



**Annexure 7**

Traffic and Parking Assessment Report (prepared by Masson Wilson Twiney)



## *Traffic Report*

### **New NSW Police Force Facility - Potts Hill Reservoir Site**

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Prepared for

**Landcom**

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Reviewer: Jason Rudd



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# **1. Introduction**

This traffic report has been prepared on behalf of Landcom to present the findings of traffic and transport investigations undertaken by Masson Wilson Twiney (MWT) for the proposed new NSW Police facility on the Potts Hill Reservoir site.

The site of the proposed new NSW Police facility is part of a larger area of surplus Sydney Water land at Potts Hill for which a Concept Application has been lodged for the redevelopment as employment and residential land uses.

Landcom proposes to construct a new purpose built facility for NSW Police at Potts Hill which will facilitate the relocation of various NSW Police units presently located elsewhere in Sydney to Potts Hill.

The proposed facility would include three separate buildings with office and workshop / warehouse storage areas and associated car parking and loading areas.

The proposed NSW Police site would have vehicle access to both Rookwood Road and Brunker Road via new industrial standard roads to be constructed as part of the broader employment precinct.



## 2. Overview of Concept Application

### 2.1 Description of Concept Plan

Sydney Water Corporation (SWC) is proposing to redevelop 40 hectares of surplus SWC land at Potts Hill for a combination of employment land, residential land and proposed public open space.

The Concept Plan (Appendix A) clearly defines two distinct precincts for potential redevelopment of SWC land on the Potts Hill site, namely:

- Eastern Precinct = Employment Uses
- Western Precinct = Residential Uses and Public Open Space.

The reservoirs and associated activities will be retained as part of the potential redevelopment.

The proposed new NSW Police facility forms part of the proposed eastern employment precinct.

It is proposed that the eastern employment precinct will be utilised by the following entities:

- Sydney Water Corporation;
- NSW Police;
- Energy Australia; and
- Transgrid.

Each of the proposed entities would involve a relocation of existing facilities elsewhere in Sydney to the Eastern Precinct site.

The eastern employment precinct will be serviced by two access roads with formalised intersections created at the following locations:

- Brunker Road (adjacent to Lambert Street); and
- Rookwood Road (north of the greyhound track).

These locations are shown in Concept Plan presented in Appendix A.

As part of the Concept Plan application it was proposed that both the eastern precinct access road intersections would be signalised. It is noted that the detail design and intersection treatments are currently the subject of further discussions between Landcom and the RTA.

## **2.2 Concept Plan Traffic and Transport Assessment**

### **2.2.1 *Eastern Precinct Development Potential***

A detailed traffic and transport assessment has been undertaken as part of the Concept Application for the Potts Hill site.

The concept plan traffic and transport assessment was based on the following employee numbers for the Eastern Employment Precinct:

- Sydney Water Corporation: 450 employees;
- NSW Police: 400 employees
- Energy Australia: 50 employees; and
- Transgrid: No permanent employees on site.

Thus the concept plan assessment has considered the development potential, and thus traffic generation potential, of the proposed new NSW Police facility as part of the broader employment precinct.

The assessment identified transport infrastructure improvements and site access arrangements necessary to facilitate redevelopment of the site.

### **2.2.2 *RTA Consultation – Site Access Arrangements***

As part of the approval process, the Concept Plan was referred to the RTA as the authority responsible for the approval of intersection treatments on Rookwood Road and Brunner Road.

The form of access road intersection treatments at both Rookwood Road and Brunner Road are currently being assessed by the RTA in consultation with Landcom with the view of providing safe and efficient access to and from the site while achieving strategic regional network objectives.

This assessment will determine whether traffic signals or priority signage with turn restrictions are applied to the Eastern Employment Precinct access roads.



### **3. Assessment of Proposed NSW Police Facility**

#### **3.1 Overview of Project Application**

The proposed new NSW Police facility within the Eastern Employment Precinct at Potts Hill will include the following:

- Three new on site buildings providing a total floor area of:
  - Office: 4,085 m2 GFA
  - Workshop: 6,699 m2 GFA
  - Warehouse: 2,975 m2 GFA
- On Site Car Parking: 179 car spaces (including 4 disabled spaces)
- Motorcycle Parking
- Bicycle Parking
- Truck / Trailer loading and manoeuvring areas
- Typical Permanent Staff Numbers = 261 employees
- Staff levels during training periods = approximately 400 employees

It is currently proposed that the workshop / warehouse area will be predominately utilised by the Police Transport Unit which will include maintenance and storage of a variety of Police transport vehicles.

#### **3.2 Traffic Generation Implications**

The traffic generation potential of the proposed new NSW Police facility within the employment precinct as considered by the Concept Plan traffic assessment was based on a total workforce of 400 staff and associated service / delivery vehicle movements.

It was estimated that the proposed new NSW Police facility would generate approximately 160 vehicle movements in the peak hour periods.

