

Planning Proposal
For Residential Zoning

**67-73 Lords Road,
Leichhardt**

TRAFFIC AND PARKING ASSESSMENT REPORT

15 May 2014

Ref 13500

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants 

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Executive Summary

This report has been prepared to accompany a Planning Proposal for a residential development with a child care centre to be located at 67-73 Lords Road, Leichhardt.

The Planning Proposal seeks to rezone the land from industrial to residential zoning. An indicative Masterplan is attached which provides a concept for the type of dwellings proposed and its density.

The indicative Masterplan envisages the demolition of the existing industrial buildings on the site to facilitate the construction of a new residential development with a childcare centre. Car parking is to be provided at various locations throughout the site, including basement car parking area, in accordance with Council's requirements.

A key feature of the proposal is the *transit* oriented nature of the site. The subject site is located approximately 350m walking distance from both the Marion Street and Taverners Hill *light rail* stations via a shared pedestrian/bicycle pathway which is located between the *light rail* corridor and Hawthorne Canal.

The *car-free* pathway also provides direct access to several bus routes which traverse Marion Street and Parramatta Road in the vicinity of the *light rail* stations, as well as forming part of Council's extensive on and off-road bicycle network.

In addition, the Planning Proposal makes provision for a *through-site pedestrian link* which could potentially reduce the walking distance to the Marion Street *light rail* station to approximately 150m, should pedestrian access through the adjacent Lambert Park eventuates.

The subject site is therefore ideally located to facilitate reduced private car usage and ownership, and to encourage increased use of public transport and alternate forms of transport such as walking and cycling.

Based on the traffic generation rates nominated in the RMS Guidelines, the proposed development is expected to result in increased traffic flows of approximately 100 vehicles per hour (vph) during peak periods when compared with the existing peak hour traffic flows currently generated by the existing industrial uses of the site.

However, the *actual* increase in traffic flows is expected to be somewhat less than is suggested by the traffic generation rates nominated in the RMS *Guidelines*, given the excellent accessibility of the site by public transport, walking or cycling.

It should also be noted that approximately half of the projected increase in traffic flows is expected to be generated by the proposed child care centre which we are advised is provided because the site is located in a "high needs area" with respect to childcare.

It is pertinent to note in this regard that:

- the peak hour traffic generated by the residential component of the development proposal will *not* coincide with school peak periods generated by the nearby Kegworth Public School
- it is likely that some of the children attending the proposed child care centre will have siblings at the nearby Kegworth Public School, thereby *reducing* the traffic generation potential of the proposal by enabling parents/carers to drop-off children at *both* locations (on a single vehicle trips), and

- if the child care centre component of the Indicative Masterplan was deleted, the traffic generation potential of the residential component would be similar to the traffic generation potential of the existing industrial uses.

An analysis of the operating performance of nearby intersections using the SIDRA capacity analysis program has found that these intersections would continue to operate at current *Levels of Service*, with increases in total average vehicle delays expected to be in the order of 1-2 seconds per vehicle under the projected additional traffic demands.

The capacity analysis component of the proposed development will not have any unacceptable traffic implications in terms of road network capacity, and that no road improvements or intersection upgrades would be required as a consequence of the development proposal.

