Balmain Road (looking north)

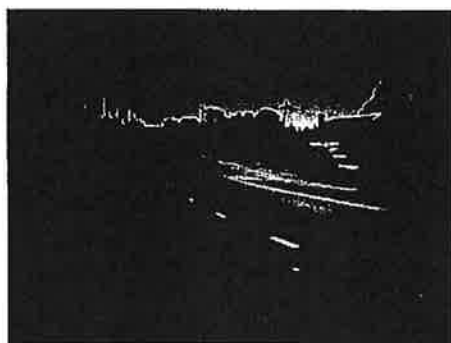
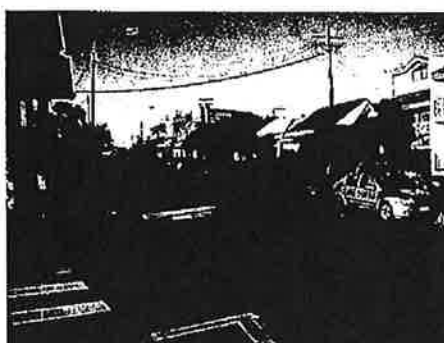


Figure 2.5: Norton Street (looking south)



### William Street

William Street is classified as a local road and in the vicinity of the site is aligned in an east-west direction. It is a two-way road configured with a 4-lane (2 parking lanes), 15 metre wide carriageway, set within a 20 metre wide road reserve (approx).

William Street has a posted speed limit of 50km/h, with kerbside parking permitted along the northern kerb and 45° angle parking along the southern kerb, subject to time restrictions.

Between Derbyshire Road and Balmain Road, William Street is a two-way road configured with one lane each-way and is designated for bus access only. This section provides bus access for Leichhardt Bus Depot with a posted speed limit of 10km/h and vehicular access is restricted by boom gates at either end.

William Street is shown in Figure 2.6 and carries approximately 3,000 vehicles per day<sup>2</sup>.

### Derbyshire Road

Derbyshire Road is classified as a local road and is aligned in a north-south direction west of the site. It is a two-way road configured with a 2-lane, 5 metre wide carriageway, set within a 10 metre wide road reserve (approx).

Unrestricted kerbside parking is permitted along the eastern kerb of Derbyshire Road.

<sup>2</sup> Based on the peak hour traffic counts undertaken by GTA in August 2012 and assuming a peak-to-daily ratio of 8% for arterial roads and 10% for local roads.

Between William Street and Allen Street, vehicular access is blocked approximately 100 metres south of William Street by bollards, as shown in Figure 2.7, to restrict through traffic. A cul-de-sac is provided on the William Street side of the blockage to enable vehicles to turnaround.

The posted speed limit of Derbyshire Road is 50km/h, however, is restricted to 40km/h during the AM and PM school times.

Figure 2.6: William Street (looking west)

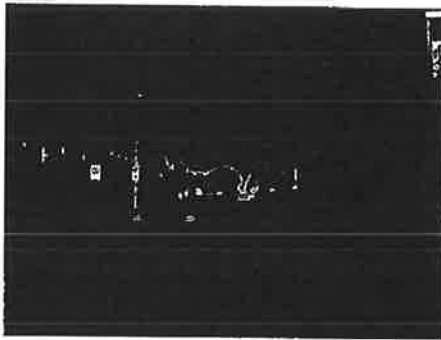


Figure 2.7: Derbyshire Road (looking south)



## 2.1.2 Surrounding Intersections

The following key intersections currently exist in the vicinity of the site:

- City West Link/ Balmain Road (4-way signalised)
- City West Link/ Norton Street (4-way signalised)
- Balmain Road/ Alfred Street (4-way signalised)
- Norton Street/ William Street (4-way roundabout).

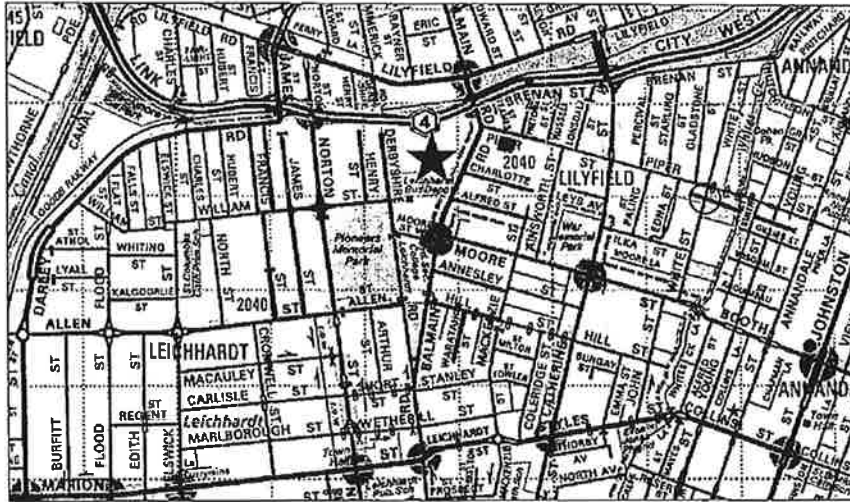
## 2.2 Car Parking

### 2.2.1 Supply

GTA Consultants compiled an inventory of publicly available on-street car parking within approximately 600-700 metres of Leichhardt Bus Depot. This catchment represents a 5-10 minute walking distance from the subject site, and captures areas which are known to offer on-street parking in favourable locations.

The survey catchment is presented in Figure 2.8.

Figure 2.8: On-Street Parking Catchment



The inventory identified that a total of 981 on-street parking spaces exist within the survey catchment operating under varying restrictions. Of the 981 on-street spaces, 614, or 63% are unrestricted.

The full inventory is presented in Appendix A of this report.

### 2.2.2 Weekday Demand

In consultation with Leichhardt Municipal Council and Leichhardt Bus Depot, it is understood that bus depot staff generally work to five main roster duty types as detailed in Table 2.2. While the approximately 50 maintenance staff work to standard shift hours, bus drivers start and finish progressively throughout the day (specific to rostered routes etc).

Table 2.1: Leichhardt Bus Depot Staff Roster

Shift Type	Sign-on	Sign-off
AM	4:00am	Before 4:00pm
Day	Morning peak	6:00pm
Broken Shift	AM (Varies)	Before 7:30pm
Midday	Late morning/early afternoon	10:00pm
PM	Early afternoon	After 10:00pm

It is evident that staff rostered on for the AM shift are the most likely to occupy the on-site car parking spaces and thus have a negligible impact on the surrounding on-street car parking environment. Staff working the day, and midday shifts would be increasingly likely to park on-street as on-site car parking reaches capacity.

It is understood that many staff on broken shifts remain at the bus depot and make use of on-site recreational facilities. Those who return home typically live in close proximity and are likely to walk or cycle to and from work.

Based on the above, it is estimated that Leichhardt Bus Depot generates on-street parking demand from approximately 7:00am on a typical weekday and is generally reflected in the traffic surveys of the basement car park access included in Appendix A.

Given the close proximity of William Street and Henry Street to the site, the impact is greatest at these locations, dissipating dependent on parking restrictions and distance, and the time of day. In addition, it is considered that the PM shift would utilise both on-site parking and on-street spaces within close proximity to the site, increasing as the AM shift sign-off. This generally results in demand for on-street parking within close proximity to the site over an extended period of time during a typical weekday.

GTA Consultants commissioned car parking demand surveys on a typical weekday (Thursday 2 August 2012) and weekend (Saturday 28 July 2012) between 5:00am and 10:00pm at 30 minute intervals. These survey times intended to capture all on-street parking demand within the survey area, including prior to the majority of bus depot staff arriving for their shift, and concluding after the majority of staff finish their shift.

The weekday parking survey results are broken down to cover the AM and PM/ evening periods and are presented in Table 2.2 and Table 2.3 in hourly intervals. Full results (in 30 minute intervals) are provided in Appendix A.

**Table 2.2: Summary of AM Parking Surveys – Thursday 02/08/12**

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies [1]
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	44	39	51	47	41	44	45	44	9
Allen St (E of Norton St)	34	14	14	10	9	10	13	14	15	20
Allen St (W of Norton St)	29	22	22	19	20	19	20	22	20	6
Annesley St	60	48	46	48	43	33	33	32	30	12
Balmaln Rd	37	23	25	25	21	20	17	16	16	12
Charlotte St	68	63	63	68	58	53	53	51	50	0
Derbyshire Rd	44	19	21	26	34	41	40	40	34	3
Francis St	118	110	111	98	84	70	66	62	62	7
Henry St	55	48	48	47	44	41	39	33	38	7
Hill St	30	24	23	22	21	21	21	20	19	6
James St	168	133	130	118	109	113	118	115	105	35
Moore St	43	23	22	30	34	41	40	41	42	0
Norton St	86	55	63	59	63	75	76	73	73	8
Piper St	13	9	9	11	11	8	9	6	5	2
Waratah St	50	42	41	50	45	39	39	44	43	0
William St (E of Norton St)	60	8	22	39	38	44	44	44	47	13
William St (W of Norton St)	26	13	15	18	20	21	20	22	20	5
<b>Total</b>	<b>981</b>	<b>698</b>	<b>714</b>	<b>739</b>	<b>701</b>	<b>690</b>	<b>692</b>	<b>680</b>	<b>663</b>	<b>140</b>
<b>% Occupancy</b>		<b>71.2</b>	<b>72.8</b>	<b>75.3</b>	<b>71.5</b>	<b>70.3</b>	<b>70.5</b>	<b>69.3</b>	<b>67.9</b>	
<b>Vacancies</b>		<b>283</b>	<b>267</b>	<b>242</b>	<b>280</b>	<b>291</b>	<b>289</b>	<b>301</b>	<b>318</b>	

[1] Minimum vacancies data determined using the ½ hourly count data, details included in Appendix A

Table 2.3: Summary of PM Parking Surveys – Thursday 02/08/12

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	44	44	47	48	45	47	49	49	49	47	9
Allen St (E of Norton St)	34	14	16	19	11	11	15	16	14	13	15	15
Allen St (W of Norton St)	29	16	16	21	23	19	22	26	28	27	25	1
Annesley St	60	30	28	26	30	35	45	49	48	48	48	11
Balmain Rd	37	17	18	18	18	21	24	26	24	24	22	11
Charlotte St	68	45	39	39	41	43	48	51	51	63	68	0
Derbyshire Rd	44	37	37	35	27	26	24	24	25	19	16	7
Francis St	118	65	65	66	72	88	89	93	99	99	101	17
Henry St	55	41	44	41	41	41	45	42	39	41	42	9
Hill St	30	19	17	17	16	18	20	19	19	20	23	7
James St	168	104	103	104	110	114	120	132	139	141	140	27
Moore St	43	43	42	40	37	26	22	22	31	32	27	0
Norton St	86	67	69	78	73	73	78	81	77	75	64	5
Piper St	13	8	9	8	8	8	10	12	12	11	11	1
Waratah St	50	37	32	31	28	26	33	38	42	42	45	5
William St (E of Norton St)	60	51	52	47	48	48	47	39	34	23	18	8
William St (W of Norton St)	26	20	20	19	19	21	19	20	21	20	22	4
<b>Total</b>	<b>981</b>	<b>658</b>	<b>651</b>	<b>656</b>	<b>650</b>	<b>663</b>	<b>708</b>	<b>739</b>	<b>752</b>	<b>747</b>	<b>734</b>	<b>144</b>
<b>% Occupancy</b>		<b>67.1</b>	<b>66.4</b>	<b>66.9</b>	<b>66.3</b>	<b>67.6</b>	<b>72.2</b>	<b>75.3</b>	<b>76.7</b>	<b>76.1</b>	<b>74.8</b>	
<b>Vacancies</b>		<b>323</b>	<b>330</b>	<b>325</b>	<b>331</b>	<b>318</b>	<b>273</b>	<b>242</b>	<b>229</b>	<b>234</b>	<b>247</b>	

Table 2.2 and Table 2.3 indicate that public on-street car parking demand within a 600-700 metre walk of the site is high/ moderate and streets generally experience higher demand overnight, mainly due to demand associated with resident parking profiles. As a result, the peak demand occurred during the early morning and evening periods and is equal to an occupancy rate of 75.7% (238 vacancies) at 7:30am and 76.7% (229 vacancies) at 8:00pm. The lowest demand is equal to an occupancy rate of 66.1% (333 vacancies) at 4:30pm.

### 2.2.3 Weekend Demand

In order to quantify the combined parking impact of the proposed expansion of Leichhardt Bus Depot with existing weekend activities occurring in the vicinity, parking demand surveys were also undertaken on Saturday 28 July 2012.

These parking surveys sought to capture the existing parking demand associated with weekend activities at Pioneer Park, St Gerasimos Greek Orthodox Church (located on Henry Street west of the site), Sydney Secondary College and existing demand associated with the site. A summary of the results is presented in Table 2.4 and Table 2.5 in hourly intervals. Full results (in 30 minute intervals) are provided in Appendix A

It should be noted that the gate in Derbyshire Road, just north of Allen Street, is typically locked on weekends thus reducing the on-street capacity in Derbyshire Road between William and Allen Streets

from 25 to 11 spaces, and the overall on-street parking supply within 600-700m of the site from 981 to 967 spaces. These conditions are reflected in Table 2.4 and Table 2.5.

Table 2.4: Summary of AM Parking Surveys – Saturday 28/07/12

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	49	47	47	39	38	34	34	31	11
Allen St (E of Norton St)	34	14	15	13	14	14	17	17	18	16
Allen St (W of Norton St)	29	19	19	17	18	14	19	21	24	5
Annesley St	60	47	49	49	48	47	40	39	37	11
Balmain Rd	37	24	24	22	18	19	22	22	24	11
Charlotte St	68	62	61	62	60	56	50	28	47	3
Derbyshire Rd	30	19	18	17	22	20	20	20	18	22
Francis St	118	102	101	97	87	82	83	81	79	16
Henry St	55	42	38	38	41	39	39	37	36	13
Hill St	30	20	20	20	19	20	23	22	17	7
James St	168	145	143	140	141	128	120	117	117	23
Moore St	43	23	22	22	35	34	35	34	38	5
Norton St	86	59	62	62	70	71	80	78	75	6
Piper St	13	9	11	11	8	8	8	7	10	2
Waratah St	50	44	43	43	41	34	28	31	25	6
William St (E of Norton St)	60	13	14	18	21	26	36	34	33	24
William St (W of Norton St)	26	10	11	11	14	13	13	12	12	12
<b>Total</b>	<b>967</b>	<b>701</b>	<b>698</b>	<b>689</b>	<b>696</b>	<b>663</b>	<b>667</b>	<b>634</b>	<b>641</b>	<b>194</b>
<b>% Occupancy</b>		<b>72.5</b>	<b>72.2</b>	<b>71.3</b>	<b>72.0</b>	<b>68.6</b>	<b>69.0</b>	<b>67.6</b>	<b>66.3</b>	
<b>Vacancies</b>		<b>266</b>	<b>269</b>	<b>278</b>	<b>271</b>	<b>304</b>	<b>300</b>	<b>313</b>	<b>326</b>	



Table 2.5: Summary of PM Parking Surveys – Saturday 28/07/12

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	33	37	45	50	49	48	49	53	54	57	3
Allen St (E of Norton St)	34	16	13	17	17	14	16	22	33	23	25	1
Allen St (W of Norton St)	29	26	24	22	23	25	26	27	26	27	22	1
Annesley St	60	36	33	30	38	43	44	45	44	48	49	11
Balmaln Rd	37	20	18	18	22	23	22	21	22	23	25	12
Charlotte St	68	47	48	47	56	57	50	41	60	64	65	3
Derbyshire Rd	30	18	14	15	15	15	16	18	18	18	19	25
Francis St	118	78	79	81	84	92	97	99	110	94	97	8
Henry St	55	37	40	42	45	39	46	47	54	54	47	0
Hill St	30	20	15	17	17	21	21	21	23	24	24	6
James St	168	116	113	117	115	125	144	159	161	159	149	5
Moore St	43	31	37	39	36	35	34	25	29	25	28	4
Norton St	86	73	74	75	78	76	82	84	84	82	75	1
Piper St	13	13	13	13	13	10	12	11	9	9	8	0
Waratah St	50	23	24	23	25	27	33	38	42	41	44	5
William St (E of Norton St)	60	33	31	31	34	36	45	60	60	53	46	0
William St (W of Norton St)	26	15	15	19	19	21	25	26	26	26	23	0
<b>Total</b>	<b>967</b>	<b>635</b>	<b>628</b>	<b>651</b>	<b>686</b>	<b>708</b>	<b>761</b>	<b>793</b>	<b>854</b>	<b>824</b>	<b>803</b>	<b>87</b>
<b>% Occupancy</b>		<b>65.7</b>	<b>64.9</b>	<b>67.3</b>	<b>70.9</b>	<b>73.2</b>	<b>78.7</b>	<b>82.0</b>	<b>88.3</b>	<b>85.2</b>	<b>83.0</b>	
<b>Vacancies</b>		<b>332</b>	<b>339</b>	<b>316</b>	<b>281</b>	<b>259</b>	<b>206</b>	<b>174</b>	<b>113</b>	<b>143</b>	<b>164</b>	

Table 2.4 and Table 2.5 indicate that public on-street car parking demand within the catchment is generally moderate throughout the day and increases during the evening, when the restaurants within Norton Street experience their highest demand. As a result, the peak demand occurred at 8:00pm and is equal to an occupancy rate of 88.3% (113 vacancies). The lowest demand is equal to an occupancy rate of 63.8% (355 vacancies) at 2:30pm.

#### 2.2.4 Unrestricted Parking Demand

With consideration for the existing bus depot staff rostering system (10-hour shifts) and the need for any overspill staff parking and/or additional staff to park on-street in unrestricted spaces only, further analysis was undertaken to establish the volume and occupancy of unrestricted on-street spaces within the same catchment. The overall on-street unrestricted parking capacity within 600-700m of the site is 614 spaces.

It is noted that the two-hour (2P) parking restriction in Norton Street between William Street and Allen Street is only enforced between 6:00pm and 10:00pm on weekends. Therefore during the majority of the Saturday parking demand survey, this section of Norton Street was unrestricted. In addition, and as discussed, the gate in Derbyshire Road is typically locked on weekends thus reducing the on-street capacity at this location. As such, the overall on-street unrestricted parking capacity within 600-700m of the site on weekends is 625 spaces, with 600 spaces after 6:00pm.

The breakdown of on-street parking restrictions are shown in Figure 2.9, with the results of the analysis of unrestricted parking spaces for both the weekday and Saturday presented in Table 2.6 and Table 2.7.

Figure 2.9: Unrestricted Parking Zones

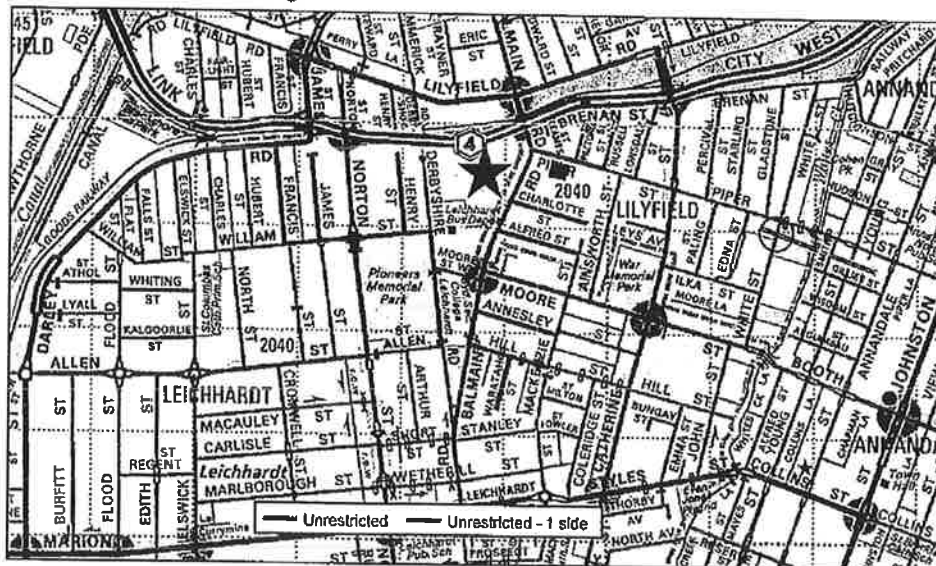


Table 2.6: Summary of AM Unrestricted Parking Surveys – Thursday 02/08/12

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	44	39	51	47	41	44	45	44	9
Annesley St	60	48	46	48	43	33	33	32	30	12
Balmain Rd	11	8	5	6	6	7	6	6	6	3
Charlotte St	68	63	63	68	58	53	53	51	50	0
Derbyshire Rd	25	3	7	14	20	25	25	25	20	0
Francis St	51	48	49	42	39	32	30	28	28	3
Henry St	55	48	48	47	44	41	39	33	38	7
Hill St	30	24	23	22	21	21	21	20	19	6
James St	61	57	55	50	44	46	43	42	41	4
Moore St	43	23	22	30	34	41	40	41	42	0
Norton St	27	10	14	19	21	25	26	27	26	0
Piper St	13	9	9	11	11	8	9	6	5	2
Waratah St	50	42	41	50	45	39	39	44	43	0
William St (E of Norton St)	34	5	17	26	25	29	27	27	28	4
William St (W of Norton St)	26	13	15	18	20	21	20	22	20	5
<b>Total</b>	<b>614</b>	<b>445</b>	<b>453</b>	<b>502</b>	<b>478</b>	<b>462</b>	<b>455</b>	<b>449</b>	<b>440</b>	<b>55</b>
<b>% Occupancy</b>		<b>72.5</b>	<b>73.8</b>	<b>81.8</b>	<b>77.9</b>	<b>75.2</b>	<b>74.1</b>	<b>73.1</b>	<b>71.7</b>	
<b>Vacancies</b>		<b>169</b>	<b>161</b>	<b>112</b>	<b>136</b>	<b>152</b>	<b>159</b>	<b>165</b>	<b>174</b>	

Table 2.7: Summary of PM Unrestricted Parking Surveys – Thursday 02/08/12

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	44	44	47	48	45	47	49	49	49	47	9
Annesley St	60	30	28	26	30	35	45	49	48	48	48	11
Balmain Rd	11	6	6	5	4	5	6	5	6	6	5	5
Charlotte St	68	45	39	39	41	43	48	51	51	63	68	0
Derbyshire Rd	25	22	23	20	10	11	10	7	7	4	3	2
Francis St	51	31	30	31	33	37	38	39	42	45	43	6
Henry St	55	41	44	41	41	41	45	42	39	41	42	9
Hill St	30	19	17	17	16	18	20	19	19	20	23	1
James St	61	39	38	41	43	45	44	48	53	55	59	2
Moore St	43	43	42	40	37	26	22	22	31	32	27	0
Norton St	27	24	25	27	25	25	26	27	24	23	16	0
Piper St	13	8	9	8	8	8	10	12	12	11	11	1
Waratah St	50	37	32	31	28	26	33	38	42	42	45	5
William St (E of Norton St)	34	30	30	27	27	28	29	24	29	13	9	3
William St (W of Norton St)	26	20	20	19	19	21	19	20	21	20	22	4
<b>Total</b>	<b>614</b>	<b>439</b>	<b>427</b>	<b>419</b>	<b>410</b>	<b>414</b>	<b>442</b>	<b>452</b>	<b>463</b>	<b>472</b>	<b>468</b>	<b>59</b>
<b>% Occupancy</b>		<b>71.5</b>	<b>69.5</b>	<b>68.2</b>	<b>66.8</b>	<b>67.4</b>	<b>72.0</b>	<b>73.6</b>	<b>75.4</b>	<b>76.9</b>	<b>76.2</b>	
<b>Vacancies</b>		<b>175</b>	<b>187</b>	<b>195</b>	<b>204</b>	<b>200</b>	<b>172</b>	<b>162</b>	<b>151</b>	<b>142</b>	<b>146</b>	

Table 2.6 and Table 2.7 indicate that unrestricted on-street car parking demand within the catchment is moderate to high during a typical weekday and remains relatively constant over the survey period, with peak demand equal to an occupancy rate of 82.2% (109 vacancies) at 7.30am.

Table 2.8: Summary of AM Unrestricted Parking Surveys – Saturday 28/07/12

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	49	47	47	39	38	34	34	31	11
Annesley St	60	47	49	49	48	47	40	39	37	11
Balmaln Rd	11	9	9	9	7	9	9	9	8	2
Charlotte St	68	62	61	62	60	56	50	48	47	3
Derbyshire Rd	11	1	1	1	7	7	7	7	5	22
Francis St	51	43	43	42	37	36	38	37	36	8
Henry St	55	42	38	38	41	39	39	37	36	13
Hill St	30	20	20	20	19	20	23	22	17	7
James St	61	55	54	52	52	50	45	43	44	6
Moore St	43	23	22	22	35	34	35	34	38	5
Norton St	52	27	30	32	43	42	46	45	44	6
Piper St	13	9	11	11	8	8	8	7	10	2
Waratah St	50	44	43	43	41	34	28	31	24	6
William St (E of Norton St)	34	7	9	12	15	19	25	24	25	9
William St (W of Norton St)	26	10	11	11	14	13	13	12	12	12
<b>Total</b>	<b>625</b>	<b>448</b>	<b>448</b>	<b>451</b>	<b>466</b>	<b>452</b>	<b>440</b>	<b>429</b>	<b>414</b>	<b>122</b>
<b>% Occupancy</b>		<b>71.7</b>	<b>71.7</b>	<b>72.2</b>	<b>74.6</b>	<b>72.3</b>	<b>70.4</b>	<b>68.6</b>	<b>66.4</b>	
<b>Vacancies</b>		<b>177</b>	<b>177</b>	<b>174</b>	<b>159</b>	<b>173</b>	<b>185</b>	<b>196</b>	<b>210</b>	

Table 2.9: Summary of PM Unrestricted Parking Surveys – Saturday 28/07/12

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	33	37	45	50	49	48	49	53	54	57	3
Annesley St	60	36	33	30	38	43	44	45	44	48	49	11
Balmain Rd	11	8	5	4	6	8	7	5	4	5	7	3
Charlotte St	68	47	48	47	56	57	50	41	60	64	65	3
Derbyshire Rd	11	4	1	2	3	2	2	2	2	3	2	7
Francis St	51	33	35	37	36	37	40	42	48	35	41	2
Henry St	55	37	40	42	45	39	46	47	54	54	47	0
Hill St	30	20	15	17	17	21	21	21	23	24	24	6
James St	61	47	50	52	48	55	58	59	58	58	53	1
Moore St	43	31	37	39	36	35	34	25	29	25	28	4
Norton St [1]	52 / 27	42	42	43	44	45	27	27	27	25	20	7 / 0
Piper St	13	13	13	13	13	10	12	11	9	9	8	0
Waratah St	50	23	24	23	25	27	33	38	42	41	44	5
William St (E of Norton St)	34	23	25	26	23	23	27	34	34	29	24	0
William St (W of Norton St)	26	15	15	19	19	21	25	26	26	26	23	0
<b>Total</b>	<b>625 / 600</b>	<b>412</b>	<b>420</b>	<b>439</b>	<b>459</b>	<b>472</b>	<b>474</b>	<b>472</b>	<b>513</b>	<b>500</b>	<b>492</b>	
<b>% Occupancy</b>		<b>65.9</b>	<b>67.2</b>	<b>70.2</b>	<b>73.4</b>	<b>75.5</b>	<b>79.0</b>	<b>78.7</b>	<b>85.5</b>	<b>83.3</b>	<b>82.0</b>	
<b>Vacancies</b>		<b>213</b>	<b>205</b>	<b>186</b>	<b>166</b>	<b>153</b>	<b>126</b>	<b>128</b>	<b>87</b>	<b>100</b>	<b>108</b>	

[1] 25 spaces on Norton Street between William Street and Allen Street restricted 2P 6pm-10pm on weekends and are not included in the survey of unrestricted spaces after 6pm

Table 2.8 and Table 2.9 indicate that unrestricted on-street car parking demand within the catchment is moderate to high during a typical weekend however increases during the evening, with peak demand equal to an occupancy rate of 87.5% (75 vacancies) at 8.30pm. Prior to 5:00pm, the peak demand was 74.6% (159 vacancies) at 8:00am.

### 2.3 Traffic Volumes

GTA Consultants commissioned traffic movement counts on key roads in the vicinity of the site on 2 August 2012 during the following peak periods:

- 7:00am and 9:00am
- 12:00pm and 2:00pm
- 4:00pm and 6:00pm.

The AM, midday and PM peak hour traffic volumes are summarised in Figure 2.10 and Figure 2.11, with full results contained in Appendix A.

Figure 2.10: Existing Weekday AM / PM Peak Hour Traffic Volumes

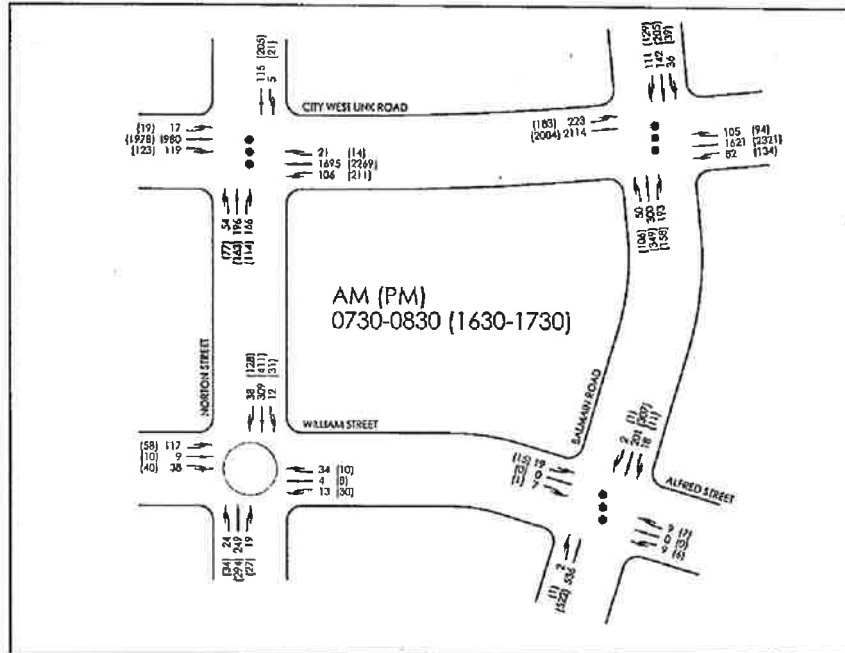
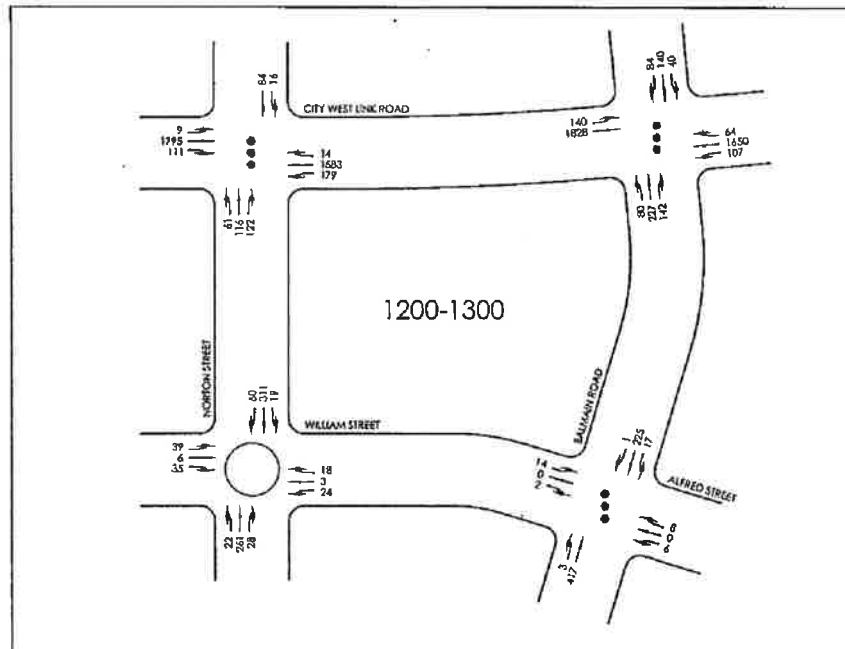


Figure 2.11: Existing Weekday Midday Peak Hour Traffic Volumes





### 2.3.1 Existing Traffic Conditions

GTA Consultants undertook an inspection of the site and surrounding areas on 2 August 2012 during the AM and PM peak periods. Observations included assessing the overall road network operation during each peak period, in particular the operation of both Norton Street and Balmain Road in the vicinity of the site. Queuing for northbound vehicles at these locations together with the operation of the study intersections were also key considerations.

It is noted that during the weekday AM peak period, specifically between 7:00am and 8:00am, it was observed that queues along Norton Street on approach to the City West Link generally extend south to a distance of approximately 200m south of the Norton Street/ William Street roundabout. After 8:00am, these queues had mostly diminished with minor vehicle delays generally clearing on each traffic signal cycle.

It is widely recognised that the City West Link experiences considerable delay for eastbound vehicles during the AM peak period, with each intersection operating at, or in excess of capacity. Delay and queuing for eastbound vehicles extend west from Norton Street/ James Street with observations also indicating that between 7:00am and 8:30am, the eastbound lanes generally queued back from Balmain Road beyond Norton Street.

Northbound vehicle queues on Balmain Road on approach to the City West Link were also observed to extend south, in excess of 100m-150m and on occasion reached Charlotte Street.

It should also be noted that queuing in the road network surrounding the site was more pronounced during the weekday AM peak period, with observations during the PM peak indicating that, although the intersections along the City West Link operate close to capacity, queuing is generally restricted to westbound vehicles on approach to Balmain Road. No queuing of any significance occurred on Norton Street or Balmain Road, south of the City West Link at the time of the site observations.

## 2.4 Intersection Operation

The operation of the key intersections within the study area have been assessed using SIDRA INTERSECTION<sup>3</sup>, a computer based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the RTA, is vehicle delay. SIDRA INTERSECTION determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 2.10 shows the criteria that SIDRA INTERSECTION adopts in assessing the level of service.

<sup>3</sup> Program used under license from Akcelik & Associates Pty Ltd.

Table 2.10: SIDRA INTERSECTION Level of Service Criteria

Level of Service (LOS)	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

Table 2.11 presents a summary of the existing operation of the intersections, with full results presented in Appendix B of this report.

Table 2.11: Existing Operating Conditions

Intersection	Peak	Leg	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
City West Link/ Norton Street	AM	South	1.26	286	471	F
		East	0.53	11	112	A
		North	0.27	51	51	D
		West	0.58	6	66	A
		Overall	1.26	35	471	C
	Midday	South	0.58	47	107	D
		East	0.58	18	145	B
		North	0.16	39	32	C
		West	0.56	11	101	A
		Overall	0.58	18	145	B
	PM	South	0.81	60	157	E
		East	0.80	21	284	B
		North	0.37	44	89	D
		West	0.79	14	132	A
		Overall	0.81	22	284	B
City West Link/ Balmain Road	AM	South	0.99	68	94	E
		East	0.89	11	65	A
		North	0.65	64	96	E
		West	1.00	59	798	E
		Overall	1.00	43	798	D
	Midday	South	0.79	64	76	E
		East	0.49	7	61	A
		North	0.62	60	89	E
		West	0.88	19	356	B
		Overall	0.88	21	356	B

Intersection	Peak	Leg	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
City West Link/ Balmain Road	PM	South	0.97	73	136	F
		East	0.76	10	138	A
		North	0.89	75	153	F
		West	0.96	39	611	C
		Overall	0.97	32	611	C
Balmain Road/ Alfred Street/ William Street (Bus depot)	AM	South	0.80	30	174	C
		East	0.08	44	6	D
		North	0.21	14	35	A
		West	0.15	30	9	C
		Overall	0.80	26	174	B
	Midday	South	0.78	31	127	C
		East	0.06	39	4	C
		North	0.26	15	38	B
		West	0.09	23	5	B
		Overall	0.78	26	127	B
	PM	South	0.77	29	163	C
		East	0.06	44	4	D
		North	0.29	14	52	A
		West	0.12	28	7	B
		Overall	0.77	23	163	B
Norton Street/ William Street	AM	South	0.24	6	10	A
		East	0.06	10	2	A
		North	0.29	6	13	A
		West	0.18	9	7	A
		Overall	0.29	7	13	A
	Midday	South	0.26	6	11	A
		East	0.05	10	2	A
		North	0.31	6	14	A
		West	0.09	9	3	A
		Overall	0.31	7	14	A
	PM	South	0.32	7	15	A
		East	0.07	10	3	A
		North	0.45	7	25	A
		West	0.12	9	5	A
		Overall	0.45	7	25	A

On the basis of the above assessment, it is clear that the intersection of City West Link/ Balmain Road currently experiences considerable delays during the AM and PM peak periods, particularly for the eastbound approach during the AM peak.