The Project Application for the proposed new NSW Police facility is consistent with the Concept Plan land use assumptions, namely the number of employees. The assessment of staff levels during training periods (400 employees) represents the worst case scenario for the site.



Thus with regard to traffic generation and potential implications, the proposed new NSW Police facility development is consistent with the Concept Plan.

Therefore provided the external road network improvements as identified in the Concept Plan traffic report are implemented then traffic generated by the proposed new NSW Police facility development can be adequately accommodated.

The principle road improvement works relate to the provision of employment precinct site access roads to Rookwood Road and Bruncker Road.

### **3.3 Site Access Arrangements**

It is proposed to provide three vehicle accesses to the proposed new NSW Police facility site. One access will be from the new employment precinct road from Rookwood Road and the other two from the new road from Bruncker Road.

Both roads will be constructed to industrial standards and have been designed to accommodate articulated vehicles.

The proposed site access arrangements are consistent with the Concept Plan and are therefore considered to be appropriate for the proposed development and the employment precinct generally.

Each access will be security controlled.

### **3.4 On Site Parking**

The minimum requirements for the provision of on site car parking are set out in Bankstown Development Control Plan 2005 (DCP).

The DCP specifies the following minimum car parking rates:

- Office: 1 / 40m<sup>2</sup> GFA
- Workshop: 1 / 100m<sup>2</sup> GFA
- Warehouse : 1 / 300m<sup>2</sup> GFA

To ensure that sufficient car parking is provided to accommodate potential on site parking demands, the higher parking rate for workshops as specified in DCP 2005 has been applied to the proposed workshop / warehouse floor area.

This is considered to be a conservative approach as a portion of the workshop area is likely to be used for the purpose of warehousing.

Notwithstanding the above, the application of the conservative rates to the proposed development is shown in Table 3.

**Table 3 - On Site Car Parking Requirements**

Use	Area (m2) GFA	DCP Car Parking Rate	DCP Minimum Parking Requirement	Proposed Car Parking Spaces
Office	4,085	1 / 40 m2	102	-
Workshop	6,699	1 / 100 m2	67	-
Warehouse	2,975*	1 / 300 m2	10	
<b>Total</b>	<b>13,759*</b>		<b>179</b>	<b>179</b>

\* Mezzanine storage area of 331 m2 discounted as per DCP 2005 provisions

As shown in Table 3, the provision of 179 on-site car parking spaces would be considered sufficient to accommodate on site parking demands as per the objectives of DCP 2005.

The provision of 179 car parking spaces also reflects the known operational car parking requirements of the NSW Police facility. The proposed on site parking provision includes the provision of parking to accommodate the various training activities proposed to be undertaken on the site.

The layout of the car parking spaces has been designed to comply with the minimum dimensional requirements specified within Council's DCP and where relevant Australian Standards (AS2890.1/2/3).

On site car parking will be provided in a number of designated car parking areas and would include:

- Office car parking (staff);
- Warehouse car parking (staff); and
- Visitor Parking (close proximity to the vehicle entrance).

In summary the proposed parking provisions are considered to be satisfactory and will adequately accommodate on site parking demands generated by the proposed development.

### 3.5 Service Vehicle Arrangements

The provision and design of the service vehicle areas including the loading bays, manoeuvring areas and hard stand areas have been carefully planned for based on known operational requirements of the proposed uses of the new NSW Police facility.

As such the proposed service vehicle arrangements represent the site specific design requirements necessary to accommodate the proposed site use.

It is proposed that the largest vehicle to access the site will be a 19.0 metre semi trailer. The internal road layout and relevant loading dock areas have been designed to accommodate the turning path requirements of a 19.0 metre semi trailer.

Thus it is concluded that the proposed service vehicle arrangements are satisfactory for the proposed site uses.

### **3.6 Public Transport Accessibility**

Bus services currently travel along Rookwood Road and Brunner Road. These services provide access to the Bankstown town centre and railway station.

Increased employment and residential populations within the catchment of the existing services will assist in maintaining their viability and increase demand for additional services.

### **3.7 Construction Traffic Impacts**

Details of the construction methodology are yet to be determined. Construction Traffic Management Plans will be prepared for each stage of construction activity on the proposed development site.

Such plans will need to consider traffic generation, site access arrangements and implications on the operation and safety of the surrounding road network.



## 4. Conclusions

This assessment has been undertaken to consider the traffic and parking implications of the proposed new NSW Police facility within the employment precinct of the to be redevelopment Potts Hill Reservoirs site.

A detailed traffic and transport assessment has been undertaken for the Concept Plan development of surplus Sydney Water land at the Potts Hill reservoir site. This assessment included as part of the concept plan, the operation of the proposed new NSW Police facility within the employment precinct of the Potts Hill site.

The proposed Police facility is consistent with the Concept Plan land use assumptions with regard to:

- Traffic generation potential;
- Parking provisions; and
- Site vehicle access arrangements.