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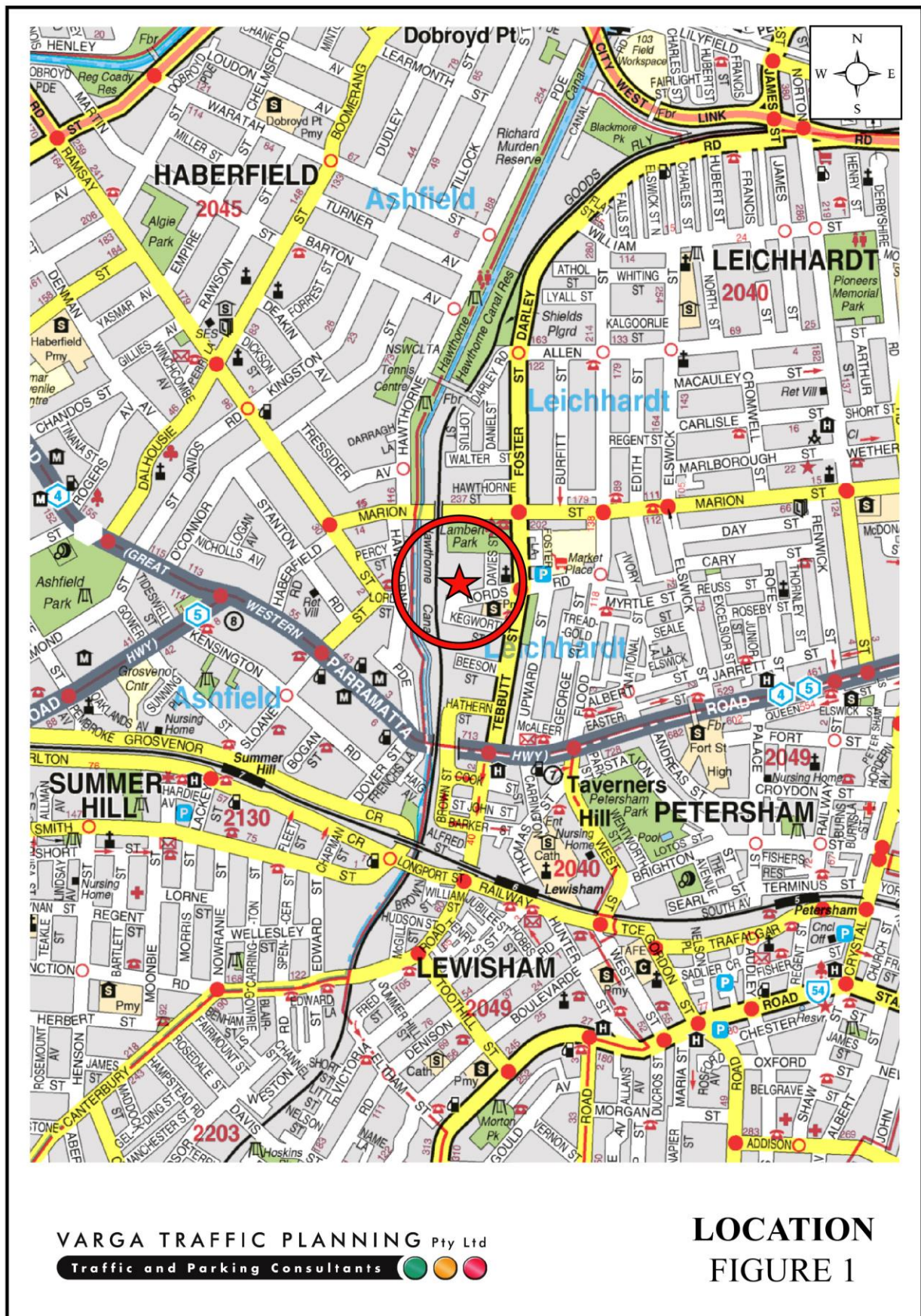
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1. INTRODUCTION

The purpose of this report is to assess the traffic and parking implications a Planning Proposal for a residential development with a child care centre to be located at 67-73 Lords Road, Leichhardt (Figures 1 & 2). To that end this report:

- describes the site and provides details of the indicative Masterplan
- reviews the road network in the vicinity of the site, and the traffic conditions on that road network
- estimates the traffic generation potential of the indicative Masterplan, and assigns that traffic generation to the road network serving the site
- assesses the traffic implications of the indicative Masterplan in terms of road network capacity
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located on the northern side of Lords Road, at the western end near Kegworth Street. The site has a street frontage approximately 93m in length to Lords Road and occupies an area of approximately 10,610m².

The subject site is currently occupied by a number of two-storey industrial/warehouse buildings. The cumulative floor area of the existing industrial buildings is approximately 10,300m² and the site has an allowable FSR of 1:1.

Off-street parking for the entire site is currently provided for 117 cars in two separate car parking areas (east and west). Vehicular access to the site is currently provided via two separate two-way driveways in Lords Road which provide access to the two separate car parking areas.

Loading/servicing for the existing industrial development is currently undertaken by a variety of commercial vehicles up to and including 8.8m long medium rigid trucks. Vehicular access to the existing loading areas is provided via the abovementioned site access driveways in Lords Road.

Indicative Masterplan

The indicative Masterplan, attached to the Planning Proposal, envisages the demolition of the existing industrial buildings on the site to facilitate the construction of a new residential apartment development comprising four buildings that range in height from three storeys to eight storeys. Redevelopment is subject to a future development application.

The indicative Masterplan has identified a potential dwelling density in the order of 315 residential units as follows:

Studio apartments:	68
1 bedroom apartments:	110
2 bedroom apartments:	115
3/4 bedroom apartments:	22
TOTAL APARTMENTS:	315

The indicative Masterplan also envisages a childcare centre facility on the site which could accommodate in the order of 60 children and 10 staff. The floor area of the childcare centre would be approximately 450m².

Off-street car parking is to be provided in a basement car parking area, with vehicular access to be provided via a driveway in Lords Road.

It is also envisaged that an internal at-grade one-way loop road could be provided within the site between Lords Road and Davies Lane. The internal loop road will be similar to a 10 km/h shared zone with a limited number of visitor parking spaces, and could accommodate the drop-off/pick-up needs of residents as well as short-term visits/deliveries garbage collection services.

The Planning Proposal also makes provision for a realignment of the western-end of Lords Road where it intersects with Kegworth Street. With the proposed change of land use heavy vehicles will no longer be required to access the subject site, thus providing the opportunity to reduce the road pavement width in the vicinity of the site to 6.5m.

The redundant road space is proposed to be converted to a landscaped public space which could accommodate a pedestrian path, an off-road bicycle path, additional planting and an angle parking area which could be used for short-term visits such as dropping-off and picking-up children at the proposed childcare centre.

Plans illustrating the indicative Masterplan, attached to the Planning Proposal, have been prepared by *Eeles Trelease Architects Pty Ltd* and *Botanica* are reproduced in the following pages.