The intersection of City West Link/ Norton Street currently experiences significant delays during both the AM and PM peak periods, particularly on the southern approach during the AM period and the eastern approach in the PM peak period.

Queuing observations were also recorded at the time of the surveys and are contained in Appendix A of this report.

It should also be noted that the basement car park access driveway was surveyed during each peak period, the details are as follows:

- AM peak – 1 car in, 4 cars out
- Midday peak – 19 cars in, 20 cars out
- PM peak – 10 cars in, 7 cars out.

On-site observations indicate that the car park is currently operating near or at capacity and staff are required, to some extent to park on-street within the local streets surrounding the site.

## 2.5 Pedestrian Infrastructure

In the vicinity of the proposed site, sealed pedestrian footpaths are located on both sides of all roads. In addition, there are pedestrian links from the City West Link to Derbyshire Road and Henry Street despite no vehicular access, and a 3.0 metre wide shared path is located approximately 150 metres south of the site between Balmain Road and Derbyshire Road.

Safe crossing points in vicinity of the site include the following:

- Balmain Road/ City West Link signalised intersection – signalised pedestrian crossing located on the north, south and west legs
- Balmain Road/ City West Link signalised intersection – signalised pedestrian crossing located on all four legs and a marked foot crossing on the eastern leg slip lane
- Balmain Road/ William Street/ Alfred Street signalised intersection – signalised pedestrian crossing located on all four legs
- Balmain Road/ Moore Street signalised intersection – signalised pedestrian crossing located on all three legs
- marked pedestrian crossings as follows:
  - Balmain Road, just north of Hill Street
  - Norton Street, just south of William Street
  - Norton Street, just south of Allen Street.

## 2.6 Cycle Infrastructure

Bicycle infrastructure in the vicinity of the site is as follows:

- 3.0 metre wide shared path along the western side of Balmain Road between City West Link and Moore Street, adjacent to the eastern boundary of the site
- 3.0 metre wide shared path between Balmain Road and Derbyshire Road
- mixed traffic road markings as follows:
  - Norton Street, between City West Link and Parramatta Road
  - Derbyshire Road, south of William Street
  - Allen Street, between Derbyshire Road and Norton Street.

### 3. Development Proposal

#### 3.1 Overview

STA has lodged a DA (D/2012/295) with Leichhardt Municipal Council for the reconfiguration of Leichhardt Bus Depot at 230-240 Balmain Road, Leichhardt, to increase the on-site bus storage capacity from 200 to 281 buses. It is proposed to accommodate the additional 81 buses within the existing on-site hardstand area.

The DA proposes the following total on-site parking capacity based on modifications to the basement car park and bus hardstand area as follows:

- 146 car spaces (132 in the basement)
- 38 motorbike spaces
- 20 bicycle spaces.

Total depot staffing is proposed to increase to 557 with a maximum daytime shift of 328 staff, including 266 drivers, and represents a 30% increase, or 76 additional day time staff.

It is understood that the proposed future car parking provision equates to an additional 21 on-site staff car parking spaces, and includes the reconfiguration of the basement level car park to accommodate an additional 7 car parking spaces and additional motorcycle parking. It is also proposed to reconfigure the existing hardstand area to provide an additional 14 car parking spaces.

Vehicular access to the site would be maintained via the William Street 'Bus Only' area together with the left-in/ left-out arrangement via Balmain Road for staff access to/ from the basement level car park.

##### 3.1.1 Sydney Bus Museum

The Sydney Bus Museum is currently in the process of relocating its operations to the former tram shed, located along the eastern side of Derbyshire Road, adjacent to the western boundary of Leichhardt Bus Depot. Since relocating from Tempe, the museum is yet to open to the public, however it is understood that this is planned to occur in late 2012.

Following discussions with the museum, the Tempe facility attracted an average of 20 to 30 people per day on a typical weekend, with special events generally attracting up to 100 people per day. It is the museum's intention to operate the new facility in a similar manner and as such, these attendance numbers have been assumed for the purposes of this report.

The new Sydney bus Museum will provide on-site parking for up to 12 vehicles, with access proposed via Derbyshire Road, north of William Street. Assuming a vehicle occupancy rate of 2.0 patrons per vehicle<sup>4</sup> for museum-related trips, and given that the 20 to 30 people per day is unlikely to arrive at the same time, the 12 on-site car spaces will be capable of accommodating the majority of the peak parking demand associated with the museum.

During special events, the impact to on-street parking in proximity to the Leichhardt Bus Depot could be mitigated through:

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<sup>4</sup> A higher vehicle occupancy rate would be expected for museums as they tend to attract families and groups as opposed to single occupancy trips

- ~~Discussions with local organisations and businesses to avoid scheduling special events at the same time as large events in neighbouring Pioneer Park, St Gerasimos Greek Orthodox Church and sporting activities at the Sydney Secondary College.~~
- The implementation of a Travel Plan and/ or Transport Access Guide (TAG) to encourage travel to and from the Museum via sustainable and active forms of transport e.g. if you travel to the Museum by bus, patrons will receive a discounted entry.

It is therefore concluded that on opening, the relocated Sydney Bus Museum is unlikely to have a significant impact on competition for on-street parking within the immediate vicinity of the site, assuming patronage patterns are similar to those recorded at the former Tempe site.

## 4. Traffic Impact Assessment

### 4.1 Traffic Generation

#### 4.1.1 Design Rates

Given that the *Guide to Traffic generating Developments* (RMS, 2002) does not provide a vehicle trip rate specifically for bus depots, the peak generation of the site (for buses and cars) has been estimated using existing site generation data provided by Leichhardt Municipal Council together with the DA reporting and traffic surveys.

Traffic generation estimates for the proposed development have been based on the additional number of buses and car parking spaces to be provided under the proposed development (i.e. 81 additional buses and 21 additional car parking spaces). Although unlikely, it has been assumed that all the additional buses will either arrive or depart the depot during the AM and PM peak hours. It has also been assumed that the proposed car parking spaces will generate an additional 21 vehicle movements during the AM and PM peak hours, assuming that all additional spaces turn over during these times.

This approach is considered conservative and reflects the worst case scenario for traffic which may be generated at the subject site as a result of the proposed development.

#### 4.1.2 On-Street Parking

It is understood that as a result of the shift (roster) times identified in Section 2.2.2, the staggered arrival of bus drivers, as well as the need for buses to be servicing commuters during peak periods, the number of additional bus drivers arriving and departing during road network peak periods would be low. As such, no additional peak period traffic generation has been included over-and-above the 21 car movements and 81 bus movements assumed above. The complexity and variability of the existing Leichhardt Bus Depot Staff Roster does not permit any reliable extrapolation of peak period staff movements and has therefore not been used as part of the traffic generation estimates.

It is noted, however, that due to the limited off-street parking proposed there would be additional traffic generation on the surrounding road network throughout the day as a result of bus depot staff circulating for available on-street parking. Due to the variability and dispersed nature of these vehicle movements, reliable estimates cannot be made.

### 4.2 Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

- i configuration of the arterial road network in the immediate vicinity of the site
- ii existing operation of intersections providing access between the local and arterial road network
- iii distribution of households in the vicinity of the site
- iv bus depot driveway access locations
- v bus route origin/ destination and designated approved arrival/ departure routes to/ from the site



- vi traffic survey directional splits, previous data recorded by STA in March 2007 and data presented as part of the DA.

Having consideration for the above and for the purposes of estimating vehicle movements, the directional distributions have been assumed and assigned taking into consideration the points above.

Figure 4.1 and Figure 4.2 have been prepared to show the estimated marginal increase in turning movements in the vicinity of the site following full site development while also noting that the proportion of heavy vehicles (i.e. buses) has been adjusted to accommodate the changing distribution of traffic surrounding the site. It is noted that the traffic surveys did not classify vehicle type with SIDRA INTERSECTION analysis specifying heavy vehicle percentages at each location, varying dependent on historical data and site observations. These percentages are detailed in the outputs included as part of Appendix B. It is noted that it is assumed that all vehicles entering and exiting William street via Balmain Road are considered to be buses.

Figure 4.1: Existing Weekday AM Peak Hour Traffic Volumes plus Development Traffic

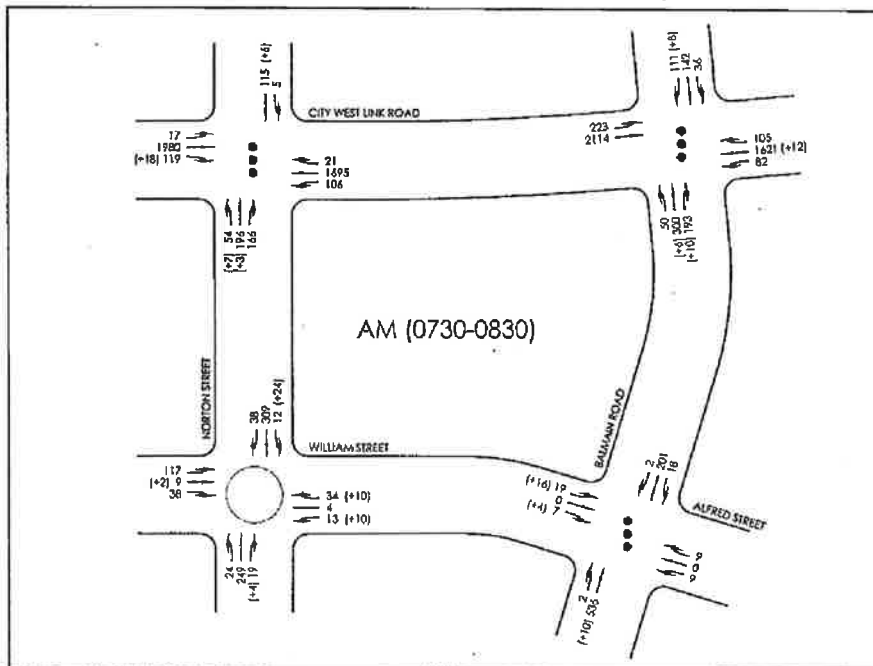
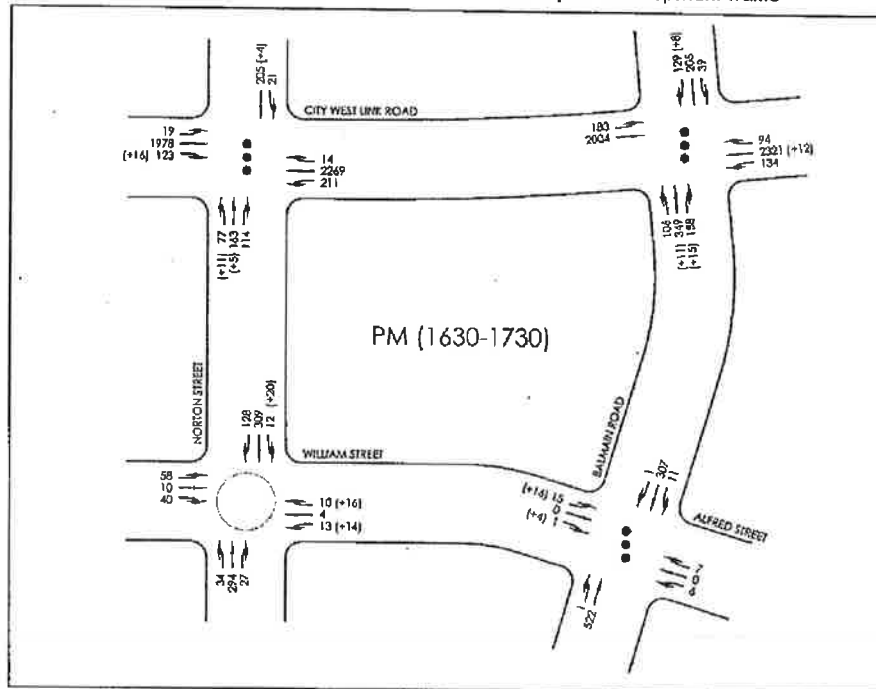


Figure 4.2: Existing Weekday PM Peak Hour Traffic Volumes plus Development Traffic



### 4.3 Traffic Impact

SIDRA INTERSECTION analysis was undertaken to assess the likely impact of the additional traffic generated by the increased on-site capacity proposed within the bus depot. The full SIDRA INTERSECTION results are contained in Appendix B of this report.

Against existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network. Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.

#### William Street bus only roadway

Site observations indicate that the William Street bus only roadway receives green time during each cycle, however existing peak period turning movements are low. Therefore the impact of additional bus movements out of William Street is negligible at this intersection.

#### William Street (west of bus depot)

On the basis of the estimated traffic distribution, the most significant change in local traffic volumes would be the additional buses on William Street to the west accessing Norton Street. This could present road safety concerns for local traffic accessing on-street (and associated pedestrian movements), as well as compromising sight lines for Henry Street traffic should any queuing occur. It is

recommended that these potential issues are monitored, with additional local traffic management measures implemented if necessary.

#### Balmain Road

As discussed in Section 2.3.1, significant AM peak period queuing occurs on Balmain Road on approach to the City West Link, which were observed to extend south, in excess of 100m-150m and on occasion reached Charlotte Street. Given the corresponding queues on the City West Link, it is assumed that there is no opportunity to allocate additional green time to Balmain Road. During these times, queued vehicles informally form two northbound lanes between Piper Street and Charlotte Street. It is recommended that the opportunity to formalise this arrangement through re-linemarking of Balmain Road (including shifting the centreline) be investigated (including consideration of turning movement swept paths) further.

It is also noted that an increased northbound right turn bay length would be of benefit, however difficult due to the Balmain Road geometry at Piper Street. Any opportunities in this regard could be investigated as part of the above.

## 5. Parking Impact Appraisal

### 5.1 Off-Street Parking

As discussed in Section 3, it is understood that the proposed future car parking provision equates to an additional 21 on-site staff car parking spaces, and includes the reconfiguration of the basement level car park to accommodate an additional 7 car parking spaces and additional motorcycle parking. It is also proposed to reconfigure the existing hardstand car parking area to provide an additional 14 car parking spaces.

Plans included as part of the DA show existing basement level car parking for 117 cars, with amendments to increase this capacity by 6 spaces, to total 123 spaces (compared with the 146 spaces noted as part of the proposal). A total of 38 motorbike spaces are shown, as are 20 bicycle spaces. The layout in the vicinity of the proposed car spaces does not appear to meet the aisle width requirements and/or the space length requirements of AS2890.1:2004. No plans have been provided illustrating the layout within the bus hardstand area to accommodate the additional 14 spaces.

On-site observations and consultation with Leichhardt Municipal Council and STA indicates that the basement car park has already been largely re-configured to reflect the above. DA approval would allow this to be formalised and as such would not result in significant changes to the traffic generation rates noting that the basement car park is operating at capacity for staff parking, with some spare capacity for visitors prior to the boom gate controlled access.

It should also be noted that scaled plans have not been provided to GTA Consultants for the purposes of this review and the exact dimensional layouts of the car parking areas were not able to be determined.

### 5.2 On-Street Parking

The existing bus depot layout accommodates in the order of 120 on-site parking spaces (noting the discrepancies between the Development Application and the plans provided) to accommodate a maximum daytime shift of 328 staff. The proposed additional 14 spaces (noting the basement parking discussion above) are required to accommodate the parking needs of a further 76 staff.

There is no firm basis for quantifying the existing total parking demand (on-site and on-street), nor the likely parking demand of the additional staff. On one hand it could be expected that staff may have a higher than average use of public transport due to staff travel entitlements, however the nature and timing of shift work typically results in higher than average private car travel (single occupant vehicles).

Site observations confirm that there may be a significant on-street parking for the afternoon/ evening shift arrivals given existing on-site demand and the overlapping staff shift times. It is unclear how shift changeover and associated on-site parking arrangements are managed.

The additional car parking demand as a result of the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets however existing demand profile indicate that these can be accommodated within the study area streets. It is likely, however, that this would further reduce the on-street parking availability in close proximity to the bus depot, thereby reducing the availability for residents and other

local users. It would also increase the circulation of vehicles searching for parking in local streets and increase walking distances for residents and other local users.

To provide an approximation of the likely parking impact of the additional bus depot staff, the 2006 Census data indicates that the Journey-to-Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. On this basis, 56 of the additional 76 staff would arrive by car. When accounting for the additional 14 parking spaces on-site as outlined in the above discussion, this would result in up to around 40 additional vehicles parked on-street in the vicinity of the site (assuming primarily single-occupant vehicles).

### 5.3 Workplace Travel Plan

It is recommended that a Workplace Travel Plan (including a staff survey and car park occupancy and turnover surveys) be prepared to better understand and manage staff travel mode choice, vehicle occupancy rates, parking demand/ location associated with the proposed development and the bus depot as a whole. This could be implemented and monitored to reduce the potential impact on parking within the surrounding streets.

### 5.4 Off-Site Parking Opportunities

On-site observations indicate that there is opportunity for both temporary and/or permanent off-street parking areas in the vicinity of the site. These include the following:

- Former tram depot and Police Station site – located south of the site. A DA was lodged with Leichhardt Municipal Council in 2010 for a new Police Local Area Command on the former tram depot site. It is understood that this development is not proceeding and as such, the site may provide the opportunity for off-street parking in the immediate vicinity of the site.
- Sydney Bus Museum – a reconfiguration of the hardstand area to the north and west of the site may provide opportunity for limited staff parking. This would be subject to consultation with the operators and may require restrictions on weekdays where the museum has scheduled group visits.

### 5.5 Resident Parking Scheme

As illustrated in Figure 2.9, there is a significant supply of unrestricted on-street parking within close proximity to the site. As such, a Resident Parking Scheme (RPS) could be considered within the streets immediately surrounding Leichhardt Bus Depot to alleviate the existing on-street parking demand and conflict between residents and bus depot staff.

Such a scheme may however simply shift parking demand to local streets further away from the site and should only be considered as part of a broader range of incentive programs, including a Workplace Travel Plan as detailed above. It is noted that Resident Parking Schemes can negatively impact owners with more than one vehicle, as well as rental tenants, depending on eligibility criteria.

## 6. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- i STA has lodged a DA (D/2012/295) with Leichhardt Municipal Council for the reconfiguration Leichhardt Bus Depot to increase the on-site bus storage capacity from 200 buses to 281 buses.
- ii It is also proposed to reconfigure the on-site car parking facilities to provide an additional 21 car parking spaces, noting that approximately 7 of these are already in use and resulting in a practical increase of 14 staff car parking spaces.
- iii Total staff is proposed to increase to 557 with a maximum daytime shift of 328 staff, including 266 drivers, and represents a 30% increase, or 76 additional day time staff.
- iv Weekday demand for unrestricted parking within the vicinity of the site is moderate to high, peaking at 82.2% (109 vacancies) at 7.30am.
- v Weekend demand for unrestricted parking within the vicinity of the site is moderate to high, peaking at 87.5% (75 vacancies) at 8.30pm. This can be largely attributed to demand associated with Norton Street restaurants.
- vi The intersections of City West Link with Norton Street and Balmain Road currently experience considerable delays during both the AM and PM peak periods, particularly on the western and southern approaches during the AM peak.
- vii Plans of the basement car park do not show adequate capacity or appropriate layout to accommodate the proposed additional car and motorbike spaces and do not appear to be in accordance with AS2890.1:2004.
- viii The proposed reconfiguration is anticipated to generate an increase in site-specific trips by up to 81 bus movements and 14 car movements (to/ from the hardstand area) during a typical weekday peak hour, noting that traffic generation estimates assessed the additional 21 staff parking spaces identified in the DA.
- ix The basement car park is presently largely operating as the DA intends, with no significant change in traffic volumes anticipated.
- x Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.
- xi It is difficult to determine the extent of existing staff parking within the surrounding streets; however this may be significant for the afternoon/ evening shift arrivals given existing on-site demand and overlapping staff shift times.
- xii The provision of increased parking for motorbikes and bicycles is appropriate and it is recommended that the use of these be monitored to understand their utilisation.
- xiii The additional car parking demand as a result of the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets; however the existing demand profile indicates that these can be accommodated within the study area streets, noting some potential difficulties for residents and local users of streets in close proximity to the bus depot.
- xiv The demand for additional on-street parking would result in additional traffic generation through the day on local streets as bus depot staff circulate to find available parking. Due the variability and dispersed nature of these vehicle movements, reliable estimates cannot be

made, however they are expected to have a minor impact on the local road network operation.

- xv There is opportunity for both temporary and permanent off-street parking areas within the vicinity of the site and include the old Police Station site and the Sydney Bus Museum.
- xvi A Resident Parking Scheme may alleviate the existing on-street parking demand and conflict between residents and bus depot staff, noting that should be part of a broader strategy.
- xvii It is recommended that a Workplace Travel Plan (including a staff survey and car park occupancy and turnover surveys) be established to better understand and manage staff travel mode choice, vehicle occupancy rates, parking demand/location associated with the proposed development and the bus depot as a whole. This could be implemented and monitored to reduce the potential impact on parking within the surrounding streets.





BDC313/11

RESOLVED

HANNAFORD/COSTANTINO

10:30pm Meeting time extended by 30 minutes

ADOPTED

- 4 DEC 2012

**Agenda Item 22**

**D/2012/295**

**Address:**

230-240 Balmain Road & 27 Derbyshire Road Leichhardt

**Description:**

Re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot.

**Applicant:**

State Transit Authority

BDC314/11

RESOLVED

BYRNE/PORTEOUS

- A. That the recommendation in the Assessment Report be adopted.
- B. That the assessment report to be provided to the JRPP outline the following further reasons for refusal raised by Councillors:
- Unacceptable acoustic impacts
  - Unacceptable traffic impacts
  - Impacts on users of Pioneer Park
  - Speeding impacts on William Street.
  - Safety impacts on William and Henry Street.

**CARRIED UNANIMOUSLY**

**RECOMMENDATION**

That Council as the consent authority pursuant to s89(1)(a) of the Environmental Planning and Assessment Act 1979 refer the application to the Joint Regional Planning Panel, with a recommendation for refusal of the Development Application No. D/2012/295 for the re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot for the following reasons:

1. The proposal is inconsistent with the Employment objectives of Clause 20 and of the Leichhardt Local Environmental Plan 2000, as the impact on car parking in surrounding residential area is detrimental to the amenity of those surrounding residential properties pursuant to Section 79C (1)(a)(i) of the Environmental Planning and Assessment Act 1979.
2. The proposal fails to comply with the provisions of the Leichhardt Development Control Plan 2000, pursuant to Section 79C (1)(a)(iii) of the Environmental Planning and Assessment Act 1979 as follows:



# **ATTACHMENT 5**



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## JOINT REGIONAL PLANNING PANEL

### ASSESSMENT REPORT

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<b>Development Application No.</b>	➤ D/2012/295
<b>Address</b>	➤ 230 Balmain Road; 27 Derbyshire Road; 240 Balmain Road (also known as Leichhardt Bus Depot)
<b>Description of Development</b>	➤ Re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot.
<b>Date of Receipt</b>	➤ 19 June 2012
<b>Value of Works</b>	➤ N/A
<b>Applicant's Details</b>	➤ State Transit Authority Mary Macken/Sydney Buses Level 1, 219 Cleveland St STRAWBERRY HILLS NSW 2012
<b>Owner's Details</b>	➤ State Transit Authority Of NSW PO BOX 2557 STRAWBERRY HILLS NSW 2012
<b>Notification Dates</b>	➤ 12th July 2012 to 10th August 2012
<b>Number of Submissions</b>	➤ 45 in opposition
<b>Building Classification</b>	➤ Class 5 and Class 7(a)
<b>Integrated Development</b>	➤ No

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<b>Main Issues</b>	➤ Parking ➤ Traffic ➤ Building Code of Australia Compliance
<b>Recommendation</b>	➤ Obtain the approval of the Minister to refuse the application

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<b>Attachment A</b>	➤ Plans of proposal
<b>Attachment B</b>	➤ Extract of Traffic and Parking Study

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#### LOCALITY MAP

Subject Site

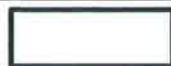


Objectors



N

Notified Area



Supporters



Note: Due to scale of map, not all objectors could be shown.



## **1. PROPOSAL**

This application seeks consent for re-configuration of parking to provide for additional bus and car parking at the Leichhardt Bus Depot. Specifically, the application seeks the following:

- Increase bus parking capacity from 200 to 281 (an increase of 81).
- Increase car parking capacity from 125 to 146 spaces (132 at basement level and 14 at the bus parking level; the latter of which may only be used during daytime hours after the first buses have left for the morning and before the last buses have returned for the evening).
- The provision of 38 motorbike parking space and increased bicycle parking capacity.
- An increase in the number of employees, including an overall increase in daytime staff, and bus drivers.
- Increase in the number of employees such that:
  - Total staff increase from 465 to 557 (an increase of 92)
  - Daytime shift staff to increase from 252 to 328 (an increase of 76)
  - Bus drivers to increase from 190 to 266 (an increase of 76).

This application has been referred to the Joint Regional Planning Panel by both Council and the applicant. Further information is provided in Section 4 of this report.

## **2. SITE DESCRIPTION**

The site is the Leichhardt Bus Depot, located within the former Tram Depot site, bounded by Balmain Road, Derbyshire Road, the City West Link, and the Sydney Secondary College Leichhardt Campus. The Leichhardt Bus Depot comprises the following properties:

- Lot 1 DP 1159702 – 240 Balmain Road
- Lot 2 DP 1159702 – 230 Balmain Road
- Lot 33 DP867166 – 27 Derbyshire Road

These properties are identified in the map on Page 2 of this report.

It is noted that the plans submitted with the application did not incorporate the full extent of the sites that are the subject of this application. Notably, the plans provided limited information on Lot 33 DP867166 – 27 Derbyshire Road.

The site accommodates a number of buildings, including the existing Leichhardt Bus Depot, part of the Tramshed building (approved to be the Sydney Bus Museum), Former Tram Offices building and the former workshop. The surrounding sites, which have been historically included as part of the bus depot/railways site, accommodate the Traffic Offices building, and the Former Cable Store building

The following are considered to be Items of Environmental Heritage of State Significance under Leichhardt Local Environmental Plan 2000 being the SRA Stores Branch Building, former Tram Depot Office, Tramshed, Cable Store. A Landscape Item of Local significance is also situated on the site being a large Moreton Bay Fig tree.



The site is zoned Public Purposes under Leichhardt Local Environmental Plan 2000. However, one of the allotments is zoned in accordance with Leichhardt Planning Scheme Ordinance, being Lot 1 DP 1159702 (240 Balmain Road), which is zoned 5(b) Railways

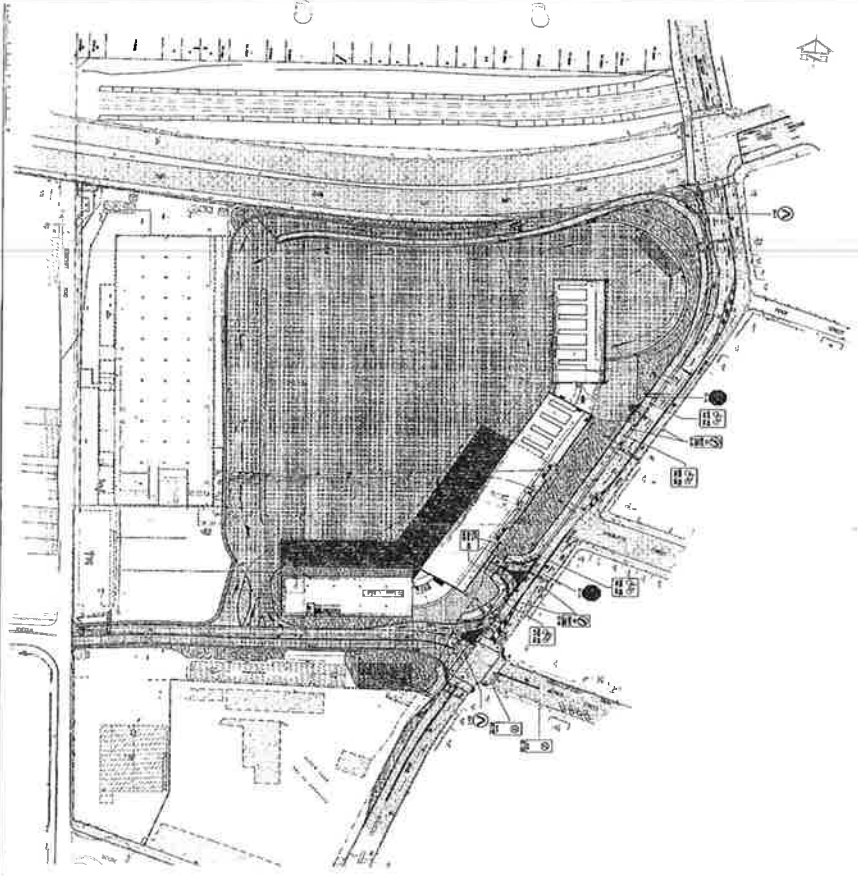
The site is located within the distinctive neighbourhood of Helsarmel.

### 3. SITE HISTORY

Various applications have been lodged with Council since 21 April 1964 and the use of the site as a Bus Depot appeared to commence in approximately 1935. The following applications have been lodged with Council since 2001 on the subject site and those immediately adjoining sites that have historically been a part of the bus depot/railways site:

Date	Application Details
D/2001/130	Removal of underground storage tanks and remediation of site – approved.
D/2001/376	New vehicle access opposite Charlotte Street. – APPROVED (19 December 2002).
D/2001/726	Construction of a compressed natural gas refuelling facility to refuel buses and construction of the associated electricity substation - APPROVED (23 January 2002).
D/2006/660	<p>Location and siting of the new Leichhardt Bus Dept and STA Regional Office, use of the Former Tram Shed for STA office use. Use of the Former Traffic Office Building for STA office use, use of the Former Cable Store Building for storage purposes and associated works.</p> <p>Stage 1 of the development is for demolition of refuelling and bus wash facilities, a new Leichhardt Bus Depot and STA Regional Office comprising commercial building with an office function, workshop/maintenance area, basement parking for 125 vehicles and loading dock, hardstand and circulation area for the parking of 200 buses. freeway wall, bulk earth works, ancillary landscaping and drainage works, new access road off Balmain Road (opposite Alfred Street), new access road off City West Link, consolidation and associated works – APPROVED (19 July 2007).</p> <p>The plan below shows the site to which this application applied.</p>



	
D/2010/663	<p>Redevelopment of the site to accommodate new Leichhardt Police Station. Works include alterations and fitout of the existing tram cable-store building; construction of a new three-storey building; new off-street parking and altered on-street parking on Derbyshire Road. Proposed hours of operations are 24 hours per day, 7 days per week – WITHDRAWN (29 September 2011).</p> <p>*This application was referred to the Joint Regional Planning Panel (JRPP) and a public meeting was held on 15 June 2011, and a JRPP meeting was held on 14 July 2011 where the JRPP resolved, by a majority of 4 to 1, that it would approve the application if the applicant</p> <ol style="list-style-type: none"> <li>Provides 30 additional as yet non-existing parking spaces available at all times within 400m of the site. These 30 spaces are in addition to the 19 already provided on site as well as the first-response vehicles.</li> <li>Reduces the width of the 19 on-site car spaces along the Derbyshire Road frontage to the Australian standard, which will result in the number of spaces becoming 25</li> <li>Dedicates a 1.5m strip of land along the Derbyshire Road frontage to facilitate the widening of the road.</li> <li>Removes the awning in front of the western elevation of the heritage item.</li> </ol>
D/2011/540	<p>Use of an existing building and its surrounds as a public transport museum – APPROVED (12 March 2012).</p>





D/2012/415	Installation of additional equipment on an existing telecommunications facility – WITHDRAWN (1 November 2012).
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160-180 Balmain Road (Leichhardt Secondary College)

Date	Application Details
D/2001/366	Closure of Moore St West for construction of new playing fields for school.

#### 4. CROWN DEVELOPMENT ASSESSMENT PROCESS

Section 89 of the Environmental Planning & Assessment Act 1979 applies to this application as it pertains to Crown land. Section 89 and Section 89A are reproduced below

##### *"89 Determination of Crown development applications*

*(1) A consent authority (other than the Minister) must not:*

- (a) refuse its consent to a Crown development application, except with the approval of the Minister, or*
- (b) impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.*

*(2) If the consent authority fails to determine a Crown development application within the period prescribed by the regulations, the applicant or the consent authority may refer the application:*

- (a) to the Minister, if the consent authority is not a council, or*
- (b) to the applicable regional panel, if the consent authority is a council.*

*(2A) A Crown development application for which the consent authority is a council must not be referred to the Minister unless it is first referred to the applicable regional panel.*

*(3) An applicable regional panel to which a Crown development application is referred may exercise the functions of the council as a consent authority (subject to subsection (1)) with respect to the application.*

*(4) A decision by a regional panel in determining a Crown development application is taken for all purposes to be the decision of the council.*

*(5) If an applicable regional panel fails to determine a Crown development application within the period prescribed by the regulations, the applicant or the panel may refer the application to the Minister.*

*(6) The party that refers an application under this section must notify the other party in writing that the application has been referred.*

*(7) When an application is referred under this section to an applicable regional panel or the Minister, the consent authority must, as soon as practicable, submit to the panel or the Minister:*

- (a) a copy of the development application, and*
- (b) details of its proposed determination of the development application, and*
- (c) the reasons for the proposed determination, and*
- (d) any relevant reports of another public authority.*

*(8) An application may be referred by a consent authority or applicable regional panel before the end of a relevant period referred to in subsection (2) or (5).*



**89A Directions by Minister**

*(1) On a referral being made by a consent authority or an applicable regional panel, or an applicant, to the Minister under this Division, the Minister may direct the relevant consent authority, within the time specified in the direction:*

- (a) to approve the Crown development application, with or without specified conditions, or*
- (b) to refuse the Crown development application.*

*(2) A consent authority must comply with a direction by the Minister.*

*(3) If the consent authority fails to comply, the consent authority is taken, on the last date for compliance specified in the direction, to have determined the Crown development application in accordance with the Minister's direction.*

*(4) Despite subsection (2), a consent authority may vary a condition specified by the Minister with the approval of the applicant”.*

Thus, pursuant to Section 89(1) if the JRPP seeks to impose a condition of consent on this application, or refuse this application, concurrence must first be sought from the Minister.