The Concept Plan identified the road infrastructure requirements necessary to accommodate redevelopment of the employment precinct which included the construction of:

- New access road and intersection at Rookwood Road; and
- New access road and intersection at Brunner Road.

These and other works will be provided as part of the package of infrastructure works associated with the Concept Plan.

As the proposed new NSW Police facility is consistent with the land use (traffic generation) assumptions of the Concept Plan, no additional works beyond those identified as part of the Concept Plan traffic and transport assessment are required to satisfactorily accommodate the proposed development.

The proposed on site parking and service vehicle arrangements have been assessed and determined to comply with the relevant DCP and AS2890 requirements. Notwithstanding, the above, the proposed car parking and service vehicle arrangements are considered to be appropriate to accommodate the operational demands of the proposed new NSW Police facility.



## Appendix A - Concept Plan

POTTS HILL REVISED LAND USE CONCEPT (BRUNKER ROAD SITE EMPLOYMENT) – 20 May 2008

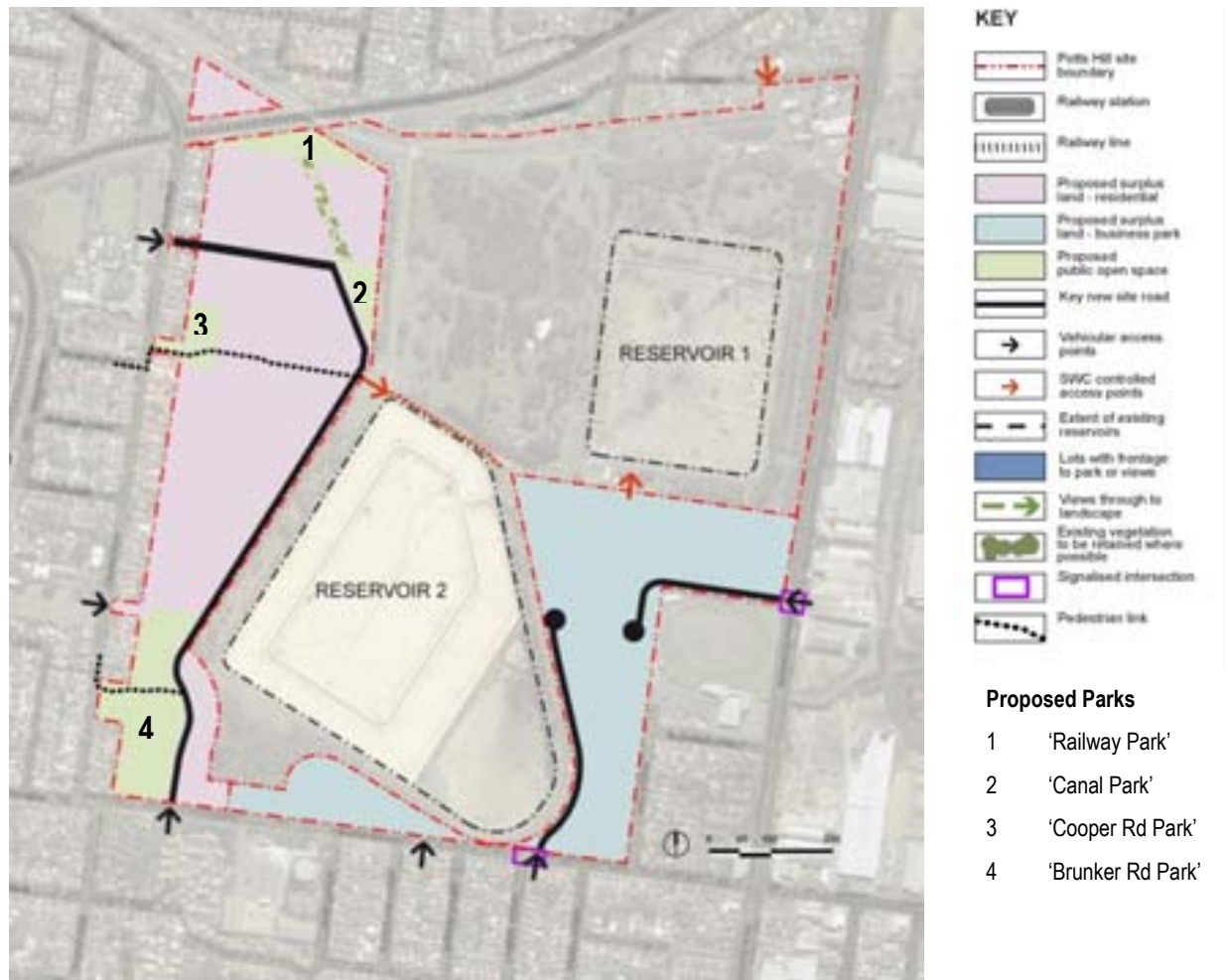


Figure 1 – Concept layout for the redevelopment land