At its meeting on 4 December 2012, a report was presented to Council, which recommended that the application be referred to the Joint Regional Planning Panel with a recommendation for refusal. Council voted unanimously to adopt this recommendation, and the recommendation is reproduced below:

*“That Council as the consent authority pursuant to s89(1)(a) of the Environmental Planning and Assessment Act 1979 refer the application to the Joint Regional Planning Panel, with a recommendation for refusal of the Development Application No. D/2012/295 for the re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot for the following reasons:*

- 1. The proposal is inconsistent with the Employment objectives of Clause 20 and of the Leichhardt Local Environmental Plan 2000, as the impact on car parking in surrounding residential area is detrimental to the amenity of those surrounding residential properties pursuant to Section 79C (1)(a)(i) of the Environmental Planning and Assessment Act 1979.*
- 2. The proposal fails to comply with the provisions of the Leichhardt Development Control Plan 2000, pursuant to Section 79C (1)(a)(iii) of the Environmental Planning and Assessment Act 1979 as follows:*
  - (a) Part A8.0 & Part C1.2 – As the proposal is unable to accommodate the increased parking requirements and will result in an additional 40 vehicles being parked on nearby residential streets.*
- 3. Insufficient information has been provided to demonstrate that the following elements achieve compliance with the requirements of the Building Code of Australia.*
  - Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.*
  - The number of required exits remain compliant with D1.2.*
  - Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.*



- *The proposed location and number of the disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.*
4. *Given the adverse impacts the proposal would have on the residential amenity of adjoining properties, the subject site is not considered suitable to accommodate the proposed development in its current form, pursuant to Section 79C (1)(c) of the Environmental Planning and Assessment Act 1979.*
  5. *The proposal is not considered to be in the public interest, pursuant to Section 79C (1)(e) of the Environmental Planning and Assessment Act 1979”.*

Council also voted to unanimously adopt a further motion that was brought forward at the Council meeting. This motion is reproduced below:

*“B. That the assessment report to be provided to the JRPP outline the following further reasons for refusal raised by Councillors:*

- *Unacceptable acoustic impacts*
- *Unacceptable traffic impacts*
- *Impacts on users of Pioneer Park*
- *Speeding impacts on William Street.*
- *Safety impacts on William and Henry Street”.*

On 27 November 2012, Council received correspondence from a representative of the applicant, indicating that the applicant wished for the application to be referred to the JRPP as a matter of urgency.

On 3 December 2012, Council received further correspondence from the applicant in response to the report that was to be presented at the Council meeting. This is discussed further elsewhere within this report.

## **5. ASSESSMENT**

The following is a summary of the assessment of the application in accordance with Section 79C of the Environmental Planning & Assessment Act 1979.

### **(a)(i) Environmental Planning Instruments**

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- Interim Development Order 27
- Leichhardt Planning Scheme Ordinance
- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy (Infrastructure) 2007
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Leichhardt Local Environmental Plan 2000

The following summarises the assessment of the proposal against the development standards and lists the other relevant clauses of the Leichhardt Local Environmental Plan 2000.



- Clause 12 – Vision of the plan
- Clause 13 – General Objectives
- Clause 15 – Heritage Objectives
- Clause 16(7) – Development in the Vicinity of a heritage item
- Clause 16(8) – Development in Conservation Areas
- Clause 20 -Employment Objectives
- Clause 27 – Community Uses
- Clause 28 – Public Purpose Zone
- Clause 29 – General Provisions for the Development of Land
- Clause 35 – Suspension of Covenants, Agreements and Instruments

The application satisfies the provisions of the above Environmental Planning Instruments with the exception of the following.

#### Leichhardt Local Environmental Plan 2000 - Vision of the Plan

Clause 12 of the Leichhardt Local Environmental Plan 2000 outlines that the vision of the Plan is to conserve and enhance the quality and diversity (social and physical) of the natural, living, working and leisure environments of the local government area of Leichhardt. It is considered that the proposal does not meet the above requirement. Further discussion on these matters is provided in Section 5(a)(iii) of this report.

It is considered that the proposal does not meet the above requirement. Further discussion on these matters is provided in Section 5(a)(iii) of this report.

#### Leichhardt Planning Scheme Ordinance

Clause 33.1(j) of the Leichhardt Planning Scheme Ordinance states that the consent authority must consider the impact of the proposal upon the existing and future amenity of the neighbourhood. It is considered that the proposal is unsatisfactory in this regard for the reasons outlined within Section 5(a)(iii) of this report.

### **(a)(ii) Draft Environmental Planning Instruments**

The application has been assessed against the relevant Draft Environmental Planning Instruments listed below:

- Draft Leichhardt Local Environment Plan 2012

#### Draft Leichhardt Local Environment Plan 2012

The Draft Leichhardt Local Environment Plan 2012 commenced exhibition on the 17 December 2012, and is therefore a matter for consideration under Section 79C of the Environmental Planning and Assessment Act 1979.

The following summarises the assessment of the proposal against the development standards and lists the other relevant clauses of the Draft Leichhardt Local Environment Plan 2012.

- 1.2 – Aims of the Plan
- 1.8A – Savings Provisions relating to Development Applications
- 2.3 – Zone objectives and Land use Table





- Land Use Table
- 5.10 – Heritage Conservation
- 6.6 - Development in areas subject to aircraft noise

The application satisfies the provisions of the above Environmental Planning Instruments with the exception of the following.

#### Aims of the Plan

Clause 1.2(2)(a) requires that one of the particular aims of the plan is to minimise negative impacts of urban development on the natural, social, economic, physical and historical environment.

It is considered that the proposal does not meet the above requirement. Further discussion on these matters is provided in Section 5(a)(iii) of this report.

#### **(a)(iii) Development Control Plans**

The application has been assessed against the relevant Development Control Plans listed below:

- Leichhardt Development Control Plan 2000
- Leichhardt Development Control Plan No.32 – Equity of Access
- Leichhardt Development Control Plan No.36 – Notifications
- Leichhardt Development Control Plan No.38 – Waste: Avoid, Reuse, Recycle
- Leichhardt Development Control Plan No.42 – Contaminated Land Management

More specifically, the application has been assessed against the following clauses of Development Control Plan 2000.

- Part A2.0 – Urban framework plans
- Part A3.0 – Principles of ecologically sustainable development
- Part A3a.0 – Sustainable water and risk management
- Part A4.0 – Urban form and design
- Part A5.0 – Amenity
- Part A6.0 – Site analysis
- Part A7.0 – Heritage conservation
- Part A8.0 - Parking standards & controls
- Part A10.2.4. – Helsarmel distinctive neighbourhood
- Part C1.1- Site layout & building design
- Part C1.2 - Parking layout, servicing & manoeuvring
- Part C1.5 - Site facilities
- Part C2.1 - Site drainage & stormwater control
- Part C2.9 - Appliances & equipment
- Part C3.1 - Noise & vibration generation
- Part C3.2 - Air pollution
- Part C3.3 - Water pollution
- Part C3.4 - Working hours

The applications satisfies the provisions of the above Development Control Plans with the exception of the following



Part A8.0 Parking standards & controls and Part C1.2 – Parking layout, servicing & manoeuvring:

At its meeting of 26 June 2012, Council resolved as follows:

*“.....That Council undertake a new parking availability survey in surrounding residential streets to be incorporated into the Council assessment report”.*

That survey was undertaken, and the main body of this study (“the Peer Review”) is attached as ‘Attachment B’. For brevity, the lengthy appendices to the Peer Review have not been provided however are readily available for viewing on Council’s on-line DA tracking system.

The Peer Review was considered by Council. The following comments are provided:

Council engaged GTA Consultants to undertake a Transport Impact Assessment Peer Review of the Leichhardt Bus Depot.

The purpose of the report was to assess the anticipated transport implications of the bus depot upgrades considering the following:

- Existing traffic and parking conditions surrounding the site
- Suitability of the proposed parking in terms of supply and layout
- The parking impact of the proposed development on the surrounding streets
- The traffic generating characteristics of the proposed development
- The transport impact of the development proposal on the surrounding road network

The main findings of the report are as follows:

- Conservatively estimates that a total of 81 bus movements and 21 vehicles movements will occur in the AM and PM peak hour.
- Against existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network. Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.
- The additional car parking demand as a result on the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets however existing demand profile indicate that these can be accommodated within the study area streets. It is likely, however, that this would further reduce the on street parking availability in close proximity to the bus depot, thereby reducing the availability for residents and other local users. It would also increase the circulation of vehicles searching for parking in local streets and increase walking distances for residents and other local users.



- To provide an approximation of the likely parking impact of the additional bus depot staff, the 2006 Census data indicates that the Journey to Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. On this basis 56 of the additional 76 staff would arrive by car. When accounting for the additional parking spaces to be provided (noting that 7 of the 21 proposed spaces have already been provided) this would result in around 40 additional vehicles parked on street in the vicinity of the site.

Given the findings of the report, the development is not supported as a result of the insufficient on site parking proposed and its subsequent impact on parking in the surrounding residential streets.

Furthermore, as well as a deficiency in the gross amount of parking there is the related problem that parking for residents is being pressured to the extent that often residents are unable to park near their homes. The parking demand generated by the proposed use cannot be readily incorporated into the nearest streets without exacerbating detrimental impacts on local residents.

Adding to the parking concerns above is the fact that this area is also used to accommodate parking from the high school, the nearby function centre, park users (discussed in greater detail in Section 7 of this report), sports teams using the playing fields and the Greek Church on Henry Street. This means that the parking shortfall may be further exacerbated during periods when events and functions are taking place within the vicinity of the site.

The letter received from the applicant on 3 December 2012, outlined several issues which require further clarification and are discussed below:

*"Council's report has used the 2006 Census data instead of the 2011 Census data for the Journey.to.Work figures".*

The 2006 Journey to Work is currently the latest dataset that is available which was used by GTA Consultants in the Transport Impact Assessment Peer Review and in the assessment of the estimated parking demand. The 2011 Journey to Work (JTW) data is expected to become available from the ABS by March 2013 and cannot be used in this assessment. Furthermore, the 2006 JTW data (73% mode split by car) is for Leichhardt LGA as a destination whereas the 2011 quickstats data (43.9% mode split by car) detailed in the letter is for Leichhardt LGA as an origin. The 2006 statistics are relevant in this instance as the bus depot staff have a destination of Leichhardt LGA and not an origin. The 2011 JTW data for Leichhardt LGA as a destination is not yet available.

*The occupancy rates range from 66.1 % (333 vacancies) at 4.30pm to 76.7% (229 vacancies) at 8.00pm during the week. It is therefore considered, that an additional 13 vehicles will not significantly impact on the surrounding street parking.*

Whilst the parking surveys indicate that the wider area has capacity to cater for the additional on street parking demand of the development, it will result in a significant amenity impact to the local residents in the immediately adjacent streets detailed within the Peer Review as parking occupancies would increase to levels where residents would be unable to find a parking space near their homes.



"The Leichhardt DCP states that the carparking rates are intended as a generic guide and may need to be adjusted for local circumstances, employee densities, public transport accessibility and reduced car mode share targets, where appropriate. The staff parking rates are based on the principle of providing parking supply up to 20% lower than observed or calculated demand to discourage car usage for journey to work travel".

Leichhardt Development Control Plan 2000 states that 'Staff parking shall be restricted to a minimum of 80% of the total staff parking demand and a maximum of 100% of total staff parking demand generated by the development, depending on local circumstances and public transport accessibility. The calculation of staff parking demand is to be based on current journey to work mode share patterns of the locality'.

In this instance it is considered appropriate that the development provide parking for 100% of staff given the likely high prevalence of shift work for a bus depot and the high observed parking occupancy in the immediately adjacent unrestricted parking in local streets including Charlotte Street, Alfred Street, William Street and Henry Street.

"Further, STA staff is provided with free travel on public transport".

No evidence is available to confirm the proportion of staff who are able to utilise the free public transport available. It is considered that there may be significant barriers for public transport patronage for staff of the bus depot for following reasons:

- Given the likely high prevalence of shift work for this type of premises, especially given that the bus depot operations relies on at least some staff arriving before the first bus of each service departs, and leaving after the last bus of each service returns, it is evident that that not all staff will be able to rely on public transport.
- Employees may not have easy access to any public transport from their point of origin.
- Employees working split shifts may choose to drive to enable use of their car during the shift break

"Increasing the bus capacity at the Leichhardt Depot will assist in meeting the principles of the DCP in that it will improve access to public transport and increase the choice of available transport and further reduce the dependence on cars".

There is no evidence to suggest that any increase in potential future public transportation will have a beneficial impact on parking in the vicinity of the site. Additionally, there is no evidence that the additional buses will provide additional services and are not simply the relocation of buses for existing services from another depot.

"(Using the 2006 Census Data) the figure for additional vehicles should be 35 additional vehicles as follows. 73% of 76 staff = 56 staff minus 21 carparking spaces = 35 additional vehicles ... therefore, the number of additional vehicles would be calculated as follows: 43.9% of 76 staff = 34 staff minus 21 carparking spaces = 13 additional vehicles".

During a number of on-site inspections of the bus depot, it has been observed that the additional 7 spaces proposed within the existing car park have already been marked and are being used to cater for existing parking demand on site. It is therefore considered that these spaces will not be available for the additional 76





staff. Using the 2006 Census data, 73% of 76 staff would equate to 56 additional parking spaces being required. The application proposed 21 additional parking spaces; however, 7 of these have already been provided. Therefore 56 parking spaces would be required less the 14 proposed – equating to 42 additional parking spaces.

In addition to the response to points raised in the letter from the applicant, it should also be noted that the bicycle parking has also already been provided on the site, and that some of the proposed motorbike parking has already been provided. Additionally, inspections revealed that motorbike parking is currently provided informally on the site. Finally, the 2006 journey to work data mode split by car (73%) has been used to estimate the additional parking demand generated by the additional Bus Depot staff. This percentage does not include journey to work by motorbikes, hence based on this data, the provision of any additional on-site motorbike or bicycle parking does not reduce the need for the additional vehicular parking spaces.

The estimate that an additional 40 vehicles will park on street as a result of the proposal is considered an accurate assessment. Further information is provided in the Peer Review. On the basis of the above, the expected parking impacts on the surrounding street network are not supported, and the application is recommended for refusal on these grounds.

#### **(a)(iv) Environmental Planning and Assessment Regulation 2000**

The Development Application has been assessed against the relevant clauses of the Environmental Planning and Assessment Regulation 2000. The Development Application fully complies with the Environmental Planning and Assessment Regulation 2000.

#### **(b) The likely environmental both natural and built environment, social and economic impacts in the locality**

The assessment of the Development Application demonstrates that the proposal will have an adverse impact on the locality in the following way:

- Parking demand cannot be accommodated on the site, and cannot be readily absorbed into the surrounding street network without affecting the amenity of nearby residents, and other users of street parking in the vicinity.

#### **(c) The suitability of the site for the development**

The site is zoned Public Purpose in accordance with Leichhardt Local Environmental Plan 2000 and 5(b) Railways in accordance with the Leichhardt Planning Scheme Ordinance. It is considered that the proposal will have an adverse impact on the surrounding area for those reasons outlined elsewhere in this report and therefore it is considered that the site is unsuitable to accommodate the proposed development.

#### **(d) Any submissions made in accordance with the Act or the regulations**

The Development Application was notified for a period of 30 days.



The notification period was from 12th July 2012 to 10th August 2012. The notification of the application included:

- Approximately 2200 letters sent to nearby properties.
- A yellow site notice placed on the site.
- Listing under the notification section on Council's website.

45 objections were received during the advertising period.

The following information is provided in response to the issues raised in the objections.

Issue: Impact on on-street parking in nearby residential streets, particularly given that proposal does not seek sufficient on site parking to accommodate the increased parking demand. Concerns also related to impact of proposal in conjunction with the various public facilities in the area, and the pending upgrades to the light rail system and opening of the Leichhardt Bus Museum.

Comment: Refer to Section 5(a)(iii) of this report in relation to parking.

Issue: Impact on traffic congestion, particularly at the intersection of the City West Link and Norton Street and the City West Link and Balmain Road.

Comment: An independent assessment of the impacts of the proposal on traffic in the locality has been undertaken. It was concluded that *"whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays"*. Subsequently it is considered that the proposal is satisfactory in this regard.

Issue: Additional bus and car movements being a hazard for vehicle and pedestrian safety.

Comment: As a result of the proposal there will be an increase in the number of bus and car movements to and from the site. While it is not considered that this issue is so significant as to warrant refusal of the proposal, the additional on-street parking impacts in the locality are significant and the application is not supported.

Issue: Impact on property values

Comment: There is no evidence to suggest that the proposal will impact on nearby property values.

Issue: Acoustic impacts created by the additional bus and car movements, and from the existing public address (PA) system used at the site. It has been suggested that the PA system currently operates as late as 11:00pm.



Comment: Given that buses currently operate from the site, it is not considered that the current proposal would give rise to significant additional acoustic impacts on nearby properties. That said, no acoustic analysis has been undertaken which would confirm (or not) this situation. Given the application is recommended for refusal on the basis of a substantial on-site parking shortfall, this is not considered warranted at this time.

The premises are currently permitted to operate 24 hours per day. Were the application recommended for approval, a condition of consent relating acoustic output emanating from the site may have been recommended.

Issue: *"(The residents) were not notified last time 90 people were employed and after the event we lodged our complaint".*

Comment: There is no record of an additional 90 people being employed at the site, other than this application being considered.

Issue: *"(Residents were not notified) when the changes were made to altering the plans by having lights instead of a round about on the corner of Alfred St and Balmain Rd, citing the buses needed a larger turning circle than the original plans (to accommodate a bicycle path)"*

Comment: The traffic lights were a condition of consent which were endorsed by the then Roads and Traffic Authority and the applicant. Residents that made submissions on the application (D/2006/660) were advised when the report addressing the traffic lights was considered by Council.

Issue: *"The lack of information from the State Transit Authority on the need for such a massive, rapid expansion just a few years after the Leichhardt Bus Depot's substantial redevelopment is also of concern, especially with extra public transport planned for the area with the upcoming expansion of the Light Rail service".*

Issue: *"I am also concerned that this Development Application has been submitted ahead of any feasibility study on public transport in the Leichhardt area".*

Comment: The information dispersed to the public from the applicant is not a matter for the assessment of the proposal.

Issue: The high volume of bus traffic causes damage to nearby roads.

Comment: Noted.

Issue: *"We were not informed that a major new bus route, the M10, would be using William Street to both exit and enter the bus depot".*

Comment: Council is not aware of any requirement for the applicant to notify residents of changes to bus services.



Issue: "How many more buses are to drive up and down William Street each day if you give this D.A. the go-ahead?"

Comment: Condition 29 of D/2006/660 does not permit any additional buses departing the bus depot from William Street towards the City West Link between 6:30am and 9:30am Monday to Friday. Thus, no additional buses would be permitted during this period. Beyond this condition, there are no restrictions as to the amount of bus movements from the depot.

Issue: Various additional requests and suggestions were received in relation to the traffic and parking impacts of the proposal. These suggestions are outlined below:

- Examination of speeds of buses travelling on William Street is required.
- Traffic survey of Norton Street and Balmain Road is required.
- No traffic should use the William Street exit.
- Reconfiguration of the depot such that buses come off the Western Distributor.
- Another access point to the City West Link being provided.
- The removal of all bus traffic from William Street.
- The bus depot entrance/exit points to be moved from William Street and Balmain Road to the City West Link, where there is no residential housing.
- A "turn-right" light to be provided at the corner of Norton Street and the Western Distributor.
- The Burwood Bus Depot being more suitable for an upgrade.

Comment: These suggestions relate primarily to the current operations of the bus depot and traffic movements within the vicinity and are outside the scope of this application.

#### **(e) The public interest**

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal is contrary to the public interest.

#### **6. SECTION 94 CONTRIBUTIONS**

Section 94 contributions are not payable for the proposal.

#### **7. INTERNAL REFERRALS**

The Development Application was referred to the following Council Officers:

##### Building Surveyor

The application was referred to Council's Building Surveyor who provided the following comments:





*“A Building Code of Australia Assessment Report is to be provided confirming the location of the proposed vehicles and bike storage areas (to) maintain compliance with the following Parts of the BCA.*

- *Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.*
- *The number of required exits remain compliant with D1.2.*
- *Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.*
- *The proposed location and number of the Disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.*

*Design changes may be proposed by the applicant being subjected to addressing the comments raised above particularly in regards to internal and external changes to address egress, fire services and disabled access requirements”.*

The application has not satisfactorily demonstrated the above. However, given that Council does not support the proposal, this information has not been requested.

The letter received from the applicant on 3 December 2012 stated that a BCA report could be required as a condition of consent. This application is recommended for refusal; however, should the application be approved, a condition is recommended requiring a BCA report. Inspection of the property revealed that some of the proposed parking in the basement, which has already been provided, impedes existing fire exits. A BCA report may conclude that these parking spaces are to be removed. Whilst a condition could be imposed requiring the BCA report to find methods of meeting the requirements of the BCA, without reducing the number of parking spaces or the compliance of such spaces with AS2890, it is unclear if this is achievable.

#### Development Engineer

The application was referred to Council's Development Engineer. Refer to comments from Council's Traffic Engineer for further information.

#### Strategic Planning (Parks)

The application was referred Strategic Planning (Parks) who provided the following comments:

*“Current and proposed car parking arrangements in Williams Street and Derbyshire Road are significant issues which are negatively affecting the use and enjoyment of Pioneers Memorial Park. These two roads are already congested during day light hours by employees’ cars from the STA site. Since the opening of the new bus facility in 2009 the use of Williams Street has changed dramatically. The Park Plan of Management developed for Pioneers Memorial Park highlights significant problems associated with car parking arrangements in Williams Street.*

*There are substantial issues with the lack of car parking available for park users and visitors to Pioneers Memorial Park (this is a significant issue for young mothers and family groups visiting the park, its playground and passive open space enjoyment) for visitors to the park. These problems have arisen as a direct result of the Original Development Application Approval. A large area of the eastern section of William Street is unrestricted in terms of car parking arrangements. This has had a negative*



*impact on the use of the park as a whole as all available on street car parking is currently being occupied by STA staff during the day restricting access for park users. Further to this safety issues have also been raised in relation to children accessing the park crossing Williams Street with the speed, size and frequency of buses.*

*Parks Planning would like to see parking restrictions for non residents brought into the entire William Street precinct to regulate parking and provide parking arrangements for residents and park users/visitors to Pioneers Memorial Park. The STA needs to recognise that car parking facilities need to be provided on site for STA employees and not in the adjacent residential area. As a possible solution to this dilemma Parks Planning would like to see the current hard surfaced parking area which is confined within the former Cable Store site opened up for parking arrangements to support the STA site. This coupled with parking restrictions in Williams Street would assist in reducing the current congestion along William Street and facilitate greater use and enjoyment of Pioneers Memorial Park. In addition to this speed and the size and volume of buses entering William Street also needs to be reviewed.*

*Finally the Roundabout on the corner of Norton Street and Williams Street has been severely damaged by large buses (bendy buses) cutting across the roundabout to enter Williams Street and this issue also needs to be addressed from a place making, maintenance and safety perspective”.*

The proposal is not supported given the impacts on parking within the vicinity of the site.

#### Traffic Engineer

The application was initially referred to Council’s Traffic Engineer who provided comments, which are outlined within Section 5(a)(iii) of this report in relation to parking and traffic. Following the receipt of a letter from the applicant on 3 December 2012, additional comments were provided which are also summarised in Section 5(a)(iii) of the report. The application is recommended for refusal; however, further comments are provided below:

*“Given the shortfall in off street parking provision, Council has investigated options in the immediate vicinity of the subject property to increase existing on street parking that could be undertaken by the applicant.*

*In this regard, there is an opportunity for the provision of an additional parallel parking lane on the western side of Derbyshire Road, between William Street and the southern end (Moore Street West). This would require relocation of the existing kerb line, by narrowing the footpath adjacent to Pioneers Park, resulting in the creation of up to an additional 12 on street parking spaces. These parking spaces would not be reserved for STA employees and would also be available to local residents and park users.*

*In addition, the applicant should review off street parking provision on the subject property, including the whole of Lot 3 of DP867166. In this regard, subject to the creation of up to an additional 12 on street parking spaces, as above, a further 28 off street parking spaces should be provided on site. For every shortfall in off street car*



*parking provision, the total number of buses stored on site should be reduced by 0.5 buses”.*

It is noted that the application pertains to Lot 3 of DP867166, despite the entire allotment not being shown on the site plan.

## **8. EXTERNAL REFERRALS**

### Roads and Maritime Services

In accordance with the requirements of Reg. 104 of SEPP (Infrastructure) 2007, the Development Application was referred to Roads and Maritime Services who provided the following comments.

*“RMS has reviewed the proposal and provides following advisory comments to Council for consideration in the determination of the application:*

- 1. The layout of the proposed modified parking areas should be in accordance with AS2890.1-2004 and AS2896.2-2002.*
- 2. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.*
- 3. All works / regulatory signage associated with the proposed development are to be at no cost to the RMS”*

## **9. CONCLUSION**

The Development has been assessed in accordance with Section 79C(1) of the Environmental Planning and Assessment Act 1979 and all relevant instruments and policies. The proposal is unsatisfactory in respect of parking impacts, and will result in adverse impacts on the locality. Additionally, the proposal provides insufficient detail to ensure compliance with the Building Code of Australia. Accordingly, the application is recommended for refusal.

## **10. RECOMMENDATION**

That pursuant to s80 of the Environmental Planning and Assessment Act 1979 Development Application No. D/2012/295 for the re-configuration of parking to provide for an additional 81 buses and 21 car parking spaces at the Leichhardt Bus Depot be refused for the following reasons

1. The proposal is inconsistent with Clauses 12, 20, 27, 28 and 29 of the Leichhardt Local Environmental Plan 2000, as well as Clause 33.1 of the Leichhardt Planning Scheme Ordinance 1979, as the impact on car parking in surrounding residential area is detrimental to the amenity of those surrounding residential properties and other users of the area pursuant to Section 79C (1)(a)(i) of the Environmental Planning and Assessment Act 1979.



2. The proposal fails to comply with the provisions of the Leichhardt Development Control Plan 2000, pursuant to Section 79C (1)(a)(iii) of the Environmental Planning and Assessment Act 1979 as follows:
  - (a) Part A8.0 & Part C1.2 – As the proposal is unable to accommodate the increased parking requirements and will result in an additional 40 vehicles being parked on nearby streets.
3. Insufficient information has been provided to demonstrate that the following elements achieve compliance with the requirements of the Building Code of Australia.
  - Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
  - The number of required exits remain compliant with D1.2.
  - Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
  - The proposed location and number of the disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.
4. Given the adverse impacts the proposal would have on the residential amenity of adjoining properties, the subject site is not considered suitable to accommodate the proposed development in its current form, pursuant to Section 79C (1)(c) of the Environmental Planning and Assessment Act 1979.
5. The proposal is not considered to be in the public interest, pursuant to Section 79C (1)(e) of the Environmental Planning and Assessment Act 1979.
6. Further reasons for refusal raised by Councillors:
  - Unacceptable acoustic impacts
  - Unacceptable traffic impacts
  - Impacts on users of Pioneer Park
  - Speeding impacts on William Street.
  - Safety impacts on William and Henry Street.





STA  
LEICHHARDT BUS DEP  
DEVELOPMENT APPLIC  
PROPOSED BASEMENT  
CARPARKING LAYOUT  
3 JULY 2012

2x car

8x m/bike

1x car

5x m/bike

13x m/bike

4x m/bike

3x car

4x m/bike

one way

one way

Bicycle Parking

TOTAL - 132 CARPARKING SPACES  
(INCLUDING 2 DISABLED)

38 M/BIKE SPACES

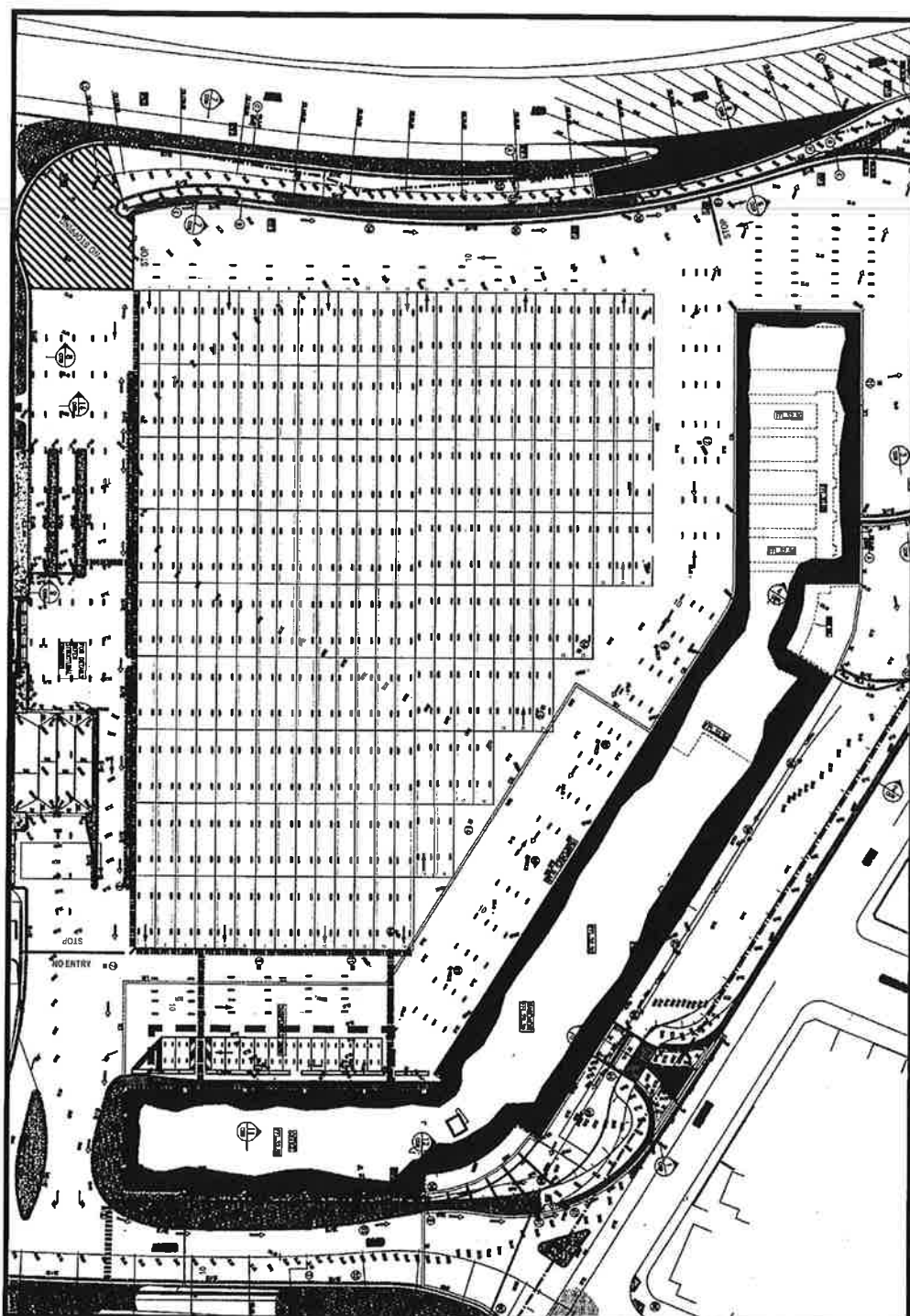
TOTAL - 132 CARPARKING SPACES  
(INCLUDING 2 DISABLED)

38 M/BIKE SPACES

Bicycle  
Parking



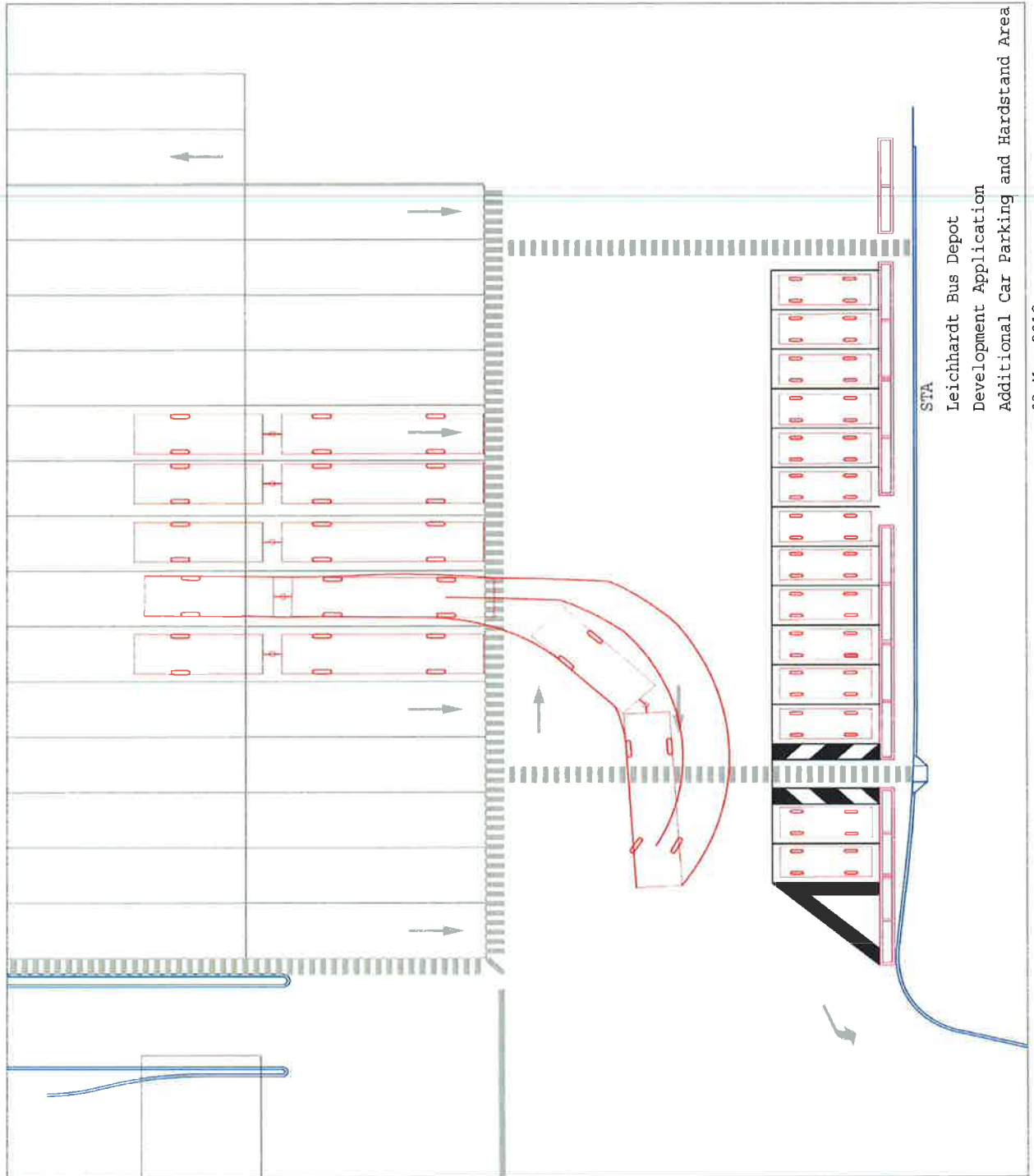
MARKED BAYS = 192  
 AISLE AREAS = 64  
 MAINTENANCE = 25  
 TOTAL = 281



TOTAL - 14 CAR  
 PARKING SPACES

STA  
 LEICHHARDT BUS DEPOT  
 PROPOSED ADDITIONAL  
 CARPARKING  
 3 JULY 2012





Leichhardt Bus Depot  
Development Application  
Additional Car Parking and Hardstand Area

03 May 2012



# **ATTACHMENT 6**







Leichhardt Bus Depot  
Transport Impact Assessment  
Peer Review

transportation planning, design and delivery

# Leichhardt Bus Depot

## Transport Impact Assessment Peer Review

Issue: B 08/11/12

Client: Leichhardt Municipal Council

Reference: 13S1015000

GTA Consultants Office: NSW

### Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By
A	08/10/12	Final	Sarah Court, Rhys Hazell	Rhys Hazell	<i>B. D. Maynard</i>
B	08/11/12	Final – Amended	Sarah Court, Rhys Hazell	Rhys Hazell	<i>B. D. Maynard</i>

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## 1. Introduction

### 1.1 Background

It is understood that NSW Transport, State Transit (STA) has lodged a Development Application (DA) (D/2012/295) with Leichhardt Municipal Council for a proposed reconfiguration of the Leichhardt Bus Depot, located at 230-240 Balmain Road, Leichhardt. The proposed reconfiguration will incorporate an increase in on-site bus storage capacity to accommodate an additional 81 buses within the existing bus hardstand area. A further 21 on-site staff car parking spaces are also proposed within the basement level car park and hardstand area.

GTA Consultants was commissioned by Leichhardt Municipal Council in July 2012 to undertake a transport impact assessment for the proposed development.

### 1.2 Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the proposed development, including consideration of the following:

- i existing traffic and parking conditions surrounding the site
- ii suitability of the proposed parking in terms of supply (quantum) and layout
- iii the parking impact of the proposed development on the surrounding streets
- iv the traffic generating characteristics of the proposed development
- v the transport impact of the development proposal on the surrounding road network.

### 1.3 References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds
- Leichhardt Municipal Council Development Control Plan (DCP) 2000
- Leichhardt Municipal Council Local Environment Plan (LEP) 2000
- Leichhardt Bus Depot Development Application Report prepared by Peter Andrews and Associates, May 2012
- plans and swept paths for the proposed development prepared by Peter Andrews and Associates as referenced in the context of the Development Application
- Assessment of Traffic and Parking implications – Leichhardt Bus Depot, prepared by Transport and Traffic Planning Associates, May 2012
- traffic and car parking surveys undertaken by ROAR Data as referenced in the context of this report
- other documents and data as referenced in this report.

## 2. Existing Conditions

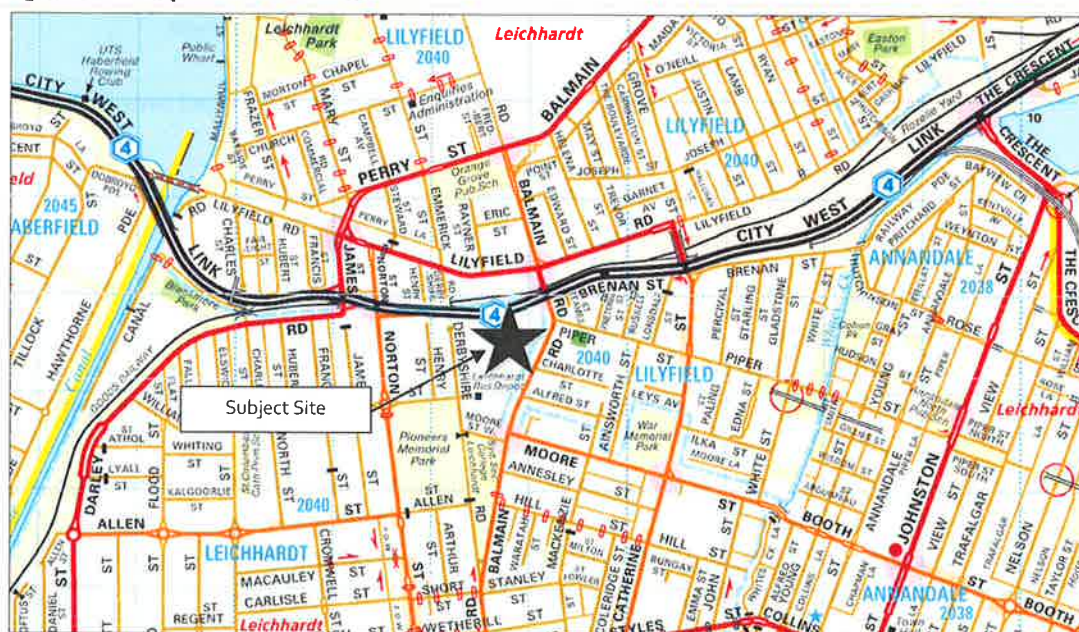
The subject site is located at 230-240 Balmain Road, Leichhardt. The site has a land use classification of 5(B) Railways and Public Purpose under the Leichhardt Local Environment Plan 2000. The site is occupied by the Leichhardt Bus Depot and currently accommodates approximately 200 buses.

The site is bound by the City West Link to the north, Balmain Road to the east, Derbyshire Road to the west and a bus only access via William Street to the south. Bus access is restricted to William Street, which is boom gate controlled, and a left-in only slip lane access via the City West Link. Staff access via a left-in/ left-out driveway to a basement car park is provided via Balmain Road. The surrounding properties predominantly include residential uses, with Sydney Bus Museum located along the western boundary and not considered as part of the site. Pioneers Memorial Park and Sydney Secondary College are located south of the site, and War Memorial Park is located to the east.

A DA for the redevelopment of two vacant tram buildings as a police station on land located south of the site was lodged with Leichhardt Municipal Council in 2010. It is understood that this development is not proceeding and as such, the traffic and parking impacts associated with the redevelopment of this site have not been considered as part of this assessment.

The location of the subject site and its surrounding environs is shown in Figure 2.1.

Figure 2.1: Subject Site and Its Environs



Basemap source: Reproduced with permission from Sydney Publishing Pty Ltd



## 2.1 Road Network

### 2.1.1 Adjoining Roads

#### City West Link

The City West Link is classified as a State Road and provides a major east-west arterial route along the northern boundary of the site. It links Anzac Bridge in the east with Parramatta Road and beyond in the west and is configured with 3 traffic lanes in each direction with additional turning bays at major intersections. The City West Link narrows to 2 traffic lanes in each direction west of Norton Street and east of Balmain Road.

The City West Link intersects with Norton Street west of the site and Balmain Road in the north-east corner of the site, at a 4-way signalised intersection at each location. Leichhardt Bus Depot also provides direct access for westbound buses via a slip lane entry, west of Balmain Road. No kerbside parking is permitted along City West Link.

The City West Link is shown in Figure 2.4 and Figure 2.5 and carries approximately 50,000 vehicles per day<sup>1</sup>.

**Figure 2.2: City West Link (looking west)**



**Figure 2.3: City West Link (looking west at Bus Depot slip lane entry)**



#### Balmain Road

Balmain Road is classified as a Regional Road and is aligned in a north-south direction along the eastern boundary of the site. It is a two-way road generally configured with a 2-lane, 10 metre wide carriageway, set within a 15 metre wide road reserve (approx). Additional lanes are provided at major intersections, including Alfred Street and City West Link.

The posted speed limit on Balmain Road is 50km/h however it is restricted to 40km/h during the AM and PM school times (8.00am-9.30am and 2.30pm-4.00pm). No on-street parking is permitted along Balmain Road north of Alfred Street, with a limited supply of unrestricted parking permitted along the eastern side of Balmain Road south to Annesley Street.

Balmain Road is shown in Figure 2.4 and carries approximately 10,000 vehicles per day<sup>1</sup>.

<sup>1</sup> Based on the peak hour traffic counts undertaken by GTA in August 2012 and assuming a peak-to-daily ratio of 8% for arterial roads and 10% for local roads.

## Existing Conditions

### Norton Street

Norton Street is classified as a collector road and in the vicinity of the site is aligned in a north-south direction. It is a two-way road configured with a 4-lane (2 parking lanes), 15 metre wide carriageway, set within a 20 metre wide road reserve (approx).

Norton Street has a posted speed limit of 50km/h, with kerbside parking permitted along the eastern and western kerbs, subject to time restrictions.

Norton Street is shown in Figure 2.5 and carries approximately 10,000 vehicles per day<sup>2</sup>.

Figure 2.4: Balmain Road (looking north)



Figure 2.5: Norton Street (looking south)



### William Street

William Street is classified as a local road and in the vicinity of the site is aligned in an east-west direction. It is a two-way road configured with a 4-lane (2 parking lanes), 15 metre wide carriageway, set within a 20 metre wide road reserve (approx).

William Street has a posted speed limit of 50km/h, with kerbside parking permitted along the northern kerb and 45° angle parking along the southern kerb, subject to time restrictions.

Between Derbyshire Road and Balmain Road, William Street is a two-way road configured with one lane each-way and is designated for bus access only. This section provides bus access for Leichhardt Bus Depot with a posted speed limit of 10km/h and vehicular access is restricted by boom gates at either end.

William Street is shown in Figure 2.6 and carries approximately 3,000 vehicles per day<sup>2</sup>.

### Derbyshire Road

Derbyshire Road is classified as a local road and is aligned in a north-south direction west of the site. It is a two-way road configured with a 2-lane, 5 metre wide carriageway, set within a 10 metre wide road reserve (approx).

Unrestricted kerbside parking is permitted along the eastern kerb of Derbyshire Road.

<sup>2</sup> Based on the peak hour traffic counts undertaken by GTA in August 2012 and assuming a peak-to-daily ratio of 8% for arterial roads and 10% for local roads.



Between William Street and Allen Street, vehicular access is blocked approximately 100 metres south of William Street by bollards, as shown in Figure 2.7, to restrict through traffic. A cul-de-sac is provided on the William Street side of the blockage to enable vehicles to turnaround.

The posted speed limit of Derbyshire Road is 50km/h, however, is restricted to 40km/h during the AM and PM school times.

**Figure 2.6: William Street (looking west)**



**Figure 2.7: Derbyshire Road (looking south)**



## 2.1.2 Surrounding Intersections

The following key intersections currently exist in the vicinity of the site:

- City West Link/ Balmain Road (4-way signalised)
- City West Link/ Norton Street (4-way signalised)
- Balmain Road/ Alfred Street (4-way signalised)
- Norton Street/ William Street (4-way roundabout).

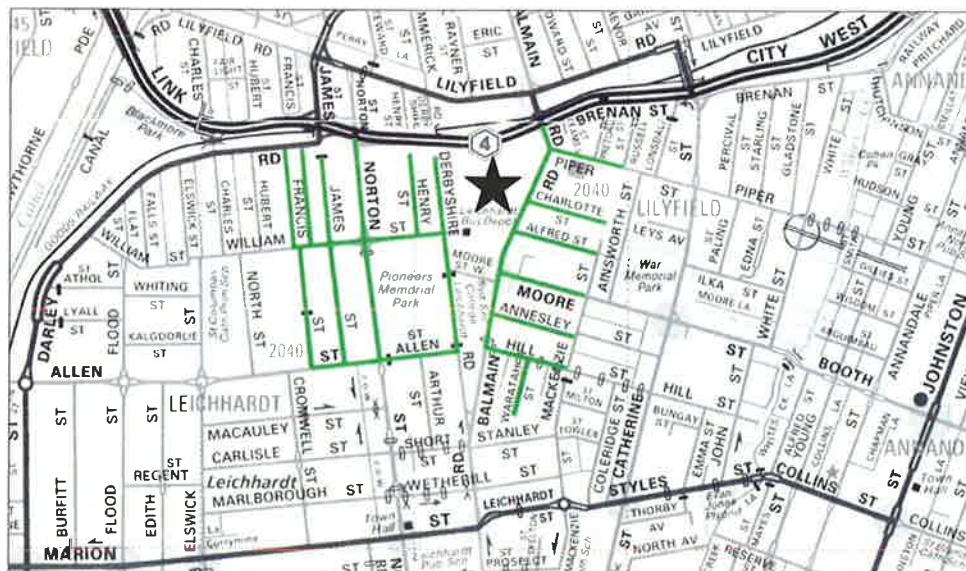
## 2.2 Car Parking

### 2.2.1 Supply

GTA Consultants compiled an inventory of publicly available on-street car parking within approximately 600-700 metres of Leichhardt Bus Depot. This catchment represents a 5-10 minute walking distance from the subject site, and captures areas which are known to offer on-street parking in favourable locations.

The survey catchment is presented in Figure 2.8.

Figure 2.8: On-Street Parking Catchment



The inventory identified that a total of 981 on-street parking spaces exist within the survey catchment operating under varying restrictions. Of the 981 on-street spaces, 614, or 63% are unrestricted.

The full inventory is presented in Appendix A of this report.

## 2.2.2 Weekday Demand

In consultation with Leichhardt Municipal Council and Leichhardt Bus Depot, it is understood that bus depot staff generally work to five main roster duty types as detailed in Table 2.2. While the approximately 50 maintenance staff work to standard shift hours, bus drivers start and finish progressively throughout the day (specific to rostered routes etc).

Table 2.1: Leichhardt Bus Depot Staff Roster

Shift Type	Sign-on	Sign-off
AM	4:00am	Before 4:00pm
Day	Morning peak	6:00pm
Broken Shift	AM (Varies)	Before 7:30pm
Midday	Late morning/early afternoon	10:00pm
PM	Early afternoon	After 10:00pm

It is evident that staff rostered on for the AM shift are the most likely to occupy the on-site car parking spaces and thus have a negligible impact on the surrounding on-street car parking environment. Staff working the day, and midday shifts would be increasingly likely to park on-street as on-site car parking reaches capacity.

It is understood that many staff on broken shifts remain at the bus depot and make use of on-site recreational facilities. Those who return home typically live in close proximity and are likely to walk or cycle to and from work.

## Existing Conditions

Based on the above, it is estimated that Leichhardt Bus Depot generates on-street parking demand from approximately 7:00am on a typical weekday and is generally reflected in the traffic surveys of the basement car park access included in Appendix A.

Given the close proximity of William Street and Henry Street to the site, the impact is greatest at these locations, dissipating dependent on parking restrictions and distance, and the time of day. In addition, it is considered that the PM shift would utilise both on-site parking and on-street spaces within close proximity to the site, increasing as the AM shift sign-off. This generally results in demand for on-street parking within close proximity to the site over an extended period of time during a typical weekday.

GTA Consultants commissioned car parking demand surveys on a typical weekday (Thursday 2 August 2012) and weekend (Saturday 28 July 2012) between 5:00am and 10:00pm at 30 minute intervals. These survey times intended to capture all on-street parking demand within the survey area, including prior to the majority of bus depot staff arriving for their shift, and concluding after the majority of staff finish their shift.

The weekday parking survey results are broken down to cover the AM and PM/ evening periods and are presented in Table 2.2 and Table 2.3 in hourly intervals. Full results (in 30 minute intervals) are provided in Appendix A.

**Table 2.2: Summary of AM Parking Surveys – Thursday 02/08/12**

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies [1]
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	44	39	51	47	41	44	45	44	9
Allen St (E of Norton St)	34	14	14	10	9	10	13	14	15	20
Allen St (W of Norton St)	29	22	22	19	20	19	20	22	20	6
Annesley St	60	48	46	48	43	33	33	32	30	12
Balmain Rd	37	23	25	25	21	20	17	16	16	12
Charlotte St	68	63	63	68	58	53	53	51	50	0
Derbyshire Rd	44	19	21	26	34	41	40	40	34	3
Francis St	118	110	111	98	84	70	66	62	62	7
Henry St	55	48	48	47	44	41	39	33	38	7
Hill St	30	24	23	22	21	21	21	20	19	6
James St	168	133	130	118	109	113	118	115	105	35
Moore St	43	23	22	30	34	41	40	41	42	0
Norton St	86	55	63	59	63	75	76	73	73	8
Piper St	13	9	9	11	11	8	9	6	5	2
Waratah St	50	42	41	50	45	39	39	44	43	0
William St (E of Norton St)	60	8	22	39	38	44	44	44	47	13
William St (W of Norton St)	26	13	15	18	20	21	20	22	20	5
<b>Total</b>	<b>981</b>	<b>698</b>	<b>714</b>	<b>739</b>	<b>701</b>	<b>690</b>	<b>692</b>	<b>680</b>	<b>663</b>	<b>140</b>
<b>% Occupancy</b>		<b>71.2</b>	<b>72.8</b>	<b>75.3</b>	<b>71.5</b>	<b>70.3</b>	<b>70.5</b>	<b>69.3</b>	<b>67.9</b>	
<b>Vacancies</b>		<b>283</b>	<b>267</b>	<b>242</b>	<b>280</b>	<b>291</b>	<b>289</b>	<b>301</b>	<b>318</b>	

[1] Minimum vacancies data determined using the ½ hourly count data, details included in Appendix A

## Existing Conditions

**Table 2.3: Summary of PM Parking Surveys – Thursday 02/08/12**

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	44	44	47	48	45	47	49	49	49	47	9
Allen St (E of Norton St)	34	14	16	19	11	11	15	16	14	13	15	15
Allen St (W of Norton St)	29	16	16	21	23	19	22	26	28	27	25	1
Annesley St	60	30	28	26	30	35	45	49	48	48	48	11
Balmain Rd	37	17	18	18	18	21	24	26	24	24	22	11
Charlotte St	68	45	39	39	41	43	48	51	51	63	68	0
Derbyshire Rd	44	37	37	35	27	26	24	24	25	19	16	7
Francis St	118	65	65	66	72	88	89	93	99	99	101	17
Henry St	55	41	44	41	41	41	45	42	39	41	42	9
Hill St	30	19	17	17	16	18	20	19	19	20	23	7
James St	168	104	103	104	110	114	120	132	139	141	140	27
Moore St	43	43	42	40	37	26	22	22	31	32	27	0
Norton St	86	67	69	78	73	73	78	81	77	75	64	5
Piper St	13	8	9	8	8	8	10	12	12	11	11	1
Waratah St	50	37	32	31	28	26	33	38	42	42	45	5
William St (E of Norton St)	60	51	52	47	48	48	47	39	34	23	18	8
William St (W of Norton St)	26	20	20	19	19	21	19	20	21	20	22	4
<b>Total</b>	<b>981</b>	<b>658</b>	<b>651</b>	<b>656</b>	<b>650</b>	<b>663</b>	<b>708</b>	<b>739</b>	<b>752</b>	<b>747</b>	<b>734</b>	<b>144</b>
<b>% Occupancy</b>		<b>67.1</b>	<b>66.4</b>	<b>66.9</b>	<b>66.3</b>	<b>67.6</b>	<b>72.2</b>	<b>75.3</b>	<b>76.7</b>	<b>76.1</b>	<b>74.8</b>	
<b>Vacancies</b>		<b>323</b>	<b>330</b>	<b>325</b>	<b>331</b>	<b>318</b>	<b>273</b>	<b>242</b>	<b>229</b>	<b>234</b>	<b>247</b>	

Table 2.2 and Table 2.3 indicate that public on-street car parking demand within a 600-700 metre walk of the site is high/ moderate and streets generally experience higher demand overnight, mainly due to demand associated with resident parking profiles. As a result, the peak demand occurred during the early morning and evening periods and is equal to an occupancy rate of 75.7% (238 vacancies) at 7:30am and 76.7% (229 vacancies) at 8:00pm. The lowest demand is equal to an occupancy rate of 66.1% (333 vacancies) at 4:30pm.

### 2.2.3 Weekend Demand

In order to quantify the combined parking impact of the proposed expansion of Leichhardt Bus Depot with existing weekend activities occurring in the vicinity, parking demand surveys were also undertaken on Saturday 28 July 2012.

These parking surveys sought to capture the existing parking demand associated with weekend activities at Pioneer Park, St Gerasimos Greek Orthodox Church (located on Henry Street west of the site), Sydney Secondary College and existing demand associated with the site. A summary of the results is presented in Table 2.4 and Table 2.5 in hourly intervals. Full results (in 30 minute intervals) are provided in Appendix A

It should be noted that the gate in Derbyshire Road, just north of Allen Street, is typically locked on weekends thus reducing the on-street capacity in Derbyshire Road between William and Allen Streets

## Existing Conditions

from 25 to 11 spaces, and the overall on-street parking supply within 600-700m of the site from 981 to 967 spaces. These conditions are reflected in Table 2.4 and Table 2.5.

**Table 2.4: Summary of AM Parking Surveys – Saturday 28/07/12**

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	49	47	47	39	38	34	34	31	11
Allen St (E of Norton St)	34	14	15	13	14	14	17	17	18	16
Allen St (W of Norton St)	29	19	19	17	18	14	19	21	24	5
Annesley St	60	47	49	49	48	47	40	39	37	11
Balmain Rd	37	24	24	22	18	19	22	22	24	11
Charlotte St	68	62	61	62	60	56	50	28	47	3
Derbyshire Rd	30	19	18	17	22	20	20	20	18	22
Francis St	118	102	101	97	87	82	83	81	79	16
Henry St	55	42	38	38	41	39	39	37	36	13
Hill St	30	20	20	20	19	20	23	22	17	7
James St	168	145	143	140	141	128	120	117	117	23
Moore St	43	23	22	22	35	34	35	34	38	5
Norton St	86	59	62	62	70	71	80	78	75	6
Piper St	13	9	11	11	8	8	8	7	10	2
Waratah St	50	44	43	43	41	34	28	31	25	6
William St (E of Norton St)	60	13	14	18	21	26	36	34	33	24
William St (W of Norton St)	26	10	11	11	14	13	13	12	12	12
<b>Total</b>	<b>967</b>	<b>701</b>	<b>698</b>	<b>689</b>	<b>696</b>	<b>663</b>	<b>667</b>	<b>634</b>	<b>641</b>	<b>194</b>
<b>% Occupancy</b>		<b>72.5</b>	<b>72.2</b>	<b>71.3</b>	<b>72.0</b>	<b>68.6</b>	<b>69.0</b>	<b>67.6</b>	<b>66.3</b>	
<b>Vacancies</b>		<b>266</b>	<b>269</b>	<b>278</b>	<b>271</b>	<b>304</b>	<b>300</b>	<b>313</b>	<b>326</b>	



## Existing Conditions

**Table 2.5: Summary of PM Parking Surveys – Saturday 28/07/12**

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	33	37	45	50	49	48	49	53	54	57	3
Allen St (E of Norton St)	34	16	13	17	17	14	16	22	33	23	25	1
Allen St (W of Norton St)	29	26	24	22	23	25	26	27	26	27	22	1
Annesley St	60	36	33	30	38	43	44	45	44	48	49	11
Balmain Rd	37	20	18	18	22	23	22	21	22	23	25	12
Charlotte St	68	47	48	47	56	57	50	41	60	64	65	3
Derbyshire Rd	30	18	14	15	15	15	16	18	18	18	19	25
Francis St	118	78	79	81	84	92	97	99	110	94	97	8
Henry St	55	37	40	42	45	39	46	47	54	54	47	0
Hill St	30	20	15	17	17	21	21	21	23	24	24	6
James St	168	116	113	117	115	125	144	159	161	159	149	5
Moore St	43	31	37	39	36	35	34	25	29	25	28	4
Norton St	86	73	74	75	78	76	82	84	84	82	75	1
Piper St	13	13	13	13	13	10	12	11	9	9	8	0
Waratah St	50	23	24	23	25	27	33	38	42	41	44	5
William St (E of Norton St)	60	33	31	31	34	36	45	60	60	53	46	0
William St (W of Norton St)	26	15	15	19	19	21	25	26	26	26	23	0
<b>Total</b>	<b>967</b>	<b>635</b>	<b>628</b>	<b>651</b>	<b>686</b>	<b>708</b>	<b>761</b>	<b>793</b>	<b>854</b>	<b>824</b>	<b>803</b>	<b>87</b>
<b>% Occupancy</b>		<b>65.7</b>	<b>64.9</b>	<b>67.3</b>	<b>70.9</b>	<b>73.2</b>	<b>78.7</b>	<b>82.0</b>	<b>88.3</b>	<b>85.2</b>	<b>83.0</b>	
<b>Vacancies</b>		<b>332</b>	<b>339</b>	<b>316</b>	<b>281</b>	<b>259</b>	<b>206</b>	<b>174</b>	<b>113</b>	<b>143</b>	<b>164</b>	

Table 2.4 and Table 2.5 indicate that public on-street car parking demand within the catchment is generally moderate throughout the day and increases during the evening, when the restaurants within Norton Street experience their highest demand. As a result, the peak demand occurred at 8:00pm and is equal to an occupancy rate of 88.3% (113 vacancies). The lowest demand is equal to an occupancy rate of 63.8% (355 vacancies) at 2:30pm.

### 2.2.4 Unrestricted Parking Demand

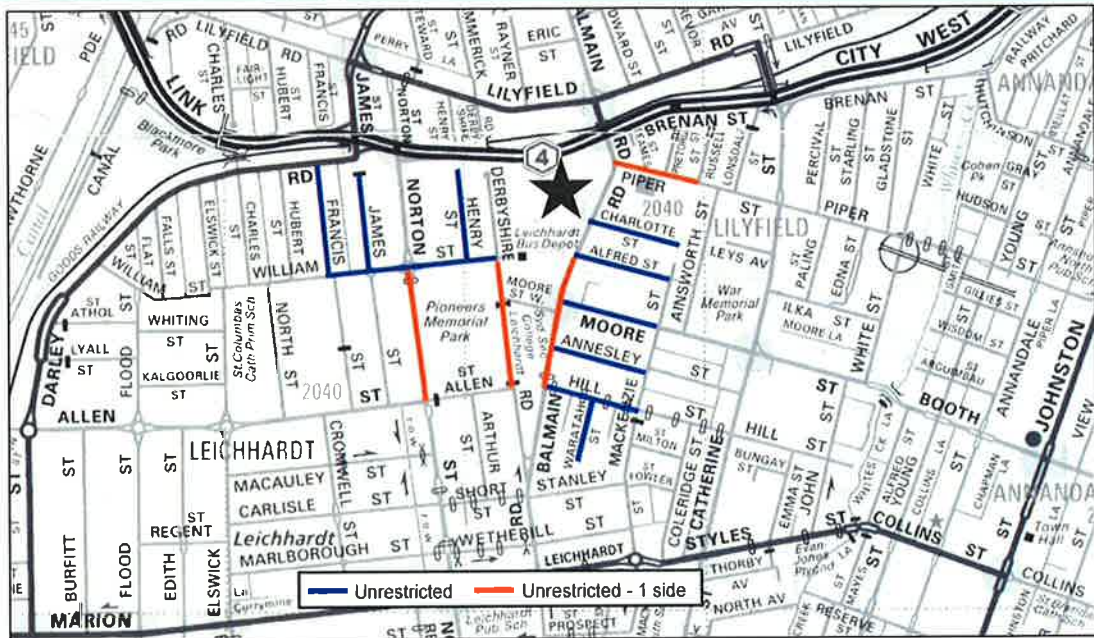
With consideration for the existing bus depot staff rostering system (10-hour shifts) and the need for any overspill staff parking and/ or additional staff to park on-street in unrestricted spaces only, further analysis was undertaken to establish the volume and occupancy of unrestricted on-street spaces within the same catchment. The overall on-street unrestricted parking capacity within 600-700m of the site is 614 spaces.

It is noted that the two-hour (2P) parking restriction in Norton Street between William Street and Allen Street is only enforced between 6:00pm and 10:00pm on weekends. Therefore during the majority of the Saturday parking demand survey, this section of Norton Street was unrestricted. In addition, and as discussed, the gate in Derbyshire Road is typically locked on weekends thus reducing the on-street capacity at this location. As such, the overall on-street unrestricted parking capacity within 600-700m of the site on weekends is 625 spaces, with 600 spaces after 6:00pm.

## Existing Conditions

The breakdown of on-street parking restrictions are shown in Figure 2.9, with the results of the analysis of unrestricted parking spaces for both the weekday and Saturday presented in Table 2.6 and Table 2.7.

**Figure 2.9: Unrestricted Parking Zones**



## Existing Conditions

**Table 2.6: Summary of AM Unrestricted Parking Surveys – Thursday 02/08/12**

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	44	39	51	47	41	44	45	44	9
Annesley St	60	48	46	48	43	33	33	32	30	12
Balmain Rd	11	8	5	6	6	7	6	6	6	3
Charlotte St	68	63	63	68	58	53	53	51	50	0
Derbyshire Rd	25	3	7	14	20	25	25	25	20	0
Francis St	51	48	49	42	39	32	30	28	28	3
Henry St	55	48	48	47	44	41	39	33	38	7
Hill St	30	24	23	22	21	21	21	20	19	6
James St	61	57	55	50	44	46	43	42	41	4
Moore St	43	23	22	30	34	41	40	41	42	0
Norton St	27	10	14	19	21	25	26	27	26	0
Piper St	13	9	9	11	11	8	9	6	5	2
Waratah St	50	42	41	50	45	39	39	44	43	0
William St (E of Norton St)	34	5	17	26	25	29	27	27	28	4
William St (W of Norton St)	26	13	15	18	20	21	20	22	20	5
<b>Total</b>	<b>614</b>	<b>445</b>	<b>453</b>	<b>502</b>	<b>478</b>	<b>462</b>	<b>455</b>	<b>449</b>	<b>440</b>	<b>55</b>
<b>% Occupancy</b>		<b>72.5</b>	<b>73.8</b>	<b>81.8</b>	<b>77.9</b>	<b>75.2</b>	<b>74.1</b>	<b>73.1</b>	<b>71.7</b>	
<b>Vacancies</b>		<b>169</b>	<b>161</b>	<b>112</b>	<b>136</b>	<b>152</b>	<b>159</b>	<b>165</b>	<b>174</b>	



**Table 2.7: Summary of PM Unrestricted Parking Surveys – Thursday 02/08/12**

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	44	44	47	48	45	47	49	49	49	47	9
Annesley St	60	30	28	26	30	35	45	49	48	48	48	11
Balmain Rd	11	6	6	5	4	5	6	5	6	6	5	5
Charlotte St	68	45	39	39	41	43	48	51	51	63	68	0
Derbyshire Rd	25	22	23	20	10	11	10	7	7	4	3	2
Francis St	51	31	30	31	33	37	38	39	42	45	43	6
Henry St	55	41	44	41	41	41	45	42	39	41	42	9
Hill St	30	19	17	17	16	18	20	19	19	20	23	1
James St	61	39	38	41	43	45	44	48	53	55	59	2
Moore St	43	43	42	40	37	26	22	22	31	32	27	0
Norton St	27	24	25	27	25	25	26	27	24	23	16	0
Piper St	13	8	9	8	8	8	10	12	12	11	11	1
Waratah St	50	37	32	31	28	26	33	38	42	42	45	5
William St (E of Norton St)	34	30	30	27	27	28	29	24	29	13	9	3
William St (W of Norton St)	26	20	20	19	19	21	19	20	21	20	22	4
<b>Total</b>	<b>614</b>	<b>439</b>	<b>427</b>	<b>419</b>	<b>410</b>	<b>414</b>	<b>442</b>	<b>452</b>	<b>463</b>	<b>472</b>	<b>468</b>	<b>59</b>
<b>% Occupancy</b>		<b>71.5</b>	<b>69.5</b>	<b>68.2</b>	<b>66.8</b>	<b>67.4</b>	<b>72.0</b>	<b>73.6</b>	<b>75.4</b>	<b>76.9</b>	<b>76.2</b>	
<b>Vacancies</b>		<b>175</b>	<b>187</b>	<b>195</b>	<b>204</b>	<b>200</b>	<b>172</b>	<b>162</b>	<b>151</b>	<b>142</b>	<b>146</b>	

Table 2.6 and Table 2.7 indicate that unrestricted on-street car parking demand within the catchment is moderate to high during a typical weekday and remains relatively constant over the survey period, with peak demand equal to an occupancy rate of 82.2% (109 vacancies) at 7.30am.

## Existing Conditions

**Table 2.8: Summary of AM Unrestricted Parking Surveys – Saturday 28/07/12**

Location	No. of Spaces	Peak Demand (Vehicles)								Minimum Vacancies
		5am	6am	7am	8am	9am	10am	11am	12pm	
Alfred St	60	49	47	47	39	38	34	34	31	11
Annesley St	60	47	49	49	48	47	40	39	37	11
Balmain Rd	11	9	9	9	7	9	9	9	8	2
Charlotte St	68	62	61	62	60	56	50	48	47	3
Derbyshire Rd	11	1	1	1	7	7	7	7	5	22
Francis St	51	43	43	42	37	36	38	37	36	8
Henry St	55	42	38	38	41	39	39	37	36	13
Hill St	30	20	20	20	19	20	23	22	17	7
James St	61	55	54	52	52	50	45	43	44	6
Moore St	43	23	22	22	35	34	35	34	38	5
Norton St	52	27	30	32	43	42	46	45	44	6
Piper St	13	9	11	11	8	8	8	7	10	2
Waratah St	50	44	43	43	41	34	28	31	24	6
William St (E of Norton St)	34	7	9	12	15	19	25	24	25	9
William St (W of Norton St)	26	10	11	11	14	13	13	12	12	12
<b>Total</b>	<b>625</b>	<b>448</b>	<b>448</b>	<b>451</b>	<b>466</b>	<b>452</b>	<b>440</b>	<b>429</b>	<b>414</b>	<b>122</b>
<b>% Occupancy</b>		<b>71.7</b>	<b>71.7</b>	<b>72.2</b>	<b>74.6</b>	<b>72.3</b>	<b>70.4</b>	<b>68.6</b>	<b>66.4</b>	
<b>Vacancies</b>		<b>177</b>	<b>177</b>	<b>174</b>	<b>159</b>	<b>173</b>	<b>185</b>	<b>196</b>	<b>210</b>	

**Table 2.9: Summary of PM Unrestricted Parking Surveys – Saturday 28/07/12**

Location	No. of Spaces	Peak Demand (Vehicles)										Minimum Vacancies
		1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	
Alfred St	60	33	37	45	50	49	48	49	53	54	57	3
Annesley St	60	36	33	30	38	43	44	45	44	48	49	11
Balmain Rd	11	8	5	4	6	8	7	5	4	5	7	3
Charlotte St	68	47	48	47	56	57	50	41	60	64	65	3
Derbyshire Rd	11	4	1	2	3	2	2	2	2	3	2	7
Francis St	51	33	35	37	36	37	40	42	48	35	41	2
Henry St	55	37	40	42	45	39	46	47	54	54	47	0
Hill St	30	20	15	17	17	21	21	21	23	24	24	6
James St	61	47	50	52	48	55	58	59	58	58	53	1
Moore St	43	31	37	39	36	35	34	25	29	25	28	4
Norton St [1]	52 / 27	42	42	43	44	45	27	27	27	25	20	7 / 0
Piper St	13	13	13	13	13	10	12	11	9	9	8	0
Waratah St	50	23	24	23	25	27	33	38	42	41	44	5
William St (E of Norton St)	34	23	25	26	23	23	27	34	34	29	24	0
William St (W of Norton St)	26	15	15	19	19	21	25	26	26	26	23	0
<b>Total</b>	<b>625 / 600</b>	<b>412</b>	<b>420</b>	<b>439</b>	<b>459</b>	<b>472</b>	<b>474</b>	<b>472</b>	<b>513</b>	<b>500</b>	<b>492</b>	
<b>% Occupancy</b>		<b>65.9</b>	<b>67.2</b>	<b>70.2</b>	<b>73.4</b>	<b>75.5</b>	<b>79.0</b>	<b>78.7</b>	<b>85.5</b>	<b>83.3</b>	<b>82.0</b>	
<b>Vacancies</b>		<b>213</b>	<b>205</b>	<b>186</b>	<b>166</b>	<b>153</b>	<b>126</b>	<b>128</b>	<b>87</b>	<b>100</b>	<b>108</b>	

[1] 25 spaces on Norton Street between William Street and Allen Street restricted 2P 6pm-10pm on weekends and are not included in the survey of unrestricted spaces after 6pm

Table 2.8 and Table 2.9 indicate that unrestricted on-street car parking demand within the catchment is moderate to high during a typical weekend however increases during the evening, with peak demand equal to an occupancy rate of 87.5% (75 vacancies) at 8.30pm. Prior to 5:00pm, the peak demand was 74.6% (159 vacancies) at 8:00am.

## 2.3 Traffic Volumes

GTA Consultants commissioned traffic movement counts on key roads in the vicinity of the site on 2 August 2012 during the following peak periods:

- 7:00am and 9:00am
- 12:00pm and 2:00pm
- 4:00pm and 6:00pm.

The AM, midday and PM peak hour traffic volumes are summarised in Figure 2.10 and Figure 2.11, with full results contained in Appendix A.

# Existing Conditions

Figure 2.10: Existing Weekday AM / PM Peak Hour Traffic Volumes

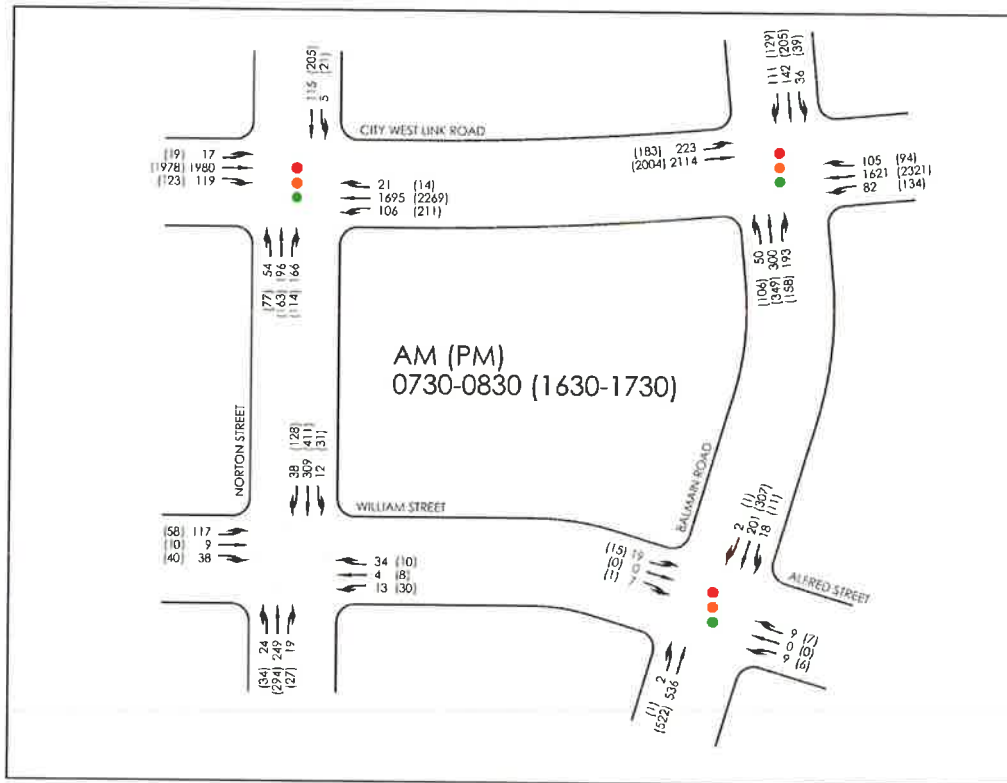
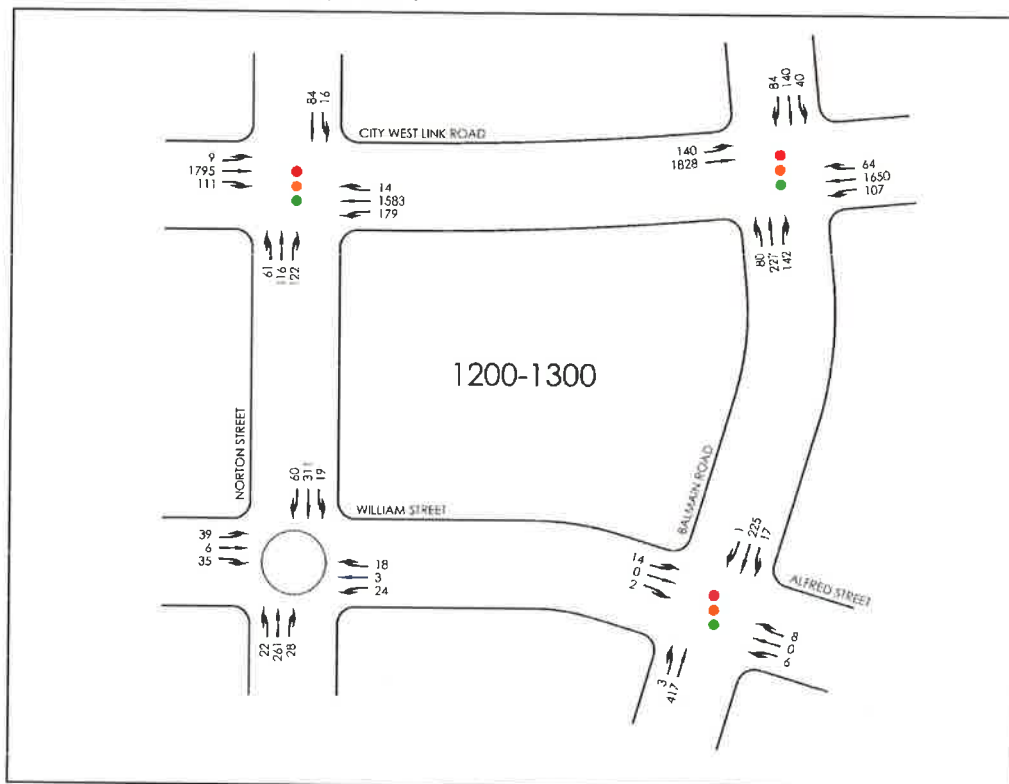


Figure 2.11: Existing Weekday Midday Peak Hour Traffic Volumes



### 2.3.1 Existing Traffic Conditions

GTA Consultants undertook an inspection of the site and surrounding areas on 2 August 2012 during the AM and PM peak periods. Observations included assessing the overall road network operation during each peak period, in particular the operation of both Norton Street and Balmain Road in the vicinity of the site. Queuing for northbound vehicles at these locations together with the operation of the study intersections were also key considerations.

It is noted that during the weekday AM peak period, specifically between 7:00am and 8:00am, it was observed that queues along Norton Street on approach to the City West Link generally extend south to a distance of approximately 200m south of the Norton Street/ William Street roundabout. After 8:00am, these queues had mostly diminished with minor vehicle delays generally clearing on each traffic signal cycle.

It is widely recognised that the City West Link experiences considerable delay for eastbound vehicles during the AM peak period, with each intersection operating at, or in excess of capacity. Delay and queuing for eastbound vehicles extend west from Norton Street/ James Street with observations also indicating that between 7:00am and 8:30am, the eastbound lanes generally queued back from Balmain Road beyond Norton Street.

Northbound vehicle queues on Balmain Road on approach to the City West Link were also observed to extend south, in excess of 100m-150m and on occasion reached Charlotte Street.

It should also be noted that queuing in the road network surrounding the site was more pronounced during the weekday AM peak period, with observations during the PM peak indicating that, although the intersections along the City West Link operate close to capacity, queuing is generally restricted to westbound vehicles on approach to Balmain Road. No queuing of any significance occurred on Norton Street or Balmain Road, south of the City West Link at the time of the site observations.

## 2.4 Intersection Operation

The operation of the key intersections within the study area have been assessed using SIDRA INTERSECTION<sup>3</sup>, a computer based modelling package which calculates intersection performance.

The commonly used measure of intersection performance, as defined by the RTA, is vehicle delay. SIDRA INTERSECTION determines the average delay that vehicles encounter and provides a measure of the level of service.

Table 2.10 shows the criteria that SIDRA INTERSECTION adopts in assessing the level of service.

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<sup>3</sup> Program used under license from Akcelik & Associates Pty Ltd.

## Existing Conditions

**Table 2.10: SIDRA INTERSECTION Level of Service Criteria**

Level of Service (LOS)	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

Table 2.11 presents a summary of the existing operation of the intersections, with full results presented in Appendix B of this report.

**Table 2.11: Existing Operating Conditions**

Intersection	Peak	Leg	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
City West Link/ Norton Street	AM	South	1.26	286	471	F
		East	0.53	11	112	A
		North	0.27	51	51	D
		West	0.58	6	66	A
		<b>Overall</b>	<b>1.26</b>	<b>35</b>	<b>471</b>	<b>C</b>
	Midday	South	0.58	47	107	D
		East	0.58	18	145	B
		North	0.16	39	32	C
		West	0.56	11	101	A
		<b>Overall</b>	<b>0.58</b>	<b>18</b>	<b>145</b>	<b>B</b>
	PM	South	0.81	60	157	E
		East	0.80	21	284	B
		North	0.37	44	89	D
		West	0.79	14	132	A
		<b>Overall</b>	<b>0.81</b>	<b>22</b>	<b>284</b>	<b>B</b>
City West Link/ Balmain Road	AM	South	0.99	68	94	E
		East	0.89	11	65	A
		North	0.65	64	96	E
		West	1.00	59	798	E
		<b>Overall</b>	<b>1.00</b>	<b>43</b>	<b>798</b>	<b>D</b>
	Midday	South	0.79	64	76	E
		East	0.49	7	61	A
		North	0.62	60	89	E
		West	0.88	19	356	B
		<b>Overall</b>	<b>0.88</b>	<b>21</b>	<b>356</b>	<b>B</b>

## Existing Conditions

Intersection	Peak	Leg	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
City West Link/ Balmain Road	PM	South	0.97	73	136	F
		East	0.76	10	138	A
		North	0.89	75	153	F
		West	0.96	39	611	C
		<b>Overall</b>	<b>0.97</b>	<b>32</b>	<b>611</b>	<b>C</b>
Balmain Road/ Alfred Street/ William Street (Bus depot)	AM	South	0.80	30	174	C
		East	0.08	44	6	D
		North	0.21	14	35	A
		West	0.15	30	9	C
		<b>Overall</b>	<b>0.80</b>	<b>26</b>	<b>174</b>	<b>B</b>
	Midday	South	0.78	31	127	C
		East	0.06	39	4	C
		North	0.26	15	38	B
		West	0.09	23	5	B
		<b>Overall</b>	<b>0.78</b>	<b>26</b>	<b>127</b>	<b>B</b>
	PM	South	0.77	29	163	C
		East	0.06	44	4	D
		North	0.29	14	52	A
		West	0.12	28	7	B
		<b>Overall</b>	<b>0.77</b>	<b>23</b>	<b>163</b>	<b>B</b>
Norton Street/ William Street	AM	South	0.24	6	10	A
		East	0.06	10	2	A
		North	0.29	6	13	A
		West	0.18	9	7	A
		<b>Overall</b>	<b>0.29</b>	<b>7</b>	<b>13</b>	<b>A</b>
	Midday	South	0.26	6	11	A
		East	0.05	10	2	A
		North	0.31	6	14	A
		West	0.09	9	3	A
		<b>Overall</b>	<b>0.31</b>	<b>7</b>	<b>14</b>	<b>A</b>
	PM	South	0.32	7	15	A
		East	0.07	10	3	A
		North	0.45	7	25	A
		West	0.12	9	5	A
		<b>Overall</b>	<b>0.45</b>	<b>7</b>	<b>25</b>	<b>A</b>

On the basis of the above assessment, it is clear that the intersection of City West Link/ Balmain Road currently experiences considerable delays during the AM and PM peak periods, particularly for the eastbound approach during the AM peak.

The intersection of City West Link/ Norton Street currently experiences significant delays during both the AM and PM peak periods, particularly on the southern approach during the AM period and the eastern approach in the PM peak period.

Queuing observations were also recorded at the time of the surveys and are contained in Appendix A of this report.

It should also be noted that the basement car park access driveway was surveyed during each peak period, the details are as follows:

- AM peak – 1 car in, 4 cars out
- Midday peak – 19 cars in, 20 cars out
- PM peak – 10 cars in, 7 cars out.

On-site observations indicate that the car park is currently operating near or at capacity and staff are required, to some extent to park on-street within the local streets surrounding the site.

## 2.5 Pedestrian Infrastructure

In the vicinity of the proposed site, sealed pedestrian footpaths are located on both sides of all roads. In addition, there are pedestrian links from the City West Link to Derbyshire Road and Henry Street despite no vehicular access, and a 3.0 metre wide shared path is located approximately 150 metres south of the site between Balmain Road and Derbyshire Road.

Safe crossing points in vicinity of the site include the following:

- Balmain Road/ City West Link signalised intersection – signalised pedestrian crossing located on the north, south and west legs
- Balmain Road/ City West Link signalised intersection – signalised pedestrian crossing located on all four legs and a marked foot crossing on the eastern leg slip lane
- Balmain Road/ William Street/ Alfred Street signalised intersection – signalised pedestrian crossing located on all four legs
- Balmain Road/ Moore Street signalised intersection – signalised pedestrian crossing located on all three legs
- marked pedestrian crossings as follows:
  - Balmain Road, just north of Hill Street
  - Norton Street, just south of William Street
  - Norton Street, just south of Allen Street.

## 2.6 Cycle Infrastructure

Bicycle infrastructure in the vicinity of the site is as follows:

- 3.0 metre wide shared path along the western side of Balmain Road between City West Link and Moore Street, adjacent to the eastern boundary of the site
- 3.0 metre wide shared path between Balmain Road and Derbyshire Road
- mixed traffic road markings as follows:
  - Norton Street, between City West Link and Parramatta Road
  - Derbyshire Road, south of William Street
  - Allen Street, between Derbyshire Road and Norton Street.



## 3. Development Proposal

### 3.1 Overview

STA has lodged a DA (D/2012/295) with Leichhardt Municipal Council for the reconfiguration of Leichhardt Bus Depot at 230-240 Balmain Road, Leichhardt, to increase the on-site bus storage capacity from 200 to 281 buses. It is proposed to accommodate the additional 81 buses within the existing on-site hardstand area.

The DA proposes the following total on-site parking capacity based on modifications to the basement car park and bus hardstand area as follows:

- 146 car spaces (132 in the basement)
- 38 motorbike spaces
- 20 bicycle spaces.

Total depot staffing is proposed to increase to 557 with a maximum daytime shift of 328 staff, including 266 drivers, and represents a 30% increase, or 76 additional day time staff.

It is understood that the proposed future car parking provision equates to an additional 21 on-site staff car parking spaces, and includes the reconfiguration of the basement level car park to accommodate an additional 7 car parking spaces and additional motorcycle parking. It is also proposed to reconfigure the existing hardstand area to provide an additional 14 car parking spaces.

Vehicular access to the site would be maintained via the William Street 'Bus Only' area together with the left-in/ left-out arrangement via Balmain Road for staff access to/ from the basement level car park.

#### 3.1.1 Sydney Bus Museum

The Sydney Bus Museum is currently in the process of relocating its operations to the former tram shed, located along the eastern side of Derbyshire Road, adjacent to the western boundary of Leichhardt Bus Depot. Since relocating from Tempe, the museum is yet to open to the public, however it is understood that this is planned to occur in late 2012.

Following discussions with the museum, the Tempe facility attracted an average of 20 to 30 people per day on a typical weekend, with special events generally attracting up to 100 people per day. It is the museum's intention to operate the new facility in a similar manner and as such, these attendance numbers have been assumed for the purposes of this report.

The new Sydney bus Museum will provide on-site parking for up to 12 vehicles, with access proposed via Derbyshire Road, north of William Street. Assuming a vehicle occupancy rate of 2.0 patrons per vehicle<sup>4</sup> for museum-related trips, and given that the 20 to 30 people per day is unlikely to arrive at the same time, the 12 on-site car spaces will be capable of accommodating the majority of the peak parking demand associated with the museum.

During special events, the impact to on-street parking in proximity to the Leichhardt Bus Depot could be mitigated through:

<sup>4</sup> A higher vehicle occupancy rate would be expected for museums as they tend to attract families and groups as opposed to single occupancy trips

- Discussions with local organisations and businesses to avoid scheduling special events at the same time as large events in neighbouring Pioneer Park, St Gerasimos Greek Orthodox Church and sporting activities at the Sydney Secondary College.
- The implementation of a Travel Plan and/ or Transport Access Guide (TAG) to encourage travel to and from the Museum via sustainable and active forms of transport e.g. if you travel to the Museum by bus, patrons will receive a discounted entry.

It is therefore concluded that on opening, the relocated Sydney Bus Museum is unlikely to have a significant impact on competition for on-street parking within the immediate vicinity of the site, assuming patronage patterns are similar to those recorded at the former Tempe site.

## 4. Traffic Impact Assessment

### 4.1 Traffic Generation

#### 4.1.1 Design Rates

Given that the *Guide to Traffic generating Developments* (RMS, 2002) does not provide a vehicle trip rate specifically for bus depots, the peak generation of the site (for buses and cars) has been estimated using existing site generation data provided by Leichhardt Municipal Council together with the DA reporting and traffic surveys.

Traffic generation estimates for the proposed development have been based on the additional number of buses and car parking spaces to be provided under the proposed development (i.e. 81 additional buses and 21 additional car parking spaces). Although unlikely, it has been assumed that all the additional buses will either arrive or depart the depot during the AM and PM peak hours. It has also been assumed that the proposed car parking spaces will generate an additional 21 vehicle movements during the AM and PM peak hours, assuming that all additional spaces turn over during these times.

This approach is considered conservative and reflects the worst case scenario for traffic which may be generated at the subject site as a result of the proposed development.

#### 4.1.2 On-Street Parking

It is understood that as a result of the shift (roster) times identified in Section 2.2.2, the staggered arrival of bus drivers, as well as the need for buses to be servicing commuters during peak periods, the number of additional bus drivers arriving and departing during road network peak periods would be low. As such, no additional peak period traffic generation has been included over-and-above the 21 car movements and 81 bus movements assumed above. The complexity and variability of the existing Leichhardt Bus Depot Staff Roster does not permit any reliable extrapolation of peak period staff movements and has therefore not been used as part of the traffic generation estimates.

It is noted, however, that due to the limited off-street parking proposed there would be additional traffic generation on the surrounding road network throughout the day as a result of bus depot staff circulating for available on-street parking. Due the variability and dispersed nature of these vehicle movements, reliable estimates cannot be made.

### 4.2 Distribution and Assignment

The directional distribution and assignment of traffic generated by the proposed development will be influenced by a number of factors, including the:

- i configuration of the arterial road network in the immediate vicinity of the site
- ii existing operation of intersections providing access between the local and arterial road network
- iii distribution of households in the vicinity of the site
- iv bus depot driveway access locations
- v bus route origin/ destination and designated approved arrival/ departure routes to/ from the site

- vi traffic survey directional splits, previous data recorded by STA in March 2007 and data presented as part of the DA.

Having consideration for the above and for the purposes of estimating vehicle movements, the directional distributions have been assumed and assigned taking into consideration the points above.

Figure 4.1 and Figure 4.2 have been prepared to show the estimated marginal increase in turning movements in the vicinity of the site following full site development while also noting that the proportion of heavy vehicles (i.e. buses) has been adjusted to accommodate the changing distribution of traffic surrounding the site. It is noted that the traffic surveys did not classify vehicle type with SIDRA INTERSECTION analysis specifying heavy vehicle percentages at each location, varying dependent on historical data and site observations. These percentages are detailed in the outputs included as part of Appendix B. It is noted that it is assumed that all vehicles entering and exiting William street via Balmain Road are considered to be buses.

Figure 4.1: Existing Weekday AM Peak Hour Traffic Volumes plus Development Traffic

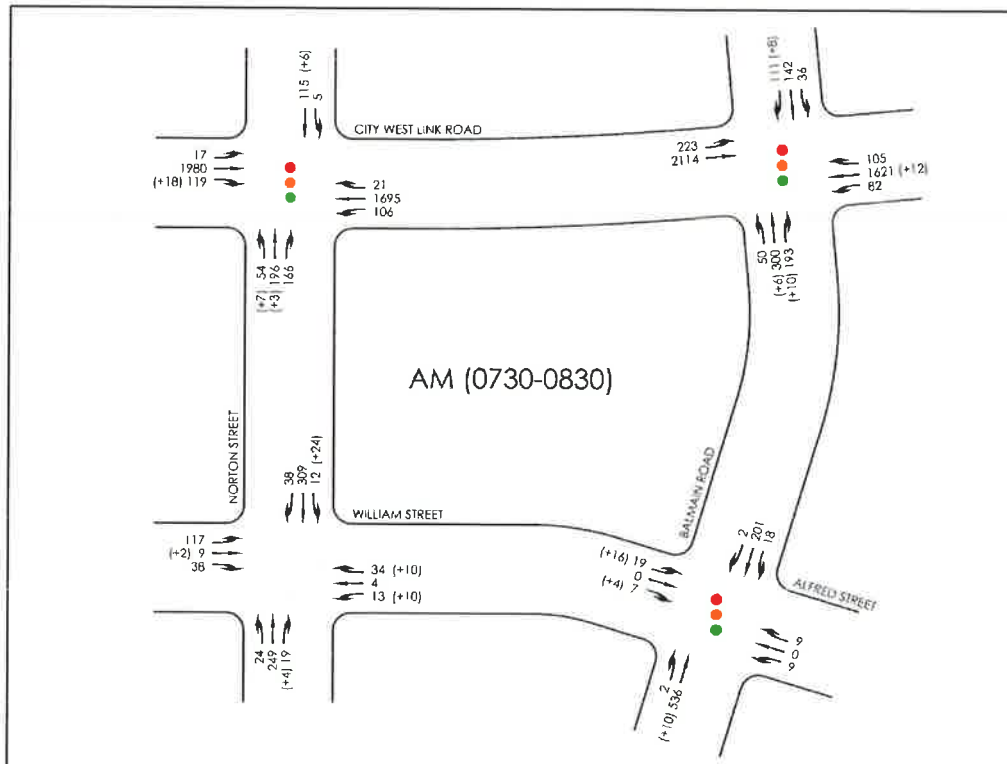
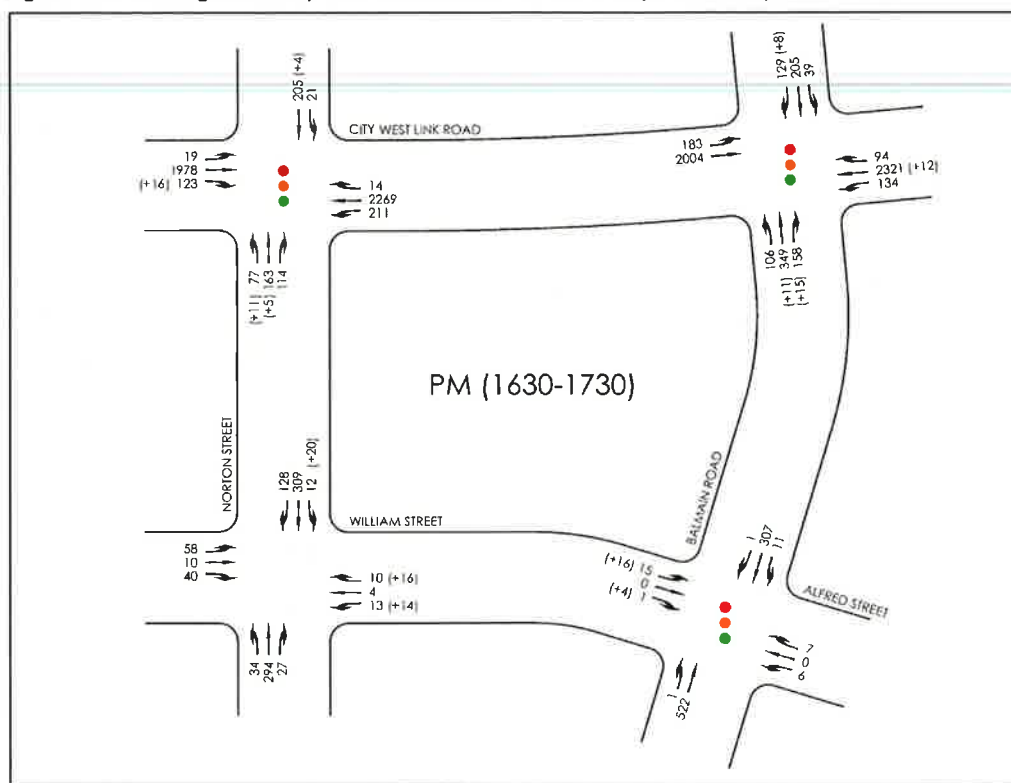


Figure 4.2: Existing Weekday PM Peak Hour Traffic Volumes plus Development Traffic



### 4.3 Traffic Impact

SIDRA INTERSECTION analysis was undertaken to assess the likely impact of the additional traffic generated by the increased on-site capacity proposed within the bus depot. The full SIDRA INTERSECTION results are contained in Appendix B of this report.

Against existing traffic volumes in the vicinity of the site, the additional traffic generated by the proposed development could not be expected to compromise the safety or function of the surrounding road network. Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.

#### William Street bus only roadway

Site observations indicate that the William Street bus only roadway receives green time during each cycle, however existing peak period turning movements are low. Therefore the impact of additional bus movements out of William Street is negligible at this intersection.

#### William Street (west of bus depot)

On the basis of the estimated traffic distribution, the most significant change in local traffic volumes would be the additional buses on William Street to the west accessing Norton Street. This could present road safety concerns for local traffic accessing on-street (and associated pedestrian movements), as well as compromising sight lines for Henry Street traffic should any queuing occur. It is

recommended that these potential issues are monitored, with additional local traffic management measures implemented if necessary.

#### Balmain Road

As discussed in Section 2.3.1, significant AM peak period queuing occurs on Balmain Road on approach to the City West Link, which were observed to extend south, in excess of 100m-150m and on occasion reached Charlotte Street. Given the corresponding queues on the City West Link, it is assumed that there is no opportunity to allocate additional green time to Balmain Road. During these times, queued vehicles informally form two northbound lanes between Piper Street and Charlotte Street. It is recommended that the opportunity to formalise this arrangement through re-linemarking of Balmain Road (including shifting the centreline) be investigated (including consideration of turning movement swept paths) further.

It is also noted that an increased northbound right turn bay length would be of benefit, however difficult due to the Balmain Road geometry at Piper Street. Any opportunities in this regard could be investigated as part of the above.

## 5. Parking Impact Appraisal

### 5.1 Off-Street Parking

As discussed in Section 3, it is understood that the proposed future car parking provision equates to an additional 21 on-site staff car parking spaces, and includes the reconfiguration of the basement level car park to accommodate an additional 7 car parking spaces and additional motorcycle parking. It is also proposed to reconfigure the existing hardstand car parking area to provide an additional 14 car parking spaces.

Plans included as part of the DA show existing basement level car parking for 117 cars, with amendments to increase this capacity by 6 spaces, to total 123 spaces (compared with the 146 spaces noted as part of the proposal). A total of 38 motorbike spaces are shown, as are 20 bicycle spaces. The layout in the vicinity of the proposed car spaces does not appear to meet the aisle width requirements and/ or the space length requirements of AS2890.1:2004. No plans have been provided illustrating the layout within the bus hardstand area to accommodate the additional 14 spaces.

On-site observations and consultation with Leichhardt Municipal Council and STA indicates that the basement car park has already been largely re-configured to reflect the above. DA approval would allow this to be formalised and as such would not result in significant changes to the traffic generation rates noting that the basement car park is operating at capacity for staff parking, with some spare capacity for visitors prior to the boom gate controlled access.

It should also be noted that scaled plans have not been provided to GTA Consultants for the purposes of this review and the exact dimensional layouts of the car parking areas were not able to be determined.

### 5.2 On-Street Parking

The existing bus depot layout accommodates in the order of 120 on-site parking spaces (noting the discrepancies between the Development Application and the plans provided) to accommodate a maximum daytime shift of 328 staff. The proposed additional 14 spaces (noting the basement parking discussion above) are required to accommodate the parking needs of a further 76 staff.

There is no firm basis for quantifying the existing total parking demand (on-site and on-street), nor the likely parking demand of the additional staff. On one hand it could be expected that staff may have a higher than average use of public transport due to staff travel entitlements, however the nature and timing of shift work typically results in higher than average private car travel (single occupant vehicles).

Site observations confirm that there may be a significant on-street parking for the afternoon/ evening shift arrivals given existing on-site demand and the overlapping staff shift times. It is unclear how shift changeover and associated on-site parking arrangements are managed.

The additional car parking demand as a result of the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets however existing demand profile indicate that these can be accommodated within the study area streets. It is likely, however, that this would further reduce the on-street parking availability in close proximity to the bus depot, thereby reducing the availability for residents and other

local users. It would also increase the circulation of vehicles searching for parking in local streets and increase walking distances for residents and other local users.

To provide an approximation of the likely parking impact of the additional bus depot staff, the 2006 Census data indicates that the Journey-to-Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. On this basis, 56 of the additional 76 staff would arrive by car. When accounting for the additional 14 parking spaces on-site as outlined in the above discussion, this would result in up to around 40 additional vehicles parked on-street in the vicinity of the site (assuming primarily single-occupant vehicles).

### 5.3 Workplace Travel Plan

It is recommended that a Workplace Travel Plan (including a staff survey and car park occupancy and turnover surveys) be prepared to better understand and manage staff travel mode choice, vehicle occupancy rates, parking demand/ location associated with the proposed development and the bus depot as a whole. This could be implemented and monitored to reduce the potential impact on parking within the surrounding streets.

### 5.4 Off-Site Parking Opportunities

On-site observations indicate that there is opportunity for both temporary and/or permanent off-street parking areas in the vicinity of the site. These include the following:

- Former tram depot and Police Station site – located south of the site. A DA was lodged with Leichhardt Municipal Council in 2010 for a new Police Local Area Command on the former tram depot site. It is understood that this development is not proceeding and as such, the site may provide the opportunity for off-street parking in the immediate vicinity of the site.
- Sydney Bus Museum – a reconfiguration of the hardstand area to the north and west of the site may provide opportunity for limited staff parking. This would be subject to consultation with the operators and may require restrictions on weekdays where the museum has scheduled group visits.

### 5.5 Resident Parking Scheme

As illustrated in Figure 2.9, there is a significant supply of unrestricted on-street parking within close proximity to the site. As such, a Resident Parking Scheme (RPS) could be considered within the streets immediately surrounding Leichhardt Bus Depot to alleviate the existing on-street parking demand and conflict between residents and bus depot staff.

Such a scheme may however simply shift parking demand to local streets further away from the site and should only be considered as part of a broader range of incentive programs, including a Workplace Travel Plan as detailed above. It is noted that Resident Parking Schemes can negatively impact owners with more than one vehicle, as well as rental tenants, depending on eligibility criteria.



## 6. Conclusion

Based on the analysis and discussions presented within this report, the following conclusions are made:

- i STA has lodged a DA (D/2012/295) with Leichhardt Municipal Council for the reconfiguration Leichhardt Bus Depot to increase the on-site bus storage capacity from 200 buses to 281 buses.
- ii It is also proposed to reconfigure the on-site car parking facilities to provide an additional 21 car parking spaces, noting that approximately 7 of these are already in use and resulting in a practical increase of 14 staff car parking spaces.
- iii Total staff is proposed to increase to 557 with a maximum daytime shift of 328 staff, including 266 drivers, and represents a 30% increase, or 76 additional day time staff.
- iv Weekday demand for unrestricted parking within the vicinity of the site is moderate to high, peaking at 82.2% (109 vacancies) at 7.30am.
- v Weekend demand for unrestricted parking within the vicinity of the site is moderate to high, peaking at 87.5% (75 vacancies) at 8.30pm. This can be largely attributed to demand associated with Norton Street restaurants.
- vi The intersections of City West Link with Norton Street and Balmain Road currently experience considerable delays during both the AM and PM peak periods, particularly on the western and southern approaches during the AM peak.
- vii Plans of the basement car park do not show adequate capacity or appropriate layout to accommodate the proposed additional car and motorbike spaces and do not appear to be in accordance with AS2890.1:2004.
- viii The proposed reconfiguration is anticipated to generate an increase in site-specific trips by up to 81 bus movements and 14 car movements (to/ from the hardstand area) during a typical weekday peak hour, noting that traffic generation estimates assessed the additional 21 staff parking spaces identified in the DA.
- ix The basement car park is presently largely operating as the DA intends, with no significant change in traffic volumes anticipated.
- x Whilst there is limited available capacity in the surrounding road network during peak periods, the traffic generated by the proposed development would have a minor impact on existing road network delays.
- xi It is difficult to determine the extent of existing staff parking within the surrounding streets; however this may be significant for the afternoon/ evening shift arrivals given existing on-site demand and overlapping staff shift times.
- xii The provision of increased parking for motorbikes and bicycles is appropriate and it is recommended that the use of these be monitored to understand their utilisation.
- xiii The additional car parking demand as a result of the proposal will not be able to be wholly accommodated on-site. As a result, there will be increased demand for unrestricted parking within the surrounding streets; however the existing demand profile indicates that these can be accommodated within the study area streets, noting some potential difficulties for residents and local users of streets in close proximity to the bus depot.
- xiv The demand for additional on-street parking would result in additional traffic generation through the day on local streets as bus depot staff circulate to find available parking. Due the variability and dispersed nature of these vehicle movements, reliable estimates cannot be

## Conclusion

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made, however they are expected to have a minor impact on the local road network operation.

- xv There is opportunity for both temporary and permanent off-street parking areas within the vicinity of the site and include the old Police Station site and the Sydney Bus Museum.
- xvi A Resident Parking Scheme may alleviate the existing on-street parking demand and conflict between residents and bus depot staff, noting that should be part of a broader strategy.
- xvii It is recommended that a Workplace Travel Plan (including a staff survey and car park occupancy and turnover surveys) be established to better understand and manage staff travel mode choice, vehicle occupancy rates, parking demand/ location associated with the proposed development and the bus depot as a whole. This could be implemented and monitored to reduce the potential impact on parking within the surrounding streets.

## Appendix A

Appendix A

### Survey Results



made, however they are expected to have a minor impact on the local road network operation.

- xv There is opportunity for both temporary and permanent off-street parking areas within the vicinity of the site and include the old Police Station site and the Sydney Bus Museum.
- xvi A Resident Parking Scheme may alleviate the existing on-street parking demand and conflict between residents and bus depot staff, noting that should be part of a broader strategy.
- xvii It is recommended that a Workplace Travel Plan (including a staff survey and car park occupancy and turnover surveys) be established to better understand and manage staff travel mode choice, vehicle occupancy rates, parking demand/ location associated with the proposed development and the bus depot as a whole. This could be implemented and monitored to reduce the potential impact on parking within the surrounding streets.





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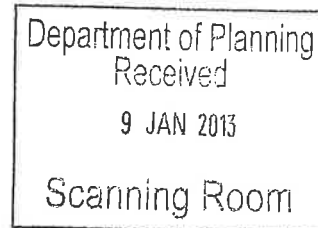
HENRY DAVIS YORK

LAWYERS

21 December 2012

Our Ref HZK/JNM/AKL/3128726

Joint Regional Planning Panel  
Panel Secretariat - Sydney East Region  
GPO Box 39  
SYDNEY NSW 2001  
**ATTENTION:** Angela Kenna



Dear Sirs

**Crown Development Application D/2012/295**  
**Leichhardt Bus Depot Expansion**  
**230 - 240 Balmain Road and 27 Derbyshire Road, Leichhardt**

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We refer to our email to you of today's date.

We enclose the following documents in hard copy and on a CD:

- (a) Development application and associated documents;
- (b) Leichhardt Council's (**Council**) assessment report;
- (c) Council's resolution adopted on 4 December 2012;
- (d) Applicant's referral letter to the Sydney East Joint Regional Planning Panel (**JRPP**) dated 6 December 2012; and
- (e) Applicant's comments on Council's reasons for refusal.

We understand that Council will be providing the remainder of the requested documents after the week commencing 7 January 2013.

Our client requests that the above development application be dealt with by the JRPP at the next available JRPP meeting.

Please contact us if you have any queries.

Yours faithfully  
Henry Davis York

A handwritten signature in black ink, appearing to read 'Janet McKelvey', with a long, sweeping horizontal line extending to the right.

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Our Ref: 11037/0407A

4 July 2012

The General Manger  
Leichhardt Municipal Council  
PO Box 45  
Leichhardt NSW 2040

By Email

Attention: Mr Brendon Glendenning

Dear Brendon,

**DEVELOPMENT APPLICATION NO 295/2012**  
**LEICHHARDT BUS DEPOT – ACCOMMODATION OF ADDITIONAL BUSES**

I refer to your request in relation to additional information for the above proposal and outline the following. Please note that this information is also to be read in conjunction with the Statement of Environmental Effects dated 7 June 2012 and its attachments including the Traffic Impact Assessment dated May 2012 (Revision B) previously lodged with Council.

As outlined in the Statement of Environmental Effects, the Leichhardt Bus Depot is able to accommodate additional buses within the existing hardstand area that is already approved for the accommodation of buses.

This development application is therefore seeking approval for:

- the reconfiguration of the bus parking and bus circulation areas to cater for a total of 281 buses being an additional 81 buses from the current development approval and to provide an additional 14 carparking spaces; and
- reconfiguration of the basement car park to accommodate an additional 7 car parking spaces and additional motorbike spaces for staff.

Therefore, bringing the total additional number of car parking spaces subject to this development application to 21 spaces.

The bus depot was the subject of major upgrading works in 2009 and incorporated:

- parking for some 200 buses (ie 190 operational)
- service and refueling facilities
- bus wash facility
- administration building
- parking for 125 cars
- total staff of some 465 persons with a maximum D/T shift of 252 including 190 drivers
- vehicle access provisions comprising
  - traffic signal controlled intersection ingress/egress on Balmain Road at Allied Street
  - ingress only of City West Link Road (CWLR)
  - ingress/egress on William Street at Derby Shire Road
  - service access on Balmain

This development application is seeking to increase the number of buses accommodated in the depot to 281 including 266 operational. The total staff will increase to 557 with a maximum daytime staff shift of 328 including 266 drivers. There will be some modifications to the existing parking provisions to increase the number of car, motorbike and bicycle spaces as follows:

- 146 car spaces (132 in basement)
- 38 motorbike spaces
- 20 bicycle spaces

As outlined in the Statement and the Traffic Assessment, it concludes that the existing provision has proved to be adequate for the operational needs of the depot. The existing maximum D/T shift staff (252) ratio to parking spaces (111) is some 2.27 persons per space while the future ratio will be maximum D/T (328) to spaces (170) being 1.93 persons per space. It is apparent that the provision of parking with the proposed fleet increase will be "in line with" (in fact slightly better) than the existing provision.

The following provides further information in relation to the car parking and bus parking spaces:

### **Basement Carpark**

Attachment 1 to this letter includes the following plans:

- The existing basement carparking layout, which incorporates
  - 125 carparking spaces inclusive of 4 disabled spaces; and
  - A bicycle storage area.
- The proposed basement carparking layout that is subject to this development application, which incorporates
  - 132 carparking spaces including 2 disabled spaces; and
  - 38 motorbike parking spaces; and
  - A larger bicycle storage area.

To gain the additional car parking spaces in the basement, some spaces will be reconfigured and additional spaces within areas that have not been utilised in the carpark.

### **External Parking**

It is also proposed that additional car parking be provided on the existing hardstand area incorporating 14 carparking spaces. These carparking spaces will be utilised once the buses within this area are in service, which will generally be the first bus services commencing at 4am. These carparking spaces will be allocated for STA authorised vehicles only. Attachment 2 to this letter includes the following plans:

- A plan showing the proposed 14 carspaces; and
- A plan of the existing hardstand area showing the location of the these 14 carspaces.

### **Bus Layout (existing hardstand area)**

The existing hardstand for the buses and the current development consent is for the parking of 200 buses. A review of the existing hardstand shows that it is capable of parking of 281 buses within the existing hardstand area incorporating the aisles and the maintenance area. The bus parking is managed to ensure that buses within the aisle areas are the buses that are first out and last in.

As stated in the Statement, the additional buses are required as a result of an increase in overall patronage by 10.5% on services operated from Leichhardt Depot. Further, it is expected that demand will continue to increase due to future developments at Harold Park, Terry Street Rozelle, the Balmain Leagues Club site, Central Park (Broadway), White Bay and Barangaroo will rely on key government infrastructure such as Leichhardt Depot to deliver the services required to meet the customers demands.

Attachment 3 to this letter includes the following plans:

- The existing bus parking layout showing the bus spaces and the maintenance area; and
- The proposed bus parking layout, which incorporates parking in the aisles and the maintenance area. These areas are identified on the plan.

If you require any further information please do not hesitate to contact me.

Yours faithfully,

Vanessa Colclough  
Director  
Peter Andrews + Associates Pty Ltd

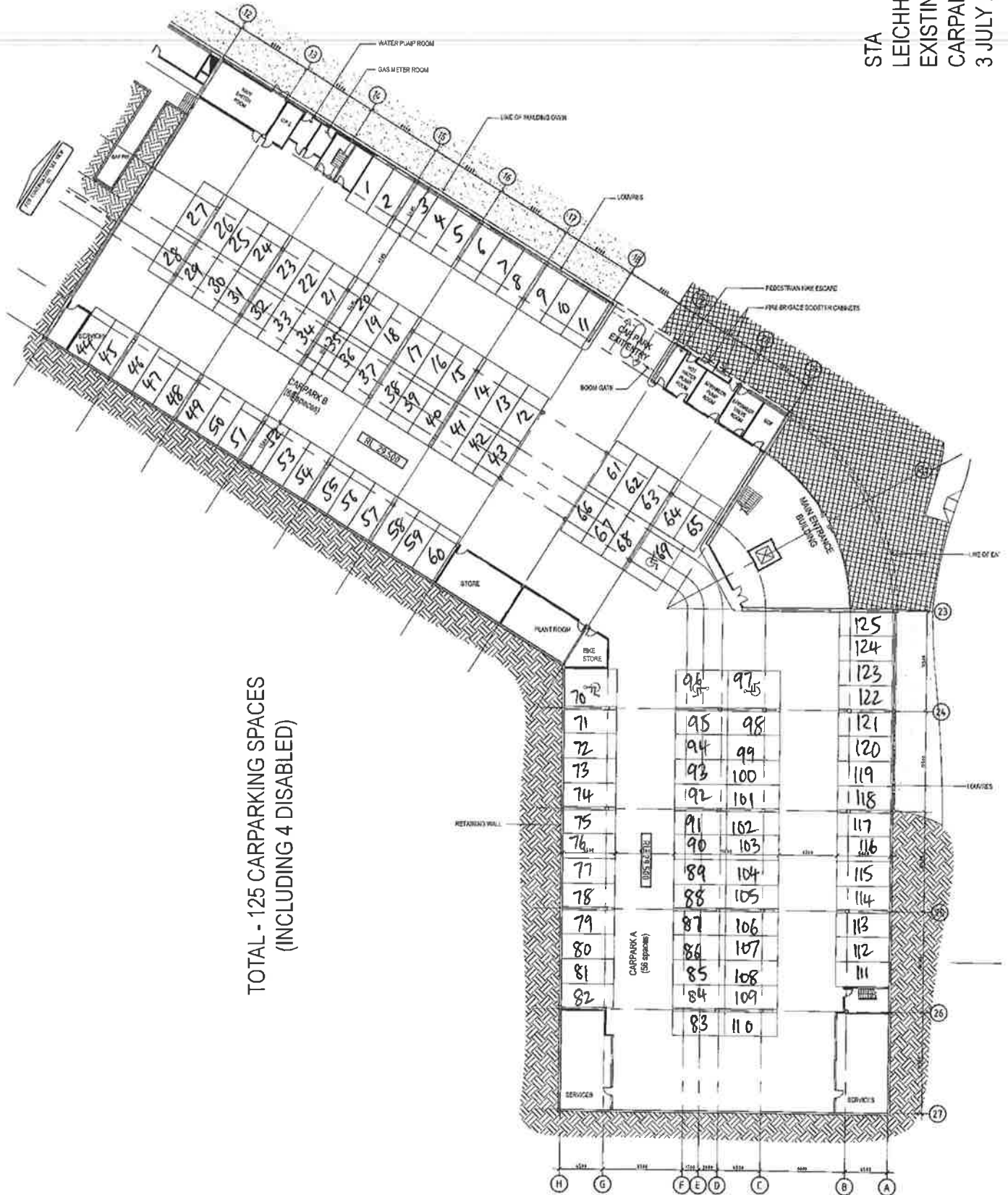
Enc.

# **ATTACHMENT 1**

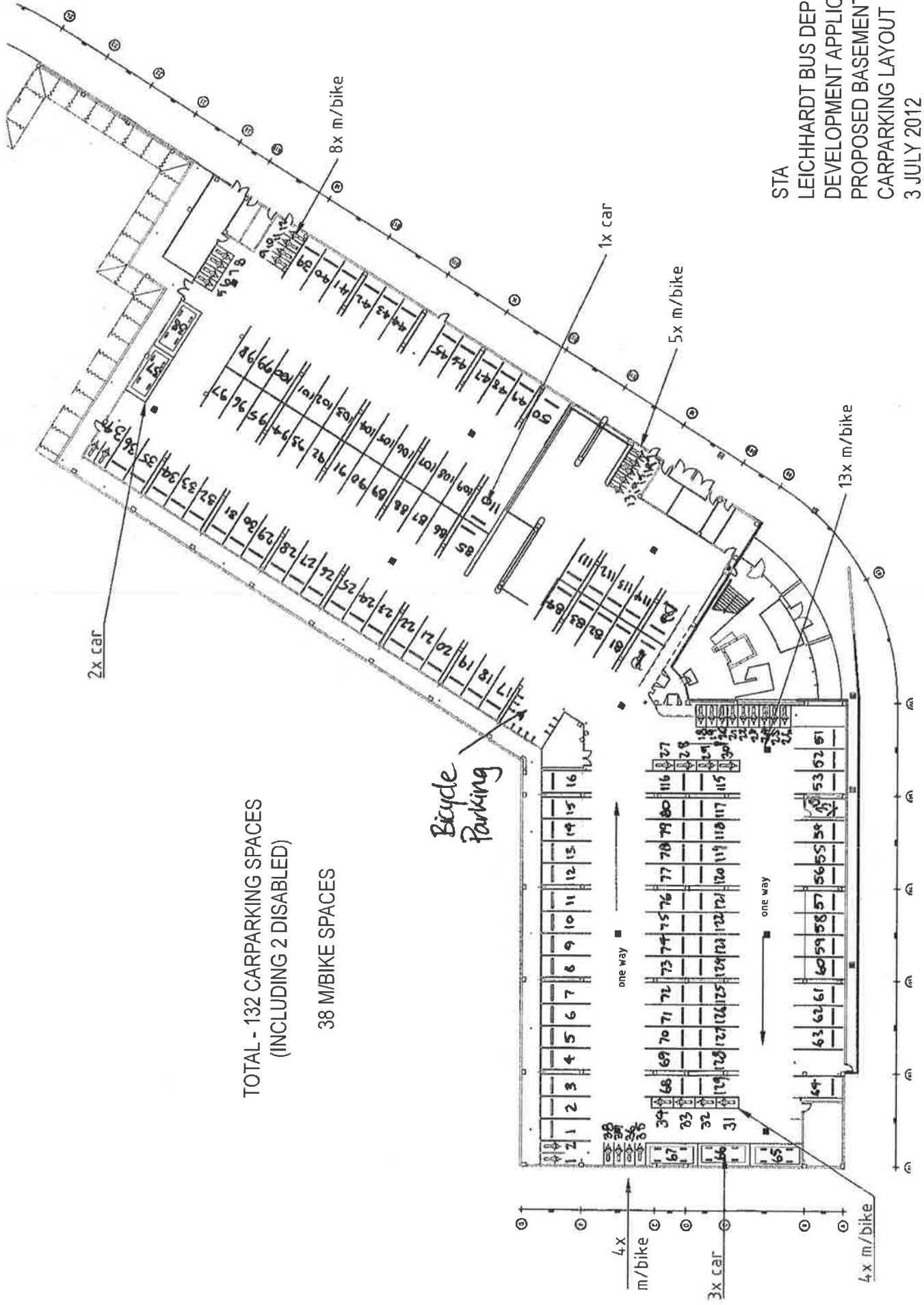
## **Basement Carpark**

1. The existing basement carparking layout
2. The proposed basement carparking layout

STA  
LEICHHARDT BUS DEPOT  
EXISTING BASEMENT  
CARPARKING LAYOUT  
3 JULY 2012



STA  
LEICHHARDT BUS DEPOT  
DEVELOPMENT APPLICATION  
PROPOSED BASEMENT  
CARPARKING LAYOUT  
3 JULY 2012



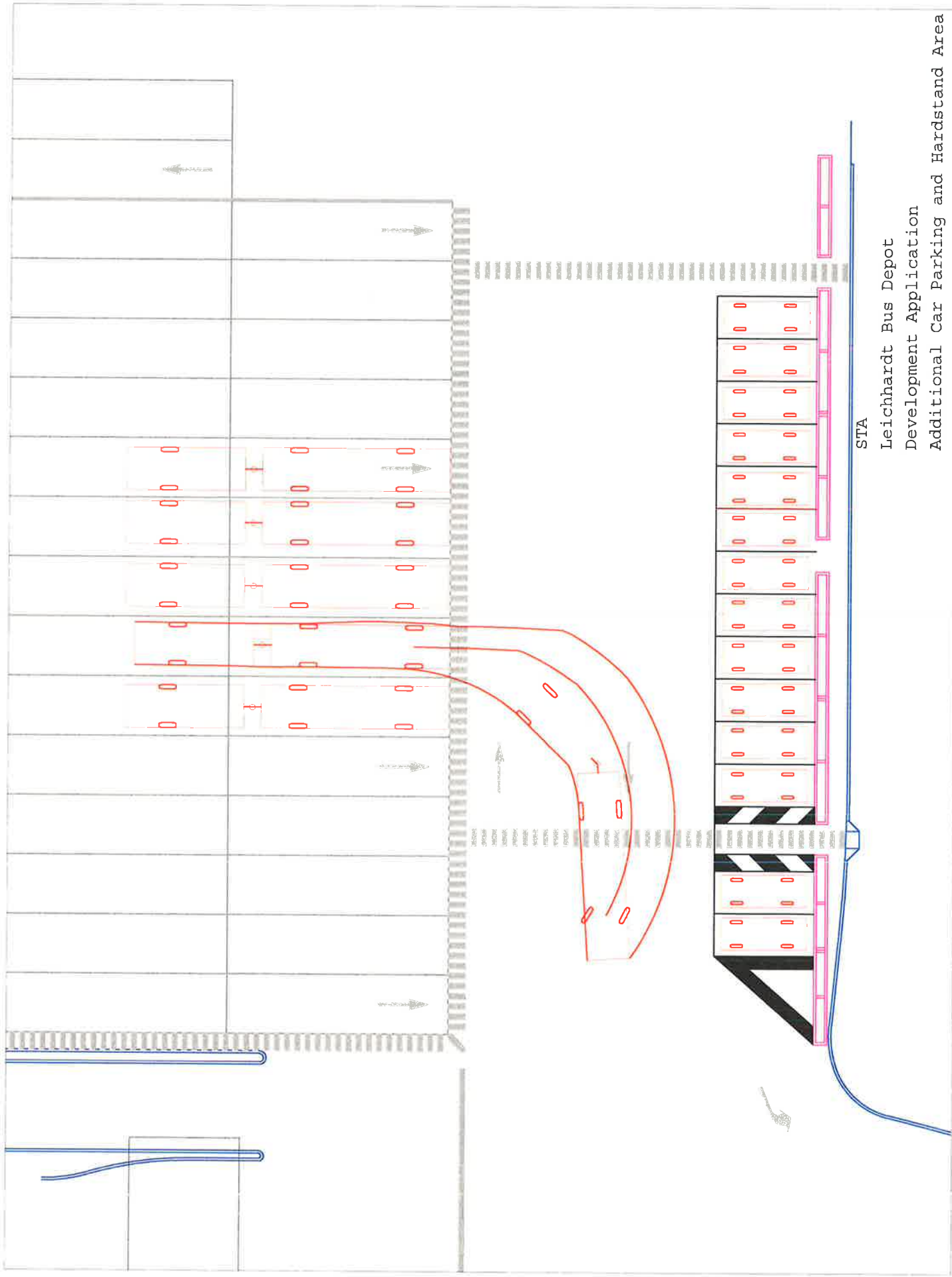
TOTAL - 132 CARPARKING SPACES  
(INCLUDING 2 DISABLED)

38 M/BIKE SPACES

## **ATTACHMENT 2**

### **External Parking**

1. The proposed 14 external carspaces (enlarged view)
2. The existing hardstand area showing the location of the these 14 carspaces



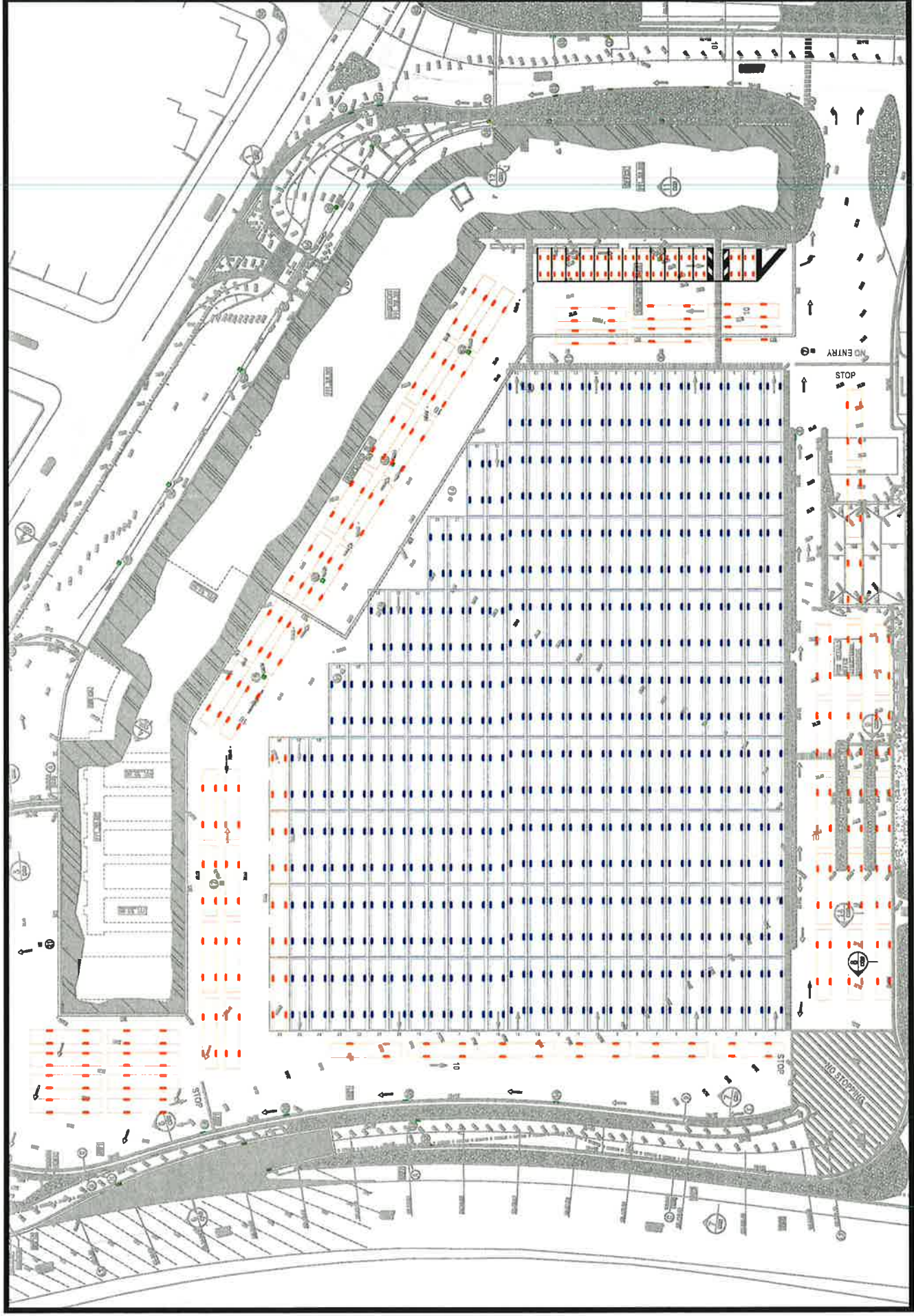
STA

Leichhardt Bus Depot  
Development Application  
Additional Car Parking and Hardstand Area

03 May 2012



**MARKED BAYS = 192**  
**aisle areas = 64**  
**MAINTENANCE = 25**  
**TOTAL = 281**

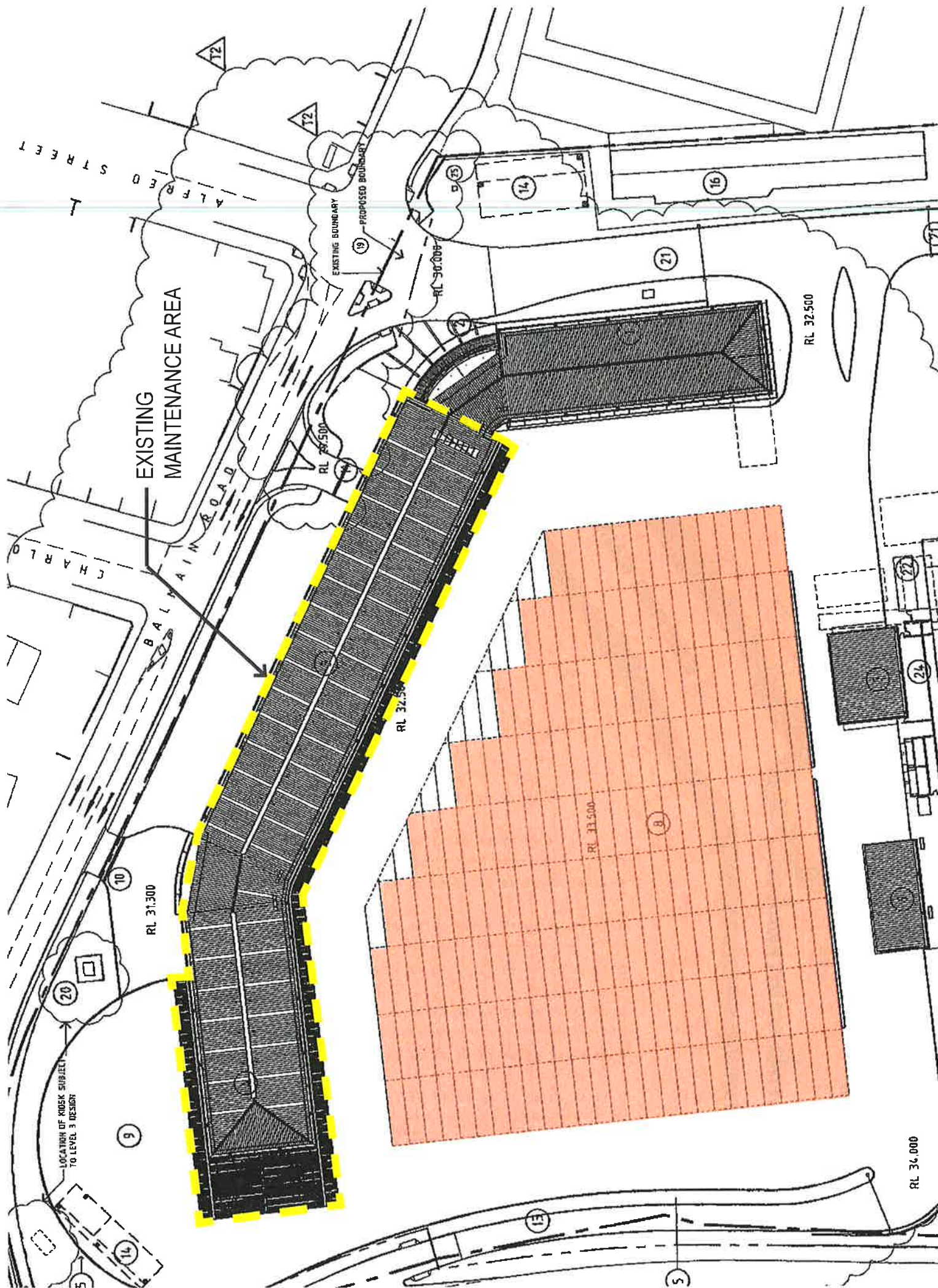


## **ATTACHMENT 3**

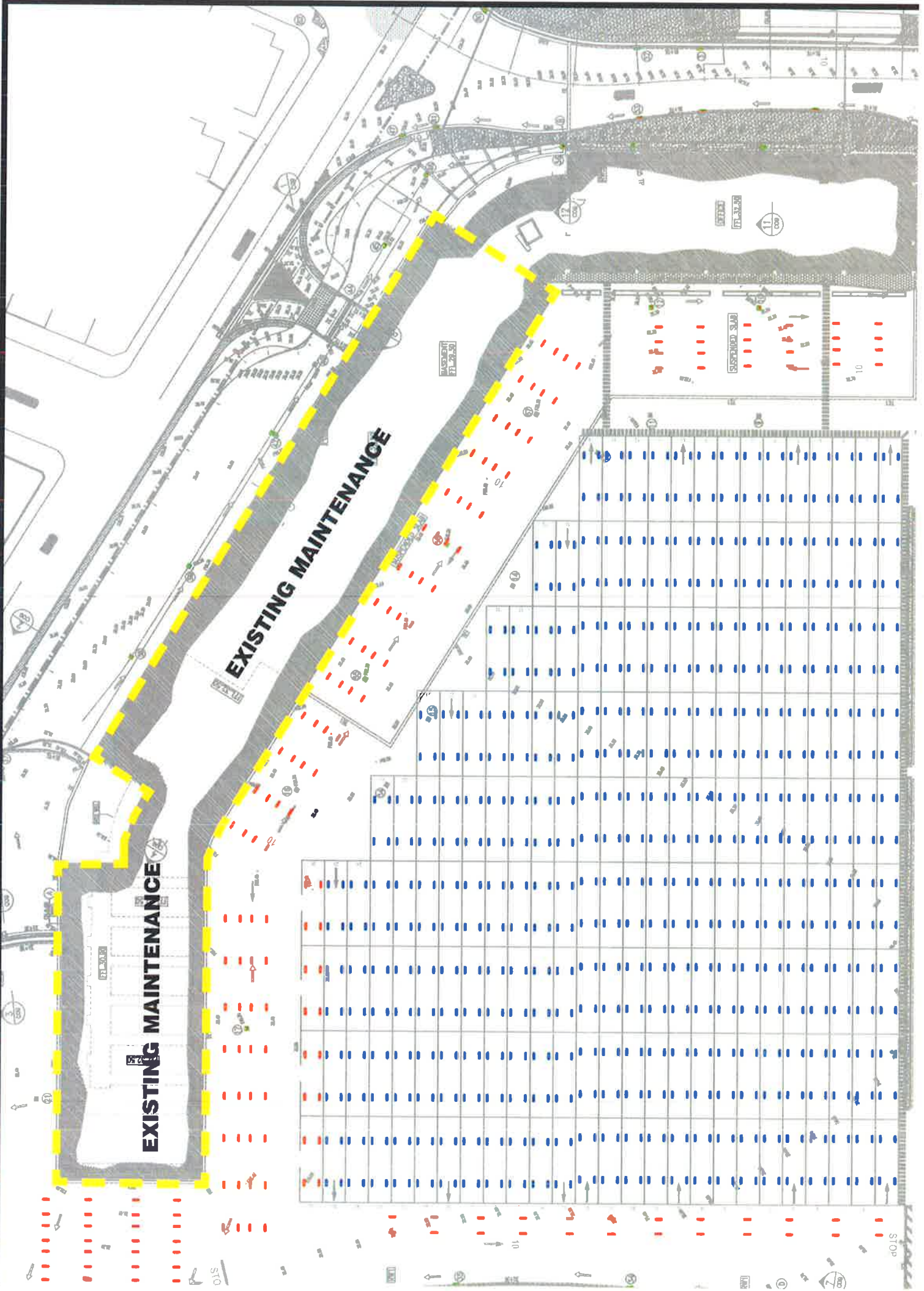
### **Bus Layout (existing hardstand area)**

1. The existing bus parking layout showing the bus spaces and the maintenance area; and
2. The proposed bus parking layout, which incorporates parking in the aisles and the maintenance area.









# **ATTACHMENT 7**





3 December 2012

The General Manager  
Leichhardt City Council  
PO Box 45  
Leichhardt NSW 2040

Dear Sir,

**DA 2012/295 - LEICHHARDT BUS DEPOT**

We refer to Council's report dated December 2012 in relation to the above development application and its recommendation that the application be refused. We ask Council to approve the application, as the additional 81 buses will provide much needed public transport for the area as patronage continues to grow since the construction of the Leichhardt Depot in 2009. We provide the following supporting information for the development application in response to Council's report.

The proposal is to:

- Increase the bus parking capacity for an additional 81 buses;
- Increase car parking capacity for an additional 21 spaces;
- Increase parking capacity for motor bikes (38) and bicycle parking (20).

As a result of the proposal, there will be additional employees at the Leichhardt bus depot being approximately an increase of 76 in the daytime shift staff.

It should also be noted that Council's report includes 29 Derbyshire Road as part of the site owned by State Transit Authority and subject to this development application. This site is no longer owned by State Transit Authority and should not be included as part of the landholdings that are subject to this development. The landholdings subject to the proposal are noted in our development application.

The following outlines Council's reasons for refusal and our response to each item.

- 1. The proposal is inconsistent with the Employment objectives of Clause 20 and of the Leichhardt Local Environmental Plan 2000, as the impact on car parking in surrounding residential area is detrimental to the amenity of those surrounding residential properties pursuant to Section 79C (1)(a)(i) of the Environmental Planning and Assessment Act 1979.**

Council's report states that it is considered the proposal does not meet the requirement of Clause 20(d) of its LEP, which is *to ensure that buildings to be used for employment are appropriately located and designed to minimise the generation of noise, traffic, car parking, waste, pollution and other adverse impacts, to maintain the amenity of surrounding land uses, and avoid harm to the environment.*

The traffic report prepared for the development application and Council's traffic impact assessment peer review both identify that the proposal will have minimal impact on the surrounding road network.

Council considers that the proposal does not meet the objective as a result of the insufficient on-site parking proposed and its subsequent impact on parking in the surrounding residential streets as further outlined in recommendation 2 below. Council's report has used the 2006 Census data instead of the 2011 Census data for



Mary  
Macken/StrawberryHills/ST  
A  
Sent by: Valerie  
McSweeney/StrawberryHills/  
STA

To leichhardt@lmc.nsw.gov.au  
cc  
bcc  
Subject Urgent Attention for Peter Head, General Manager: DA  
2012/295 Leichhardt Bus Depot

04/12/2012 11:36 AM

Dear Mr Head

Please find State Transit letter in response to Council's report  
dated December 2012 in relation to the Development Application DA 2012/295  
Leichhardt Bus Depot for your consideration.



- DOC041212.pdf

Kind Regards

**Mary Macken**  
Corporate Counsel

**State Transit Authority of New South Wales**

Tel: +612 9245 5760  
Fax: +612 9245 5710  
Mobile: +61411 028 382



the Journey-to-Work figures.

The following outlines the calculation used by Council and the same calculation using the 2011 Census data.

- *To provide an approximation of the likely parking impact of the additional bus depot staff, the 2006 Census data indicates that the Journey to Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. On this basis 56 of the additional 76 staff would arrive by car. When accounting for the additional parking spaces on site this would result in around 40 additional vehicles parked on street in the vicinity of the site.*

However, using the above calculation, the figure for additional vehicles should be 35 additional vehicles as follows.

- 73% of 76 staff = 56 staff minus 21 carparking spaces = 35 additional vehicles.

The quick stats from the 2011 Census data indicates that the method of travel to work for employed people in a car as a driver or as a passenger is 43.9% for the Leichhardt LGA as identified in Appendix 1. Therefore, the number of additional vehicles would be calculated as follows:

- 43.9% of 76 staff = 34 staff minus 21 carparking spaces = 13 additional vehicles.

Council's traffic report prepared an inventory of publicly available on-street car parking within approximately 600-700 m of the Leichhardt Bus Depot. This catchment represents a 5 to 10 minute walking distance from the subject site. The peak demand occurred during the early morning and evening periods, mainly due to demand associated with resident parking profiles. It states that the on-street parking demand is high / moderate. The occupancy rates range from 66.1% (333 vacancies) at 4.30pm to 76.7% (229 vacancies) at 8.00pm during the week. It is therefore considered, that an additional 13 vehicles will not significantly impact on the surrounding street parking.

**2. The proposal fails to comply with the provisions of the Leichhardt Development Control Plan 2000, pursuant to Section 79C (1)(a)(iii) of the Environmental Planning and Assessment Act 1979 as follows:**

- (a) Part A8.0 & Part C1.2 – As the proposal is unable to accommodate the increased parking requirements and will result in an additional 40 vehicles being parked on nearby residential streets.**

As stated in item 1. above, the additional vehicles possibly being parked on nearby residential streets will be 13 vehicles and this will continue to reduce as public transportation increases.

Further, the proposal does comply with the provisions of the Leichhardt Development Control 2000. The Leichhardt DCP states that the carparking rates are intended as a generic guide and may need to be adjusted for local circumstances, employee densities, public transport accessibility and reduced car mode share targets, where appropriate. The staff parking rates are based on the principle of providing parking supply up to 20% lower than observed or calculated demand to discourage car usage for journey to work travel.

*The principles of Council's DCP in relation to parking include:*

*To ensure that safe and sufficient parking for all modes of transport is provided to meet anticipated demands.*

*Improve access by walking, cycling and public transport to housing, jobs and services.*

*Ensure access for people with disabilities. Increase the choice of available transport and reducing dependence on cars.*

*To make cycling a viable transport alternative.*

*To restrain employee off-street parking provisions to discourage car travel.*

*To improve the design and quality of the urban environment.*

Increasing the bus capacity at the Leichhardt Depot will assist in meeting the principles of the DCP in that it will improve access to public transport and increase the choice of available transport and further reduce the dependence on cars.

Further, STA staff are provided with free travel on public transport. With the additional bus services, additional bicycle and motorbike parking located on the premises, the car usage for journey to work travel is further reduced.

**3. Insufficient information has been provided to demonstrate that the following elements achieve compliance with the requirements of the Building Code of Australia.**

- Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
- The number of required exits remain compliant with D1.2.
- Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
- The proposed location and number of the disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.

Council has not requested this information. A BCA report could be undertaken and could be conditioned as part of the consent.

**4. Given the adverse impacts the proposal would have on the residential amenity of adjoining properties, the subject site is not considered suitable to accommodate the proposed development in its current form, pursuant to Section 79C (1)(c) of the Environmental Planning and Assessment Act 1979.**

The site consists of an existing bus depot. The bus depot is able to support an additional 81 buses to provide public transport. Whilst, this will increase the number of staff, it will only result in an addition of approximately 13 vehicles parking in the surrounding area. This is also expected to decrease given the future increase in public transportation. It is considered that the proposal will provide beneficial impacts.

**5. The proposal is not considered to be in the public interest, pursuant to Section 79C (1)(e) of the Environmental Planning and Assessment Act 1979.**

The objects of the EP&A Act relevant to this proposal are to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (vii) ecologically sustainable development.*

The site is capable of parking an additional 81 buses to provide additional public transportation. Further, additional carparking spaces can be provided on site. Whilst, some parking may be required on the surrounding road network for staff parking, it is considered that 13 vehicles would have minimal impact.

The proposal through the increase of public transportation on an existing bus depot site promotes a better environment and ecologically sustainable development as identified in the objects of the EP&A Act.

Yours faithfully

  
MARY MACKEN  
CORPORATE COUNSEL

Appendix 1  
2011 Census Data

<b>Travel to work, top responses</b>	<b>Leichhardt (A)</b>	<b>%</b>	<b>New South Wales</b>	<b>%</b>	<b>Australia</b>	<b>%</b>
<i>Employed people aged 15 years and over</i>						
Car, as driver	12,130	40.4	1,807,358	57.6	6,059,972	60.2
Bus	5,645	18.8	116,656	3.7	301,187	3.0
Walked only	1,619	5.4	128,339	4.1	377,043	3.7
Car, as passenger	1,005	3.3	157,359	5.0	537,638	5.3
Bicycle	828	2.8	23,359	0.7	103,914	1.0
People who travelled to work by public transport	8,668	28.9	433,016	13.8	1,046,721	10.4
People who travelled to work by car as driver or passenger	13,181	43.9	1,971,702	62.8	6,620,840	65.8

In Leichhardt (A) (Local Government Areas), on the day of the Census, the methods of travel to work for employed people were Car, as driver 40.4%, Bus 18.8% and Walked only 5.4%. Other common responses were Car, as passenger 3.3 and Bicycle 2.8. On the day, 28.9% of employed people travelled to work on public transport and 43.9% by car (either as driver or as passenger).

The Census data states that this variable records includes up to three methods, or means, of travel to work on the day of the Census, for each person aged 15 years and over who was employed during the week before the Census. The data are used in Place of Work (POWP) analysis, and transport planning. It should be noted that it refers to method on the day of the Census, not usual method used.

Yours sincerely

PETER ROWLEY  
CHIEF EXECUTIVE



# **ATTACHMENT 8**



6 December 2012

**EXPRESS POST**

Dr John Roseth  
Chair, Sydney East Joint Regional Planning Panel  
Regional Panels Secretariat  
GPO Box 39  
Sydney NSW 2001

Dear Dr Roseth

**Crown Development Application D/2012/295  
Leichhardt Bus Depot Expansion  
230-240 Balmain Road and 27 Derbyshire Road, Leichhardt**

---

State Transit Authority is the applicant for the above Crown development application (the **DA**) that was lodged with Leichhardt Municipal Council (**Council**) on 19 June 2012. The DA seeks to increase staff parking and the number of buses accommodated at the Leichhardt bus depot.


The Council has failed to determine the DA within 70 days of it being lodged. Accordingly, State Transit requests that the DA be referred to the JRPP for determination in accordance with section 89(2) of the *Environmental Planning and Assessment Act 1979*.

State Transit has attempted to avoid referring this DA to the JRPP, however, Council's delay in dealing with the DA has left State Transit with little choice. It was recommended to the Council at its meeting on Tuesday, 4 December 2012, that the DA be referred to the JRPP with a recommendation for refusal. Despite this recommendation and a discussion regarding the DA, no resolution to determine or otherwise refer the DA has been made.

As this DA has been on foot for some time and Council has already prepared an assessment report, I request that the JRPP consider the DA as a matter of urgency.

If you require any further information, please contact me on 9245 5760.

Yours faithfully



Mary Macken  
Corporate Counsel





# **ATTACHMENT 9**



27 February 2013

Sydney East Joint Regional Planning Panel  
Panel Secretariat  
GPO Box 39  
Sydney NSW 2001

Dear Sir,

**DEVELOPMENT APPLICATION 2012/295  
LEICHHARDT BUS DEPOT – ADDITIONAL BUSES AND CARPARKING SPACES**

We refer to Leichhardt Council's Assessment Report and Draft Conditions of Consent in relation to the above application. We have taken Council's comments into consideration and provide an alternative layout for the proposal, which incorporates additional car parking onsite. However, we do not agree with Council's assessment report and recommendation for refusal. The following outlines the revised proposal and provides further information in response to Council's report.

As outlined in the Statement of Environmental Effects, the existing Leichhardt Bus Depot is located on Lots 1 and 2 DP 1159702 and part of Lot 33 DP 867166.

The development application (DA 2012/295) seeks approval for the parking of an additional 81 buses within the existing development footprint to assist in meeting demands for public transportation. As an additional 81 buses will increase the staff levels, the development application also seeks the reconfiguration of the basement carpark to allow for additional vehicle, motorbike and bicycle parking and for additional carparking spaces within the bus parking area.

**The Revised Proposal**

The proposal has been revised to incorporate additional car parking on site as required by Council. Council states that based on the 2006 Census data, the Journey to Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. Therefore, Council states that 56 of the additional 76 staff would arrive by car. It states that taking into consideration the proposed additional parking spaces, this would result in around 40 additional vehicles parked on the street. Whilst we do not agree with Council's methodology and calculations, which is outlined further in our submission, the layout for bus parking and carparking spaces has been reconfigured to incorporate parking for 40 car parking spaces in addition to that proposed in our development application lodged to Council.

The proposal now incorporates:

### **Additional Buses**

- The number of bus parking remains the same at 281 parking spaces for buses as identified in the development application.
- The bus parking layout has been reconfigured from the plans submitted as part of the development application and is as follows. The revised layout is shown on Figure 01.
  - Marked Bays = 195
  - Aisle areas = 61
  - Maintenance = 25
  - Total = 281 buses

### **Increase in Staff**

- The total staff numbers do not change from the development application and is outlined below:
  - Total staff increase from 465 to 557 (an increase of 92).
  - Daytime shift staff to increase from 252 to 328 (an increase of 76).
  - Bus drivers to increase from 190 to 266 (an increase of 76).

### **Car parking spaces**

- The reconfiguration of the bus parking layout has allowed for additional car parking spaces. The car parking spaces that are proposed on site are as follows and are shown on Figures 02 and 03.
  - Reconfiguration of the basement car park.  
The approved basement car park incorporated 125 car parking spaces and bicycle parking. The proposal will reconfigure the carpark and will include an additional seven (7) carparking spaces, an additional 38 motorbike parking spaces and increased bicycle parking capacity. This is in accordance with the development application. Refer Figure 02.
  - Outdoor car parking spaces incorporating:
    - 35 car spaces within the semi circle area of the hardstand area, which does not rely on the removal of parked buses (refer Figure 04).
    - 5 car spaces adjoining the loading dock (refer Figure 05), which is separate to the bus parking area.
    - 15 car parking spaces located on the hardstand area where buses will park overnight. However, these buses will generally depart from this area as part of the first bus services and arrive in this area as part of the last bus service (refer Figure 06). These parking spaces will be utilised by STA authorised vehicles only.

In reply to Council's assessment report, we provide further information in relation to the proposal for additional bus parking and carparking spaces for the Joint Regional Planning Panel's consideration as follows.

### **Background**

Leichhardt Council approved the new Leichhardt Bus Depot under DA 2006/660 on 17 April 2007. The report identified the project as follows:

#### ***D/2006/660 Agenda Item 6***

*Off 25 Derbyshire Road, LEICHHARDT*

*Location and siting of the new Leichhardt Bus Depot and STA Regional Office, use of the Former Tram Shed for STA office use, use of the Former Traffic Office Building for STA office use, use of the Former Cable Store Building for storage purposes and associated works.*

*Stage 1 of the development is for demolition of refuelling and bus wash facilities, a new Leichhardt Bus Depot and STA Regional Office comprising commercial building with an office function, workshop/maintenance area, basement parking for 125 vehicles and loading dock, hardstand and*

*circulation area for the parking of 200 buses, freeway wall, bulk earth works, ancillary landscaping and drainage works, new access road off Balmain Road (opposite Alfred Street), new access road off City West Link, consolidation and associated works.*

The new Leichhardt Bus Depot was constructed in 2009 and included a new regional office incorporating basement parking for 125 vehicles and the circulation and parking area for 200 buses. The proposal subject to DA 2012/295 applies only to the Leichhardt Bus Depot located on Lots 1 and 2 DP 1159702 and part of Lot 33 DP 867166 and does not include any additional land or additional construction works.

#### **Council's Methodology to determine car parking spaces on site**

Council calculation to determine the number of car parking spaces for the increase in bus parking uses the 2006 Census data, which indicates that the Journey to Work mode split by car (driver or passenger) is 73% for the Leichhardt LGA. Council's calculation is as follows:

Journey to Work by car	-	73%
Additional staff -	-	76 staff
Proposed additional parking spaces (Although 21 additional car parking spaces are proposed)	-	14 car parking spaces
Therefore: 73% of 76	=	55.48
		Less 14 car parking spaces
	=	41.48 car parking spaces

If we are to use Council's calculation to determine car parking spaces only using the 2006 Census data, then the calculation should take into account the total number of additional parking spaces to be provided in addition to the existing approval for the Leichhardt Bus Depot. The calculation would be as follows:

Journey to Work by car	-	73%
Additional staff	-	76 staff
Proposed additional parking spaces	-	21 car parking spaces
Therefore: 73% of 76	=	55.48
		Less 21 car parking spaces
	=	34.48 car parking spaces

However, we also make the following comments in relation to the above methodology:

- Council uses the 2006 Census data. We note Council's comment that the 2012 Census data is not available for Journey to Work, however it should be noted that the 2006 Census data is over 6 years old and public transport has increased during this time.
- The Leichhardt Depot has been expanded since 2006 offering more public transport in the area.
- The 2006 Census data used is the Journey to Work mode split by car includes driver and passenger. Therefore, some of these vehicles could have more than one employee but would only require one parking space and some vehicles would drop the passenger off and continue to its place of work not requiring any parking space at the depot.
- The 2006 Census data Journey to Work is for the whole of Leichhardt LGA. It does not specifically relate to the Leichhardt Depot. As outlined in our previous submission, the State Transit Authority offers all of its full-time and part-time permanent employees free travel. Free public transport is also available to casual and contract staff under certain circumstances. Attached is State Transit's Authority's policy in relation to free public transportation for employees (Appendix A).
- Further, the use of the above data does not consider employees that live and work in the Leichhardt LGA and walk to work.
- The existing development consent for the Leichhardt Bus Depot is to provide 125 basement car parking spaces.
- Council states that there is a high observed parking occupancy in the immediately adjacent unrestricted parking in local streets including Charlotte Street, Alfred Street, William Street and Henry Street. It also states that adding to the parking concerns is the fact that this area is also used to accommodate parking from the high school, the nearby function centre, park users, sports teams using the playing fields and the Greek Church. Therefore, Council notes that there are many different users of the parking spaces and it is not just parking requirements of the Leichhardt Depot.
- Council also states that there is likely to be a high prevalence of shift work for this type of premise especially given that the bus depot operations relies on at least some staff arriving before the first bus of each service departs and leaving after the last bus of each service returns and that not all staff will be able to rely on public transport. However, this is only for a small percentage as only some bus operators who commence the first shifts or finish the last shifts would not be able to rely on public transport.
- The core hours for the Bus Depot are as follows:
  - Monday to Friday 8.00am to 5.00pm.
  - Saturday 10.00am to 5.00pm with staff predominantly bus drivers.
  - Sunday 11.00am to 5.00pm with staff predominantly bus drivers.
- Current parking requirements for weekends are as follows:
  - Saturday – currently approximately 110 staff at any one time
  - Sunday – currently approximately 95 staff at any one time.

If all employees were to drive to work, the existing carpark is able to accommodate the weekend staff and no street parking is required.
- Proposed carparking requirements for the weekends are as follows:
  - Saturday – increase to a maximum of around 154 staff at any one time and predominantly bus operators.
  - Sunday – increase to a maximum of around 133 at any one time and predominantly bus operators.

Therefore, if all employees were to drive to work, all carparking can be accommodated on site in the revised proposal and no street parking would be required.

Further, it is noted that Leichhardt Council approved the expansion of the Palace Cinema in December 2011, which included an expansion from 4 cinemas (742 seats) to 8 cinemas being an additional four cinemas and an additional 340 seats. The parking for the cinema was through the secured paid parking area that was part of the building. This secured parking is not operated by the Cinema.

Council's traffic engineer and transport planner advised that the parking provision should be 16 additional parking spaces or six (6) additional parking spaces supported by a Green Travel Plan. The Cinema was unable to provide six (6) parking spaces in the secured parking area. Therefore, Council agreed that the secured parking

area could include stack parking and provide a valet service at particular times. This included an additional two spaces and the development consent required the Cinema to pay contributions for two parking spaces and that the Cinema prepare a green travel plan.

State Transit Authority's proposal for the Leichhardt Bus Depot also proposed a green travel plan. This would have been complementary to the free public transportation that State Transit Authority already offers.

### **Council Internal Referrals**

#### **Strategic Planning (Parks)**

There is no evidence that the parking issues in relation to the Pioneers Memorial Park is caused only by the Leichhardt Bus Depot as stated by Council. There are many surrounding land uses as identified above by Council. It is also noted that the Pioneers Memorial Park does not provide any onsite parking spaces and relies on parking in the surrounding road network. Therefore, lack of parking for Pioneers Memorial Park is not a reason for refusal for the current proposal for the Leichhardt Bus Depot.

It should also be noted that the landholdings opposite the Leichhardt Bus Depot are not owned or managed by the State Transit Authority and therefore cannot be used for parking for the Leichhardt Bus Depot.

#### **Traffic Engineer**

As stated above, Council's required carparking spaces have been provided on site and therefore, the Leichhardt Bus Depot should not have to construct additional street parking spaces as suggested.

#### **Conclusion**

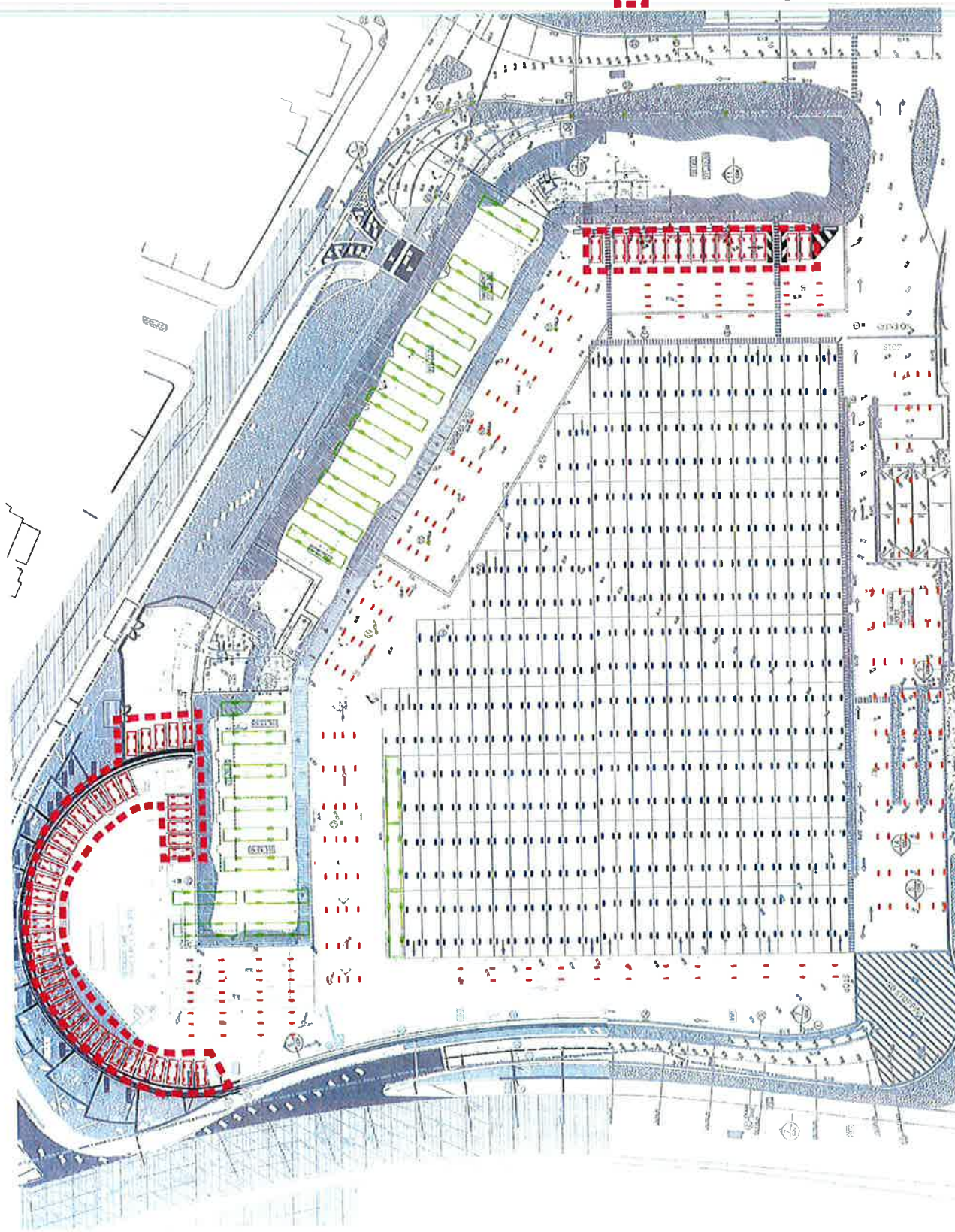
As outlined above, the carparking spaces as required by Council have been provided as part of the revised proposal. Leichhardt Bus Depot is an existing bus depot providing essential public transport for the Sydney Metropolitan Area. The expansion of the Bus Depot does not require any additional land and can be accommodated within the existing boundaries of the Bus Depot. The proposal has beneficial impacts including additional employment opportunities and additional public transport. Therefore, the State Transit Authority requests that the JRPP favourably consider the proposal.

Yours faithfully

  
MARY MACKEN  
CORPORATE COUNSEL







 TOTAL - 55 OUTDOOR  
 CARPARKING  
 SPACES

FIGURE 03  
 PROPOSED OUTDOOR  
 CARPARKING LAYOUT

STA  
 LEICHHARDT BUS DEPOT  
 DEVELOPMENT APPLICATION  
 27 FEBRUARY 2013

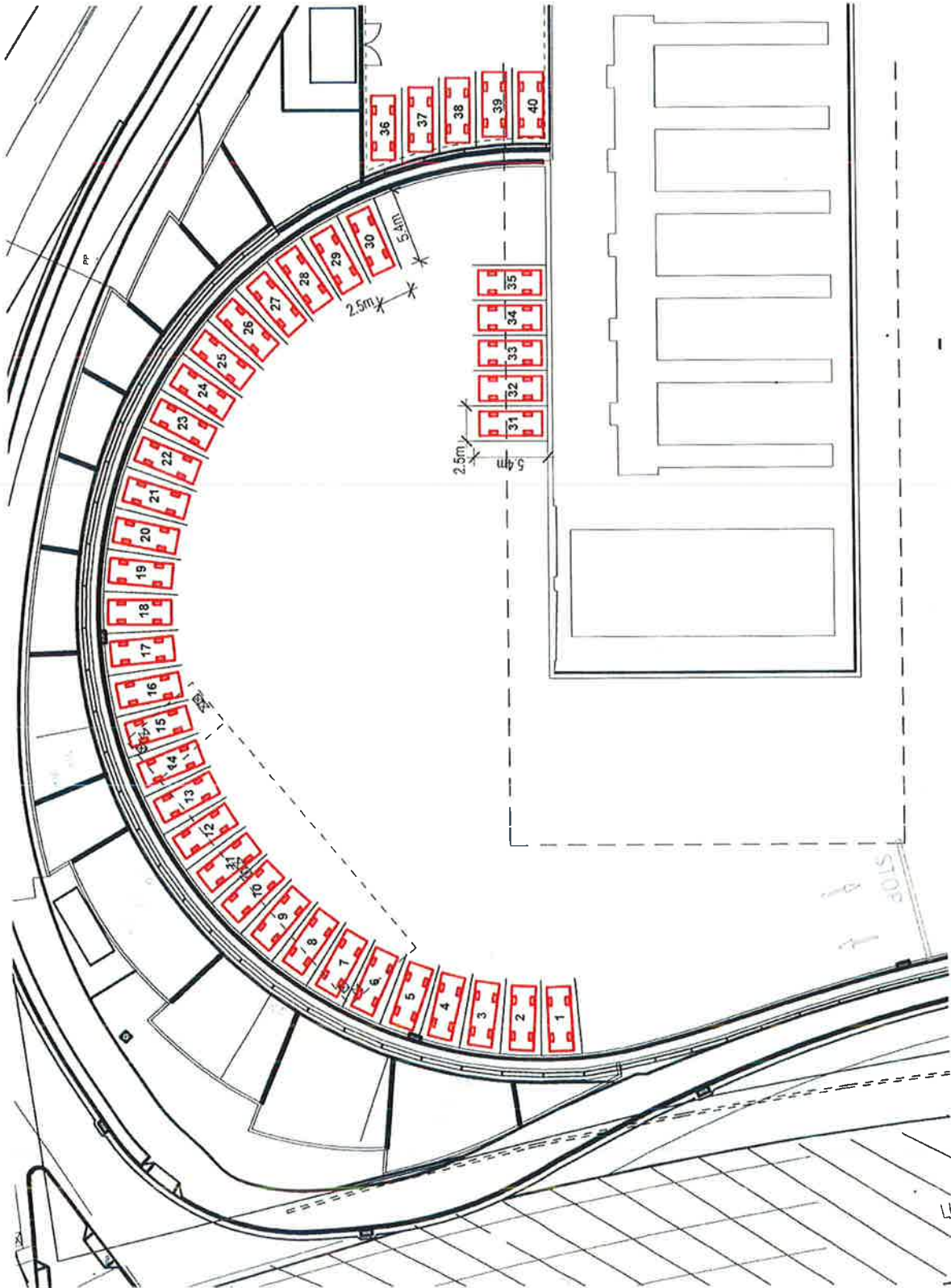


FIGURE 04  
 PROPOSED OUTDOOR  
 CARPARKING LAYOUT  
 STA  
 LEICHHARDT BUS DEPOT  
 DEVELOPMENT APPLICATION  
 27 FEBRUARY 2013



**MARKED BAYS = 195**  
**AISLE AREAS = 61**  
**EXISTING MAINTENANCE = 25**  
**TOTAL = 281**

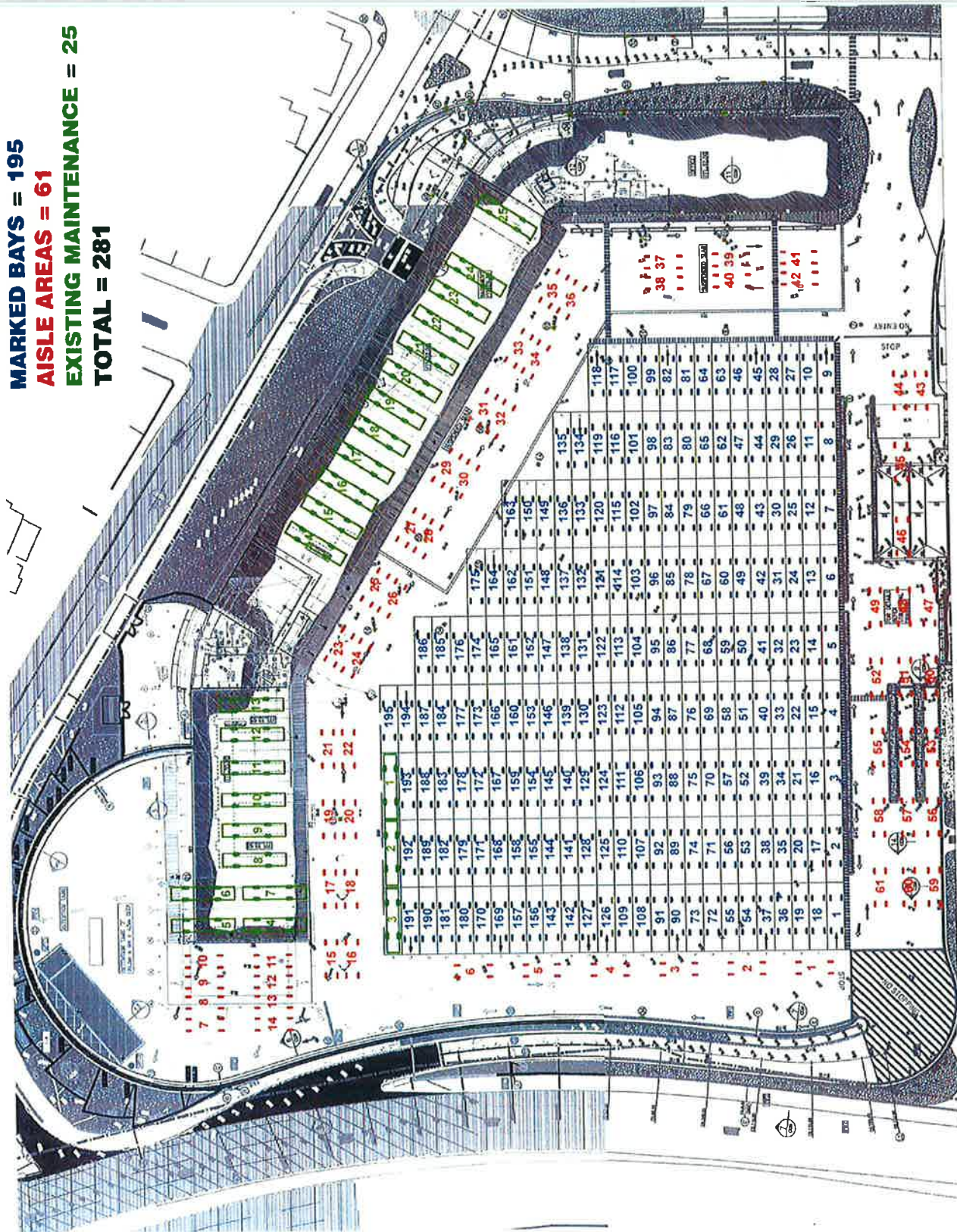
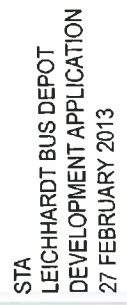


FIGURE 01  
 PROPOSED BUS PARKING  
 AREA  
 STA  
 LEICHHARDT BUS DEPOT  
 DEVELOPMENT APPLICATION  
 27 FEBRUARY 2013







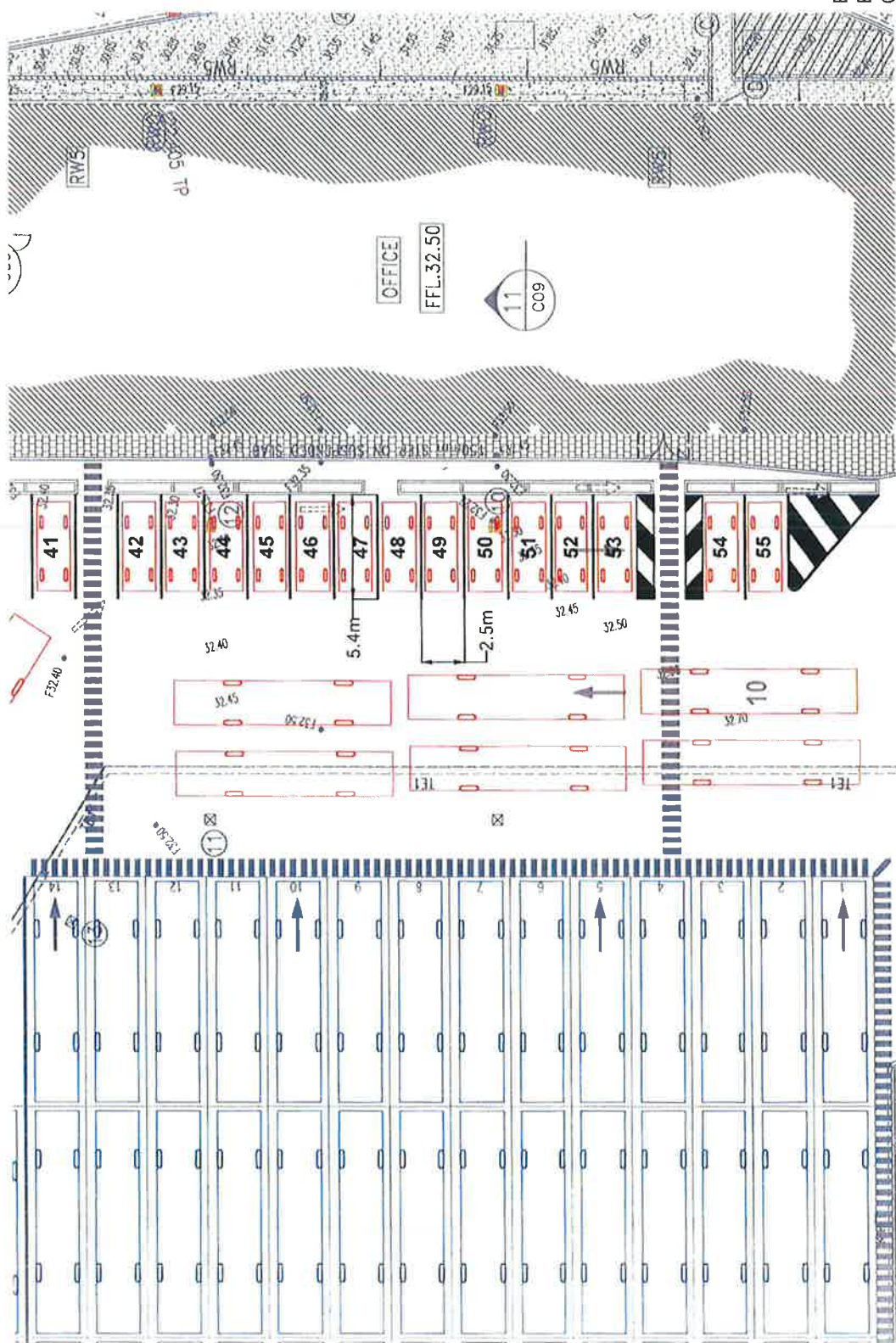



FIGURE 06  
PROPOSED OUTDOOR  
CARPARKING LAYOUT

STA  
LEICHHARDT BUS DEPOT  
DEVELOPMENT APPLICATION  
27 FEBRUARY 2013

**APPENDIX A  
STATE TRANSIT AUTHORITY'S  
FREE PUBLIC TRANSPORTATION  
POLICY FOR STAFF**

---

[Close](#)[Print](#)**Recruitment & Employee Travel****HR Services** Conditions  
and Benefits of  
Employment

DOC REF    PROC 52.30  
NO:  
Issue No.    6  
Date:        18/08/2010  
              12:00:00 AM  
GM            GM HUMAN  
Reviewer     RESOURCES  
              (EXEC52)  
Review       18/08/2012  
Date:        12:00:00 AM  
Reviewer:    HR  
              DEVELOPMENT  
              MANAGER  
              (CH335)  
Read Count: 0



+ expand all - collapse all

## ▼ 1.0 Introduction

State Transit provides a variety of arrangements for employees who use public transport when travelling to and from work, during the course of their employment or outside their employment.

This Employee Travel procedure incorporates the following:-

- Business Travel
  - Official Overseas Travel (4.2.1)
  - Official Domestic Travel - Overnight (4.2.2)
  - Official Domestic Travel - Day Trip (4.2.3)
  - Travel Time (4.2.4)
  - Taxi Transport (4.2.5)
  - Motor Vehicle (4.2.6)
- Employee Passes & Concessions
  - Employee Pass (Home & Duty)
  - All Services Pass
  - Point to Point pass
  - Interstate Travel Voucher
  - Gold Pass

These procedures outline the travel entitlements of State Transit employees and detail the process to claim allowances and reimbursement.

## ▶ 2.0 Responsibilities

## ▶ 3.0 Documentation and Records

### ▼ 4.0 Procedure

#### ▶ 4.1 Definitions

#### ▶ 4.2 Business Travel

#### ▼ 4.3 Employee Passes

This section outlines the eligibility and entitlement of employees and their immediate family members and long-term contractors to free travel on prescribed State Transit, Western Sydney Buses, CityRail and CountryLink services.

Employees using passes to travel are ambassadors of State Transit. Their behaviour while travelling (both during and outside work hours) must be in accordance with the relevant sections of the code of Conduct (**PROC 14.01**) and must not bring State Transit into disrepute.

When a pass is used for travel it must be carried at all times by the passholder.

#### ▶ Misuse of Passes

##### ▼ 4.3.1 Eligibility

All permanent, (full-time and part time) employees are eligible for an

Employee Pass upon commencement of employment with State Transit.

Temporary employees (full time and part time) are eligible for an Employee Pass upon commencement of employment with State Transit if their initial period of employment is expected to be over three months.

Temporary employees who are initially employed for less than three months, whose employment is subsequently extended over three consecutive months are entitled to be issued with an Employee Pass after their 3 month service is reached. The three months service may be worked in the same or a different role or location provided the service is continuous.

In appropriate circumstances, long-term contractors who have contracts with State Transit for a minimum of twelve months may be eligible for an Employee Pass. The issue of an Employee Pass to a contractor is not an admission in any form or manner that an employment relationship exists, or will exist or has existed between the contractor and State Transit. Long Term Contractors must apply for a pass using Application for Issue of Pass to Contractor (**FORM 646**). Approval of a pass for a long term contractor is at Chief Executive or General Manager level only.

Long-term contractors are not eligible for All-Services, Point to Point, Interstate and Gold Passes. When the contract ends, the General Manager, or relevant State Transit contract Manager, is responsible for collecting the pass and returning it to the Treasury and Ticketing Services (Passes Unit).

All-Services, Point-to-Point and Interstate Travel Vouchers are only available to employees who have completed the requisite length of service as specified in 4.3.2.

Casual staff are not eligible for any type of Employee Pass or Concession.

Employee Passes and Concessions are NOT cumulative from year to year.

#### ▼ **4.3.2 Entitlements**

##### ▼ **Employee Pass**

Employee Passes are valid on all Ordinary City Rail (including Airport Link stations), all Ordinary Sydney Ferries Corporation, all Ordinary State Transit Bus & Newcastle Ferry and Western Sydney Buses services.

Travel is permitted on or off duty, subject to the Employee Pass being validated or presented for inspection when required.

##### ▶ **All-Services Pass (Holiday Pass)**

► **Point-to-Point Pass**

► **Interstate Travel Voucher**

▼ **Gold Pass**

Employees who complete thirty (30) years or more equivalent full-time service with State Transit, Sydney Ferries Corporation, Western Sydney Buses or State Rail are eligible for a Gold Pass (unless dismissed for serious and wilful misconduct). Gold Passes are valid for life.

Gold Passes are valid on Country Rail services in NSW, all Ordinary City Rail, all Ordinary State Transit Bus & Newcastle Ferry, all Ordinary Sydney Ferries Corporation and Western Sydney Buses services.

In certain circumstances where employees take early retirement (for example medical retirement where it has been in State Transit's interest to exit employment) then equivalent full-time service can comprise of actual service plus outstanding Annual or Long Service Leave if such leave would be sufficient to achieve a total of thirty (30) years service or more.

A Spouse / Partner of an eligible employee / ex-employee or deceased Gold Pass holder is also entitled to a Gold Pass. Gold Passes issued to a spouse / partner are subject to the following provisions:

- Applications are made by the employee / ex-employee on behalf of the spouse / partner or directly by the spouse / partner of a deceased Gold Pass Holder;
- Proof of relationship will be required either through current employee and / or superannuation details or by declaration;
- The spouse / partner must reside at the same address as the employee / ex-employee;
- The pass is issued to the partner in their own right;
- The pass is retained until their death or dissolution of the partnership;
- Renewal notices will be sent concurrently every year to the same address as the employee / ex-employee
- The pass is not transferable eg: a widow / widower is not entitled to apply for a pass for a new partner
- Only one spouse / partner is eligible to receive a Gold Pass each calendar year.
- Any new spouse / partner is bound by the same conditions.

Retired Gold Pass holders and their spouse / partner are not entitled to any other travel pass or voucher.

► **4.3.3 Applying for a Travel Pass**

► **4.3.4 Relationship to Leave**

► **4.3.5 Leaving State Transit**

- ▶ **4.3.6 Lost, Stolen or Damaged Passes**
- ▶ **4.3.7 Production and Issue of Passes**
- ▶ **4.3.8 Approval for Passes/Vouchers**

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XXXX 2013

State Transit Authority  
Sydney Buses  
C/- Mary MacKen  
Level 1

219 Cleveland St  
STRAWBERRY HILLS NSW 2012

Contact: Brendon Clendenning  
Phone: 9367 9054

File Ref: XXXX

**NOTICE OF DETERMINATION OF  
DEVELOPMENT APPLICATION NO: D/2012/295  
Issued under the Environmental Planning & Assessment Act 1979  
(Section 81(1)(a))**

**Applicant Name:** State Transit Authority

**Applicant Address:** Sydney Buses  
C/- Mary MacKen  
Level 1  
219 Cleveland St  
STRAWBERRY HILLS NSW 2012

**Land to be Developed:** Lot 2 DP 1159702, Lot 1 DP 1159702, PT LOT  
33 DP 867166 (~~LESSEE BUS DEPOT LEASE  
71589~~), PT LOT 33 DP 867166 (~~LESSEE BUS  
DEPOT LEASE 71589~~)  
230-240 Balmain Road & 27 Derbyshire Road,  
Leichhardt. Also know as Leichhardt Bus  
Depot

**Proposed Development:** Re-configuration of parking to provide for an  
additional 81 buses and 21 car parking spaces at  
the Leichhardt Bus Depot.

**Determination:** Draft conditions provided, without prejudice, in the  
event the application is approved

**Date of Determination:**

**Consent to Operate From:**

**Consent to Lapse On:** XXXX 2017

~~The following conditions have been included in response to development considerations and to ensure a high standard of development having regard to the effect upon the environment.~~

## DEFERRED COMMENCEMENT

1. The following deferred commencement conditions must be complied with to the satisfaction of Council, prior to the issue of an operational Development Consent:

An engineering design of roadworks and associated stormwater drainage in Derbyshire Road, prepared by a qualified practicing Civil Engineer, must be approved by Council prior to the consent becoming operable. The design must be prepared to make provision for the following:

Derbyshire Road, between William Street and the southern end must be reconstructed and widened in accordance with the following criteria:

A minimum 3.0 metre wide travel lane plus 2 parallel parking lanes.

Adequate footpath widths on the western side of Derbyshire Road.

Reconstruction/realignment of the south west corner of the William Street/Derbyshire Road intersection with reduced radius to create a narrowed carriageway in Derbyshire Road.

Provision of a local cycle route (bicycle logos and signposting) in Derbyshire Road extending from the College to William Street and beyond.

Relocation of existing power poles as required.

Reconstruction of concrete footpath for the full length of Derbyshire Road on the western side, adjacent to Pioneers Park.

Note that the design would need to be supported by swept path analysis for manoeuvring between Derbyshire Road and Moore Street West taking into account the extent of the proposed on street parking.

The design must be in accordance with the requirements of Council's Specification for Roadworks.

The design must be accompanied by detailed engineering drawings including relevant long and cross sections and location of utility services.

Relocation/ installation of parking/ traffic signs as required.

Linemarking as required.

The design must be in accordance with the relevant requirements of Austroads and all Australian Standards.

The applicant must consult with Council's Manager — Assets and Manager — Traffic in relation to the design of all works in the public road reserve.

The design will need to be submitted to and approved by Council's Local Traffic Committee prior to Council issuing an approval.

The following conditions of consent including any other conditions that may arise from resolution of matters listed in the above condition, will be included in an operational Development Consent. The operational Development Consent will be issued by Council after the applicant provides sufficient information to satisfy

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### Council in relation to the conditions of the deferred commencement consent.

The Applicant does not accept this condition. As additional spaces are being provided on site, no upgrade to Derbyshire Road is justified.

2. ~~An additional 28 car parking spaces must be provided on site within the Bus Depot. Should the bus storage capacity of 281 be unable to be achieved as a result of these additional on site car parking spaces, the bus storage capacity must be reduced. For every reduction of two (2) buses, one (1) less additional car space is to be provided. A plan identifying the location of the proposed parking arrangement is to be approved by Council prior to the consent becoming operable.~~

As the required spaces are being provided, this condition is no longer required.

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### CONDITIONS OF CONSENT

3. Development must be carried out in accordance with Development Application No. D/2012/295 and the following plans and supplementary documentation, except where amended by the conditions of this consent.

Plan Reference	Drawn By	Dated
Basement Parking Plan	Unknown	<del>n.d.</del> 27 February 2013
Outdoor Parking Plan <del>(Buses)</del>	Unknown	<del>n.d.</del> 27 February 2013
<del>Additional Car Parking and Hardstand Area</del> Outdoor Parking Plan (Cars)	Unknown	<del>3 May 2012</del> 27 February 2013

In the event of any inconsistency between the approved plans and the conditions, the conditions will prevail.

### PRIOR TO THE ACTIVATION OF THE DEVELOPMENT CONSENT

4. ~~All conditions of Development Application No. D/2006/660 must be satisfied prior to the activation of D/2012/295.~~

This condition is unacceptable to the Applicant as it is unnecessary. Council already has powers to require the satisfaction of D/2006/660 to the extent that it is not modified by this DA.

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5. ~~Any public address system on the site must be installed and operated at all times in a manner that complies with the following;~~

~~The Protection of the Environment Operations Act 1997 in particular the "offensive noise" criterion and~~

~~The Office of Environment Heritage Industrial Noise Policy in particular the "intrusive noise" criterion".~~

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The development does not propose any changes to the public address system. Therefore this condition is not relevant. In any event, STA is required by law to abide by noise pollution legislation.

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6. The bicycle storage area must accommodate a minimum of 10 bicycles and be designed in accordance with Australian Standard AS 2890.3:1993 *Parking Facilities – Bicycle parking facilities*. ~~Details are to be provided prior to the activation of the Development Consent.~~

7. A total of two (2) car parking spaces for use by persons with a disability must be provided as part of the total car parking requirements. Consideration must be given to the means of access from the car parking spaces to adjacent buildings, to other areas within the building and to footpath and roads, ~~and must be clearly shown on the plans prior to the activation of the Development Consent.~~

All details must be prepared in accordance with Australian Standard AS/NZS 2890.1:2004 *Parking Facilities – Off street car parking* and the relevant provisions of Australian Standard 1428.1:2001 *Design for Access and Mobility – General requirements for access - New building work* and Australian Standard 1428.4:2002 *Design for Access and Mobility – Tactile indicators*.

8. A Building Code of Australia Assessment Report is to be provided confirming the location of the proposed vehicles and bike storage areas maintain compliance with the following Parts of the BCA.
  - a) Access to the required exits are to be maintained and are not obstructed in accordance with D1.4 and D1.6.
  - b) The number of required exits remains compliant with D1.2.
  - c) Access to services and equipment such as fire hydrants and fire hose reels remain compliant with the requirements of Part E1.
  - d) The proposed location and number of the Disabled parking spaces maintains compliance with the required circulation space and ceiling height requirements of D3.5 and AS2890.6.

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The report must address the above without reducing the number of on-site parking spaces.

9. The design of the vehicular access and off street parking facilities must address the relevant provisions of Australian Standards, including but not limited to AS/NZS 2890.1-2004 *Parking Facilities - Off-Street Car Parking*, AS 2890.2-2002 *Parking Facilities - Off-Street commercial vehicles facilities*, AS/NZS 2890.6-2009 *Off-street parking for people with disabilities* and AS 2890.3-1993 *Parking Facilities - Bicycle parking facilities*. The design must be certified by a suitably qualified Civil Engineer.

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Section 109R requires that crown building works be certified that they comply with "the technical provisions of the State's building laws", which, pursuant clause 227 of the Environmental Planning and Assessment Regulation 2000 includes the Building Code of Australia. Accordingly, these conditions are unnecessary but STA agrees to their inclusion.

10. The applicant must bear the cost of construction of the following works:

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~~Roadworks in accordance with the plans approved by Council under Deferred Commencement Condition No 1.~~

~~Development Consent does NOT give approval to undertake any works on Council property. An application must be made to Council for a Roadworks Permit under Section 138 of the Roads Act 1993 for approval to construct these works.~~

~~The application must be accompanied by the above engineering design and survey plan. The Roadworks Permit will only be issued when the design has been approved by Council. A copy of the Roadworks Permit must be obtained from Council prior to the activation of the Development Consent.~~

~~The applicant must bear the cost of construction of all works, including the cost of any required adjustment or relocation of any public utility service. Where the finished levels of the new works will result in changes to the existing surface levels, the cost of all necessary adjustments or transitions beyond the above scope of works shall be borne by the owner/applicant.~~

~~These works must be constructed in accordance with the conditions of the Roadworks Permit and be completed prior to the activation of the Development Consent.~~

▲ As the road works required by Condition 1 are no longer necessary due to the provision of additional onsite parking, this condition is no longer relevant.

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11. ~~Prior to the activation of the Development consent, a security deposit to the value of \$79,600.00 must be paid to Council to cover the costs associated with the road, footpath and drainage works required by this consent.~~

~~Payment will be accepted in the form of cash, bank cheque, EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee.~~

~~Video inspection must be carried out of completed stormwater drainage works that are to revert to Council and a copy provided to Council to support the certification of the works.~~

~~A request for release of the security may be made to the Council after all construction work has been completed.~~

~~The amount nominated is only current for the financial year in which the consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.~~

As the road works required by Condition 1 are no longer necessary due to the provision of additional onsite parking, this condition is no longer relevant.

▲ In addition, as the Applicant is part of the NSW Government, this condition is inappropriate.

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12. Where any works are proposed in the public road reservation, the following applications must be made to Council, as applicable:

- a) For installation or replacement of private stormwater drainage lines or utility services, including water supply, sewerage, gas, electricity, etc. an application must be made for a *Road Opening Permit*.
- b) For construction/reconstruction of Council infrastructure, including vehicular crossings, footpath, kerb and gutter, stormwater drainage, an application must be made for a *Roadworks Permit*.

Note: Private stormwater drainage is the pipeline(s) that provide the direct connection between the development site and Council's stormwater drainage system, or street kerb and gutter.

As the road works required by Condition 1 are no longer necessary due to the provision of additional onsite parking, this condition is no longer relevant, however, STA does not object to it being included.

~~13. The LA10\* noise level emitted from the premises must not exceed the background noise level in any octave band centre frequency (31.5Hz – 8k Hz inclusive) by more than 5dB between 7:00 am and 12:00 midnight at the boundary of any affected residence.~~

~~The LA10\* noise level emitted from the premises must not exceed the background noise level in any octave band centre frequency (31.5Hz – 8k Hz inclusive) between 12:00 midnight and 7:00am at the boundary of any affected residence.~~

~~Notwithstanding compliance with the above, the noise from the premises must not be audible within any habitable room in any residence between the hours of 12:00 midnight and 7:00am.~~

~~\*For the purposes of this condition, the LA10 can be taken as the average maximum deflection of the noise emission from the licensed premises or restaurant.~~

~~Details of the acoustic measures to be employed to achieve compliance with this condition must be provided prior to the commencement of works.~~

This condition is not acceptable to the STA. The development has been approved under earlier consents and is already subject to other legislation (for example, the EPA's noise pollution policies).

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14. Provision must be maintained for access to and within ~~the building basement carpark on the site~~ for persons with a disability in accordance with the provisions of Australian Standard AS 1428.1:2001 *Design for access and mobility – General requirements for access – new building work*, ~~prior to the activation of the Development Consent.~~

The development only proposes changes to the basement car park. Accordingly, it is appropriate to confine the requirement of the condition to that area.

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15. ~~Prior to the activation of the consent, the Principle Certifying Authority~~A qualified practicing Civil Engineer must ~~ensure~~certify that the vehicle access and off street parking facilities have been constructed in accordance with the development consent and relevant Australian Standards and the car park has been completed, line marked and all signage relating to parking erected prior to the increase of bus parking on site.

~~A copy of that Ccertification must be provided to Council prior to the increase of bus parking on site. by a qualified practicing Civil Engineer that the vehicular access and off street parking facilities have been constructed in accordance with the above must be provided prior to the activation of the Development Consent.~~

16. ~~Prior to the activation of the Development Consent, the Principal Certifying Authority must ensure that all approved road, footpath and/or drainage works, including vehicle crossings, have been completed in the road reserve in accordance with Council Roadworks Permit.~~

~~Works-as-executed plans of the extent of roadworks, including any component of the stormwater drainage system that is to revert to Council, certified by a Registered Surveyor, together with certification by a qualified practicing Civil Engineer to verify that the works have been constructed in accordance with the approved design and relevant Australian Standards, must be provided to Council prior to the issue of an Occupation Certificate.~~

~~Video inspection must be carried out of completed stormwater drainage works that are to revert to Council and a copy provided to Council to support the certification of those works.~~

~~The works-as-executed plan(s) must show the as-built details in comparison to those shown on the plans approved with the Roadworks Permit. All relevant levels and details indicated must be marked in red on a copy of the Council stamped plans.~~

~~Written notification from Council that the works approved under the Roadworks Permit have been completed to its satisfaction and in accordance with the conditions of the Permit, must be provided to the Principal Certifying Authority prior to the activation of the Development Consent.~~

As additional parking is being provided onsite, no road works are required. Accordingly, this condition is not relevant.

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17. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be certified by an appropriately

~~qualified experts submitted to Council for approval~~, which shows that the proposed development complies with this requirement.

18. All works / regulatory signage associated with the proposed development are to be at no cost to the RMS."

- ~~19. The development must be inspected at the following stages by the Principal Certifying Authority during construction:~~

~~a) After Conditions 2-19 of this consent have been satisfied.~~

The Applicant will not accept any conditions as deferred commencement conditions. The Applicant will accept the conditions above as amended.

#### ONGOING CONDITIONS OF CONSENT

20. The maximum number of ~~people employed~~staff on the premises must be in accordance with the following table:

Total Staff	557
Daytime staff	328
Bus drivers	266

21. All vehicles must enter and exit the site in a forward direction.
22. An annual Fire Safety Statement must be given to Council and the New South Wales Fire Brigade commencing within twelve (12) months after the date on which the initial Interim / Final Fire Safety Certificate is issued.
23. All outdoor lighting must not detrimentally impact upon the amenity of other premises and adjacent dwellings and must comply with, where relevant, Australian Standard AS 1158.3:2005 *Lighting for roads and public spaces – Pedestrian Area (Category P) lighting – Performance* and design requirements and Australian Standard AS 4282:1997 *Control of the obtrusive effects of outdoor lighting*.
24. Driveways and parking spaces must not be used for manufacture, storage or display of goods, materials and equipment. The spaces must be available at all times, for all vehicles associated with the development.
25. The parking spaces must be easily accessible and be clearly designated marked and signed.
26. At all times, the loading, car parking spaces, driveways and footpaths must be kept clear of goods and must not be used for storage purposes.
27. All owners, tenants and occupiers of this ~~building-site~~ are not eligible to participate in any existing or proposed Council Resident Parking Schemes unless they are otherwise entitled to participate in the Council's Residential Parking Scheme because they are a resident of the Leichhardt local government area. ~~All occupants and/or employees of this building will be~~

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~~ineligible to obtain Council Resident Parking Scheme parking permits.~~ The owner of the ~~dwelling-site~~ must advise in writing all intending owners, tenants and occupiers of the dwelling, at the time of entering into a purchase / lease / occupancy agreement, of this prohibition.

28. Signs reading "all owners, tenants and occupiers of this ~~building-site~~ are advised that they are not eligible to obtain Resident Parking Scheme parking permits from Council ~~unless they would otherwise be entitled as a resident of the Leichhardt local government area~~", must be located in prominent places such as ~~at display apartments and~~ on directory boards or notice boards, where they can easily be observed and read by people entering the ~~buildingsite~~. The signs must be erected ~~and prior to the activation of the Development Consent~~ and ~~must~~ be maintained in good order at all times.

Conditions 20 to 28 are acceptable to the Applicant, subject to the amendments above.

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## PREScribed CONDITIONS

### A. BASIX Commitments

Under clause 97A(3) of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. The Certifying Authority must ensure that the building plans and specifications submitted by the Applicant, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

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In this condition:

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- a) Relevant BASIX Certificate means:
- (i) a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
- (ii) if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

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This condition is not necessary as the proposed development is not a BASIX affected development and therefore this condition is not a prescribed condition in accordance with clause 97A of the Environmental Planning and Assessment Regulation 2000.

While this condition is not applicable, however, STA does not object to it being included.

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### B. Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

This condition is not applicable given the operation of section 109R of the EP&A Act, however, STA does not object to it being included.

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### C. Home Building Act

- 1) Building work that involves residential building work (within the meaning and exemptions provided in the Home Building Act 1989) must not be carried out unless the Principal Certifying Authority for the development to which the work relates has given Leichhardt Council written notice of the following:
  - a) in the case of work for which a principal contractor is required to be appointed:
    - i) the name and licence number of the principal contractor, and
    - ii) the name of the insurer by which the work is insured under Part 6 of that Act, or
  - b) in the case of work to be done by an owner-builder:
    - i) the name of the owner-builder, and
    - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
- 2) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

This condition is not applicable as the development is not a dwelling, however, STA does not object to it being included.

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### D. Site Sign

- 1) A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
  - a) stating that unauthorised entry to the work site is prohibited;
  - b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and

c) showing the name, address and telephone number of ~~the Principal Certifying Authority~~project manager for the work.

- 2) Any such sign must be maintained while the building work or demolition work is being carried out, but must be removed when the work has been completed.

As the works are Crown building works, the reference to the PCA is not applicable.

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#### **E. Condition relating to shoring and adequacy of adjoining property**

- (1) For the purposes of section 80A (11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense:
- (a) protect and support the adjoining premises from possible damage from the excavation, and
  - (b) where necessary, underpin the adjoining premises to prevent any such damage.
- (2) The condition referred to in subclause (1) does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

#### **NOTES**

1. This Determination Notice operates or becomes effective from the endorsed date of consent.
2. Section 82A of the *Environmental Planning and Assessment Act 1979* provides for an applicant to request Council to review its determination. This does not apply to applications made on behalf of the Crown, designated development, integrated development or a complying development certificate. The request for review must be made within six (6) months of the date of determination or prior to an appeal being heard by the Land and Environment Court. A decision on a review may not be further reviewed under Section 82A.
3. If you are unsatisfied with this determination, Section 97 of the *Environmental Planning and Assessment Act 1979* gives you the right of appeal to the Land and Environment Court within six (6) months of the determination date.
4. Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.
5. Works or activities other than those approved by this Development Consent will require the submission of a new development application or an application to



modify the consent under Section 96 of the *Environmental Planning and Assessment Act 1979*.

6. This decision does not ensure compliance with the *Disability Discrimination Act 1992*. Applicants should investigate their potential for liability under that Act.
7. This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):
  - a) Application for any activity under that Act, including any erection of a hoarding.
  - b) Development Application for demolition if demolition is not approved by this consent.
  - c) An application under the Roads Act 1993 for any footpath / public road occupation. A lease fee is payable for all occupations.

~~8. Prior to the issue of the Construction Certificate, the applicant must make contact with all relevant utility providers (such as Sydney Water, Energy Australia etc) whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained.~~

Given the operation of section 109R and section 81A(6) of the EP&A Act, a construction certificate is not required for Crown building works.

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#### **Have you made a political donation?**

If you (or an associate) have made a political donation or given a gift to a Councillor, political party or candidate at the local government elections during the last two (2) years you may need to include with your application a full disclosure of this matter. For information go to Council's website at [www.leichhardt.nsw.gov.au/Political-Donations.html](http://www.leichhardt.nsw.gov.au/Political-Donations.html). If you have made a reportable donation, failure to provide a completed declaration with your application is an offence under the Environmental Planning and Assessment Act, 1979 for which you may be prosecuted.

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# **ATTACHMENT 10**



Development Application

# Information Evening

July 2012



## Information Evening- Introductions

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**Councillor Rochelle Porteous**

Mayor

**Elizabeth Richardson**

Manager Assessments

**John Stephens**

Manager Traffic

**Brendon Clendenning**

Assessment Officer

**Jason Scoufis**

Traffic Engineer



## Information Evening- Intention

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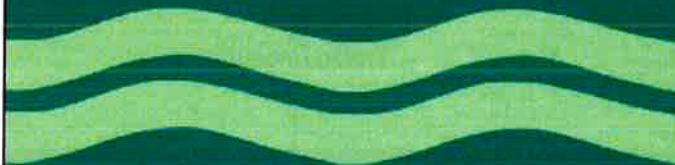
The intention of this Public Meeting is to:

- Provide general information and details of the current Development Application pertaining to the Leichhardt Bus Depot.
- Outline the Assessment Process
- Provide a summary of the proposal
- Advise of the most effective way people can have their say about the Development Application



## Recent Site History: Timeline

July 2012



## Recent Site History

**3 NOVEMBER 2006** – Development Application D/2006/660 lodged for:  
Location and siting of the new Leichhardt Bus Depot and STA Regional Office, use of the Former Tram Shed for STA office use, use of the Former Traffic Office Building for STA office use, use of the Former Cable Store Building for storage purposes and associated works.

The site had an extensive history as a public transport facility and at that stage was operating as a bus depot.

**17 APRIL 2007** – D/2006/660 first considered at Council meeting. Council resolves to approve the proposal in principle subject to additional traffic and parking analysis, which would be considered at a further Council meeting.

**17 JUNE 2007** – After extensive public notification including public and site meetings, DA was considered again at Council meeting following satisfactory additional analysis in relation to traffic and parking. Council resolved to approve the application and forward the conditions of consent to the applicant.



## Recent Site History

**19 JULY 2007** – Determination Notice issued for D/2006/660, following some changes to conditions, primarily to remove the requirement for an Occupation Certificate and a Principal Certifying Authority, as neither is required for Crown Development.

**7 JULY 2008** – Construction commences on works approved within D/2006/660.

**22 SEPTEMBER 2010** – Application D/2010/663 for redevelopment of 29 Derbyshire Road to accommodate new Leichhardt Police Station. Application to be considered by Joint Regional Planning Panel (JRPP) given cost of works (\$12m), however was 'called up' by applicant to Minister for Planning

**7 JUNE 2011** – Minister delegates D/2010/663 (application for police station) to JRPP for determination. Council subsequently recommends refusal of the application.



## Recent Site History

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29 SEPTEMBER 2011 – D/2010/663 withdrawn by applicant.

12 OCTOBER 2011 – Application D/2011/540 lodged by The Sydney Bus and Truck Museum for use of 25 Derbyshire Road as a Public Transport Museum.

12 MARCH 2012– Application D/2011/540 approved by Council.

19 JUNE 2012 – Current Development Application, D/2012/295, lodged for re-configuration of parking to provide additional bus parking, additional car parking and additional staff at the Leichhardt Bus Depot.



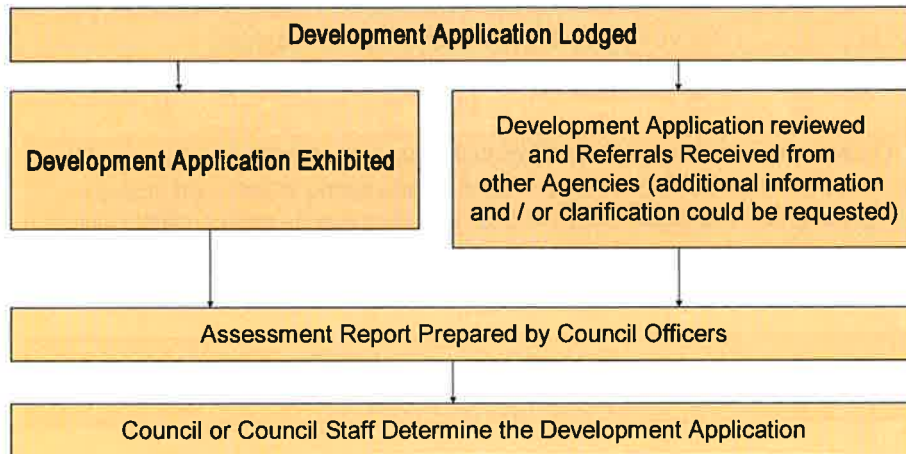
## Development Application Process

July 2012

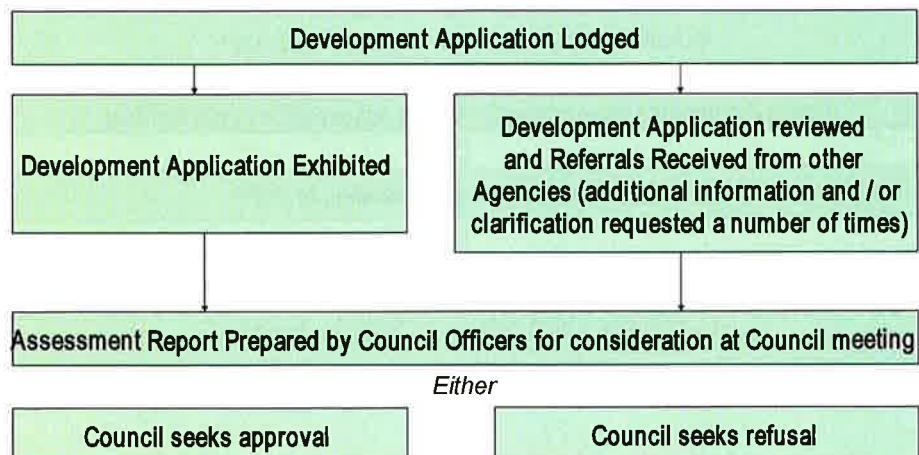




## Traditional – Development Application Process



## Crown Development Application Process: Assessment



## Crown Development Application Process: If Council seeks approval

If Council seeks approval of Crown Development

Council may only impose a condition on its consent only with the approval of the applicant or the Minister. Consultation occurs during assessment process regarding suitable conditions. Further consultation may be required after Council meeting.

Application is approved and relevant stakeholders notified of the outcome.



## Crown Development Application Process: If Council seeks refusal

If Council seeks refusal of Crown Development

Council may only refuse consent with the concurrence of the Minister

Minister may delegate determination to JRPP

If delegated to JRPP, JRPP may only determine the application in accordance with delegation from the Minister



## Crown Development Application Process

- If the application remains undetermined after 70 days from the date of lodgement, being 28 August 2012, the application may be referred by either the applicant or Council to the Joint Regional Planning Panel (JRPP) for determination.
- If the JRPP does not determine the application within 50 days from which it was referred, the application may be referred by either the applicant or the JRPP to the Minister for determination.



## Development Application Facts and Figures

July 2012



## Subject Site



The application is at the Leichhardt Bus Depot, which comprises the following properties:

- 25 Derbyshire Road
- 230 Balmain Road
- 27 Derbyshire Road
- 240 Balmain Road
- 182 Balmain Road
- 29 Derbyshire Road



## Planning Controls

### Zoning

- 5(a) Public Transport Depot under Leichhardt Planning Scheme Ordinance.
- 5(b) Railways under Leichhardt Planning Scheme Ordinance.
- Public Purposes under Leichhardt Local Environmental Plan 2000.



## Planning Controls

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- Heritage: Cable store & Tram sheds listed as heritage items of State significance.
- Assessment undertaken under the Leichhardt Local Environmental Plan 2000 & Leichhardt Development Control Plan 2000, and Leichhardt Planning Scheme Ordinance.



## Facts and Figures – Requirements of D/2006/660

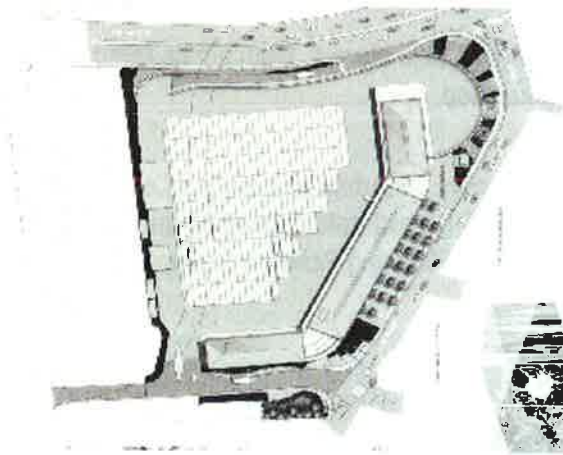
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- Roadworks including:
  - Construction of signalised intersection at Balmain Road and Alfred Street.
  - Shared pedestrian cycleway on western side of Balmain Road.
  - Additional left turn lane from southern side of Balmain Road and City West Link intersection.
  - Additional road works from Charlotte Street to Piper Street.
- No additional buses permitted to access City West Link via William Street and Norton Street during morning peak



## Outdoor Bus Parking Level - Approved

- 200 bus parking spaces.



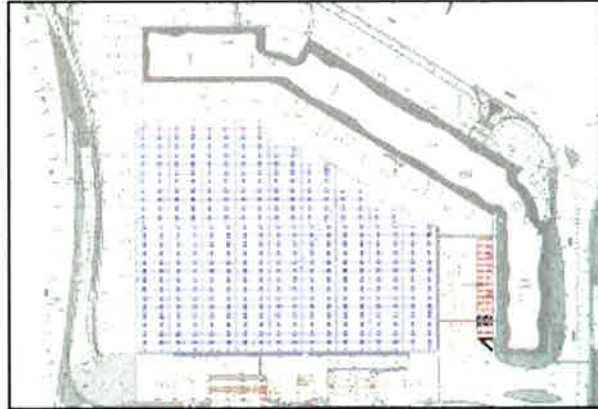
## Aerial Photograph: Outdoor Bus Parking Level





## Outdoor Parking Level - Proposed

MARKED BAYS = 192  
AISLE AREAS = 64  
MAINTENANCE = 25  
TOTAL = 281



### Development Uses

- 81 additional bus parking spaces, with 64 of those to be accommodated in aisle areas, and the remainder in maintenance bays.
- 14 additional car parking spaces to be used by office staff during peak periods where the majority of buses are off-site.



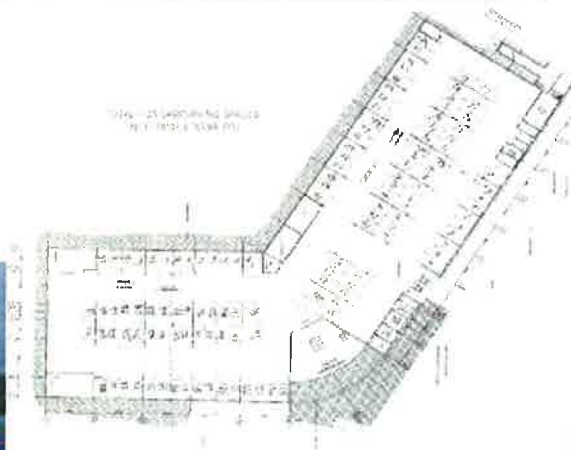
## Outdoor Bus Parking Level - Proposed

- Additional 14 car parking spaces proposed in the aisles surrounding the existing bus parking on first floor parking level.
- These spaces are proposed to be used only after buses vacate the premises in the morning and before they return in the evening (i.e. office hours).
- These spaces are proposed to be for the use of STA fleet cars only.



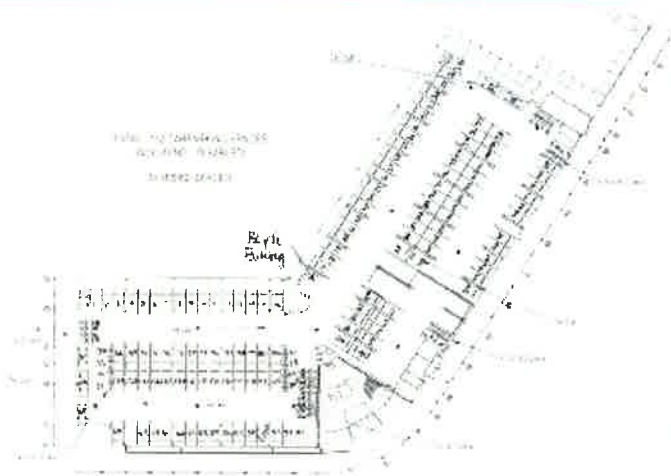
## Basement Bus Parking Level - Existing

- 125 car parking spaces, including 4 disabled parking spaces
- Bicycle storage area



## Basement Parking Level - Proposed

- 132 car parking spaces (an increase of 7 spaces)
- 2 disabled parking spaces (a decrease of 2 spaces)
- 38 motorbike spaces (none currently approved)
- Increased bicycle storage area





## Summary of Proposed Changes

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- Total bus parking capacity proposed to increase from 200 to 281 (an increase of 81).
- Total car parking capacity proposed to increase to from 125 to 146 spaces (132 at basement level and 14 in the outdoor parking area).
- Proposed increased bicycle parking capacity.
- An increase in the number of employees, including an overall increase in daytime staff, and bus drivers.



## Facts and Figures – Employees

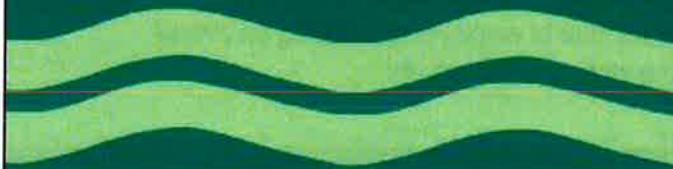
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- Applicant seeking to increase the number of employees such that:
  - Total staff increase from 465 to 557 (an increase of 92)
  - Daytime shift staff to increase from 252 to 328 (an increase of 76)
  - Bus drivers to increase from 190 to 266 (an increase of 76).



# Application Process To Date

July 2012



## Application Process to Date

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### Referrals to Council departments include:

Development  
Engineer

Building Surveyor

Recreation Planning

Traffic Engineer

### Referrals to other government bodies include:

Roads and Maritime Services



## Application Process to Date



- Application currently on notification from:

**12 July 2012 – 10 August 2012**

- Notification Area includes approximately 2200 properties surrounding the subject site.

**Subject site**



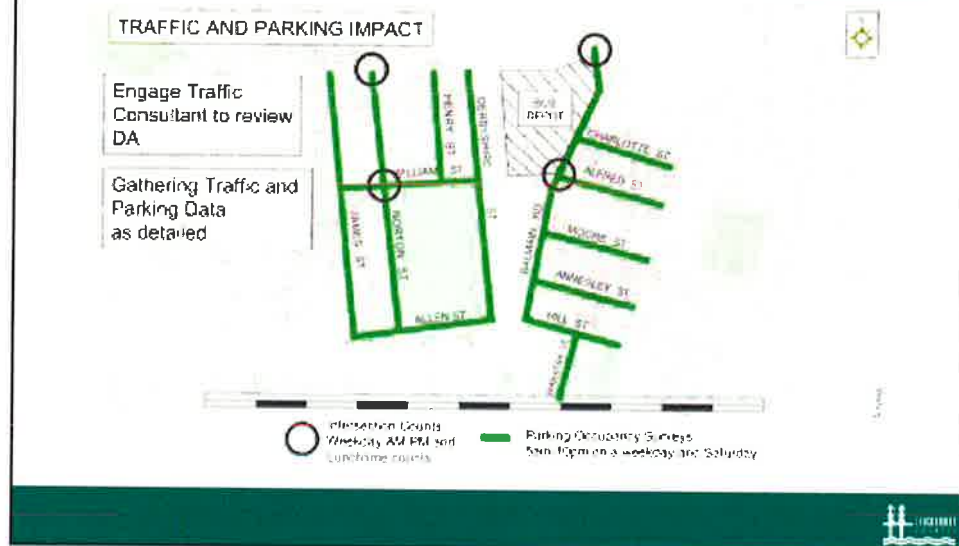
## Application Process to Date

**26 JUNE 2012** - At the Ordinary Council meeting, Council resolves as follows:

- To extend the notification period to 30 days
- To expand the notification area such that it is identical to the DA in 2006 for expansion of the depot
- To hold a public meeting for local residents and businesses on Monday 16<sup>th</sup> July
- To undertake a new parking availability survey in surrounding residential streets to be incorporated into the Council assessment report.



## Traffic & Parking Analysis



## Current Status of Application

- Traffic and Engineering assessment pending the conclusions of analysis conducted by external traffic consultants, GTA
- Application still under consideration from Council's Building Surveying, and Recreation Planning Departments, as well as the Roads and Maritime Services.
- Council to make formal request to the applicant for additional information in the near future.
- Issues under consideration include:
  - Traffic & parking impacts
  - Building Code of Australia issues
- Application is still under assessment and no firm position has been formed.
- Council now calling for community feedback.

# Making a Submission to Council

July 2012



## Advising Council of your concerns

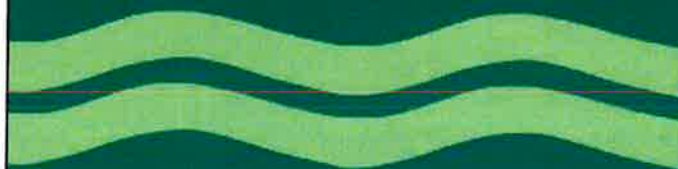
- Submissions must be in writing
- Submissions close **10 August 2012**
- Council cannot take verbal comments into account
- Representations should relate directly to the work proposed and possible impact.

Post in your submission  
Leichhardt Council, PO Box 45, Leichhardt NSW 2040  
Email:  
[leichhardt@lmc.nsw.gov.au](mailto:leichhardt@lmc.nsw.gov.au)



# Application Process Where To From Here

July 2012



## Where to From Here?

- Council will be requesting additional information from the Applicant. Additional information will be available on Council's web page once submitted.
- Council staff to consider submissions received
- Additional information forwarded to referral bodies for comment.
- If application not referred to JRPP earlier, once assessment is complete, a report will be prepared for consideration at a Council Meeting.
- Application may then be approved, or referred to the Minister for determination.



# Questions

Please limit questions to those that would assist you in  
preparing a submission  
or provide you with further clarification

July 2012