Amendments:	18.02.14
A Issue for Council	Date:
Nº Amendments:	

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TITLE:
**CONCEPT SKETCH
VOLUNTARY PLANNING AGREEMENT
67-73 LORDS ROAD
LEICHHARDT**

SCALE: 1:200@A1 DATE: FEB 2014

JOB N°: 13113 DWG. N°: LP.01/A

SHEET 1 of 1



01 LANDSCAPE PLAN
1:200

3. TRANSPORT AND ACCESSIBILITY

Bus Services

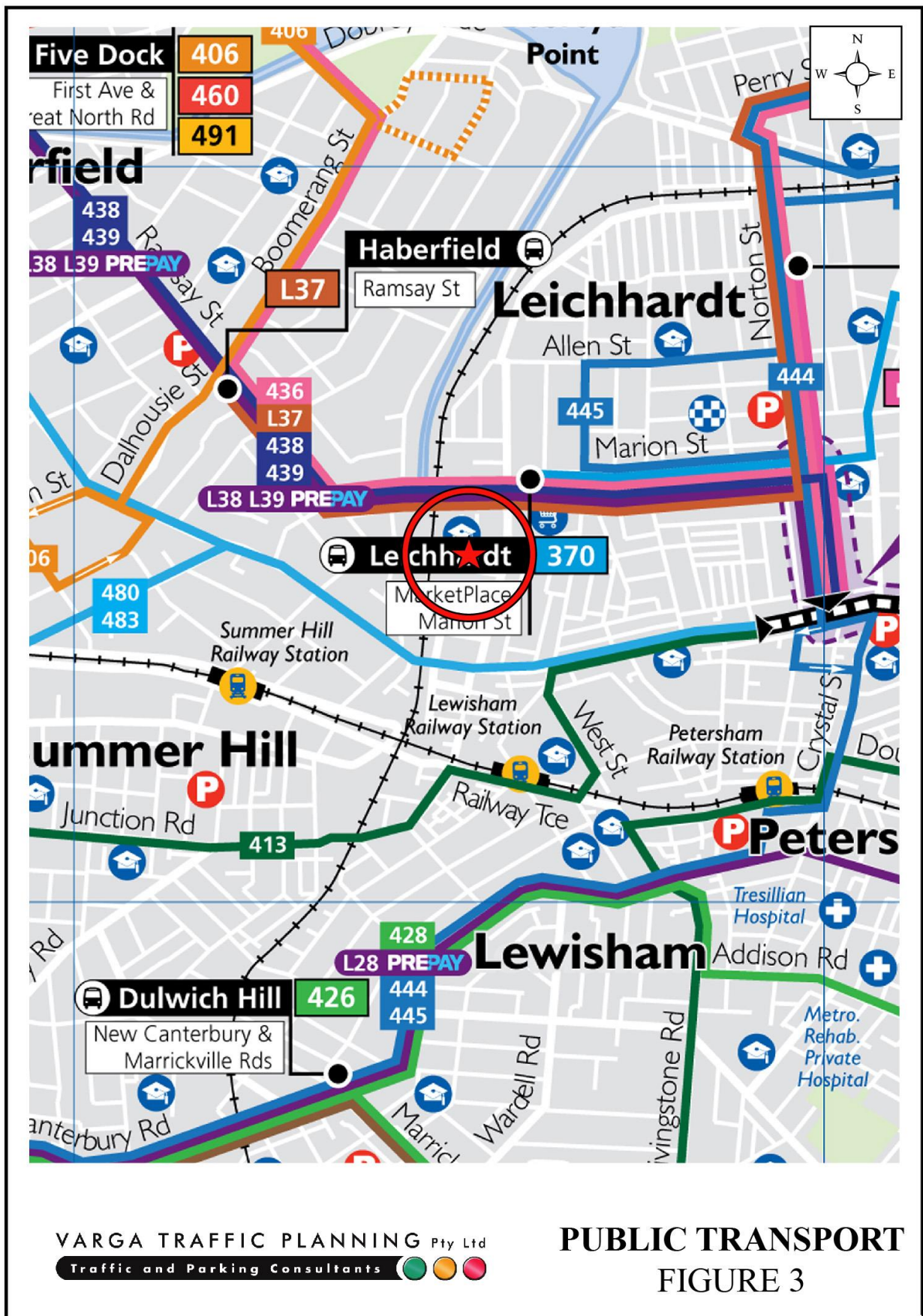
The existing public transport bus services available to the site are illustrated on Figure 3. There are currently six bus routes travelling along Marion Street which is approximately 350m walking distance north of the site. A further two bus routes provide regular services along Parramatta Road which is located approximately 350m walking distance south of the site. A bus route/service is also available from Leichhardt Marketplace which is approximately 300m walking distance north-east of the site.

There are more than 350 bus services available in the vicinity of the site on weekdays, decreasing to 220 bus services per day on Saturdays and 150 services on Sunday and public holidays, as set out below:

Bus Routes and Frequencies							
Route No.	Route	Weekdays		Saturday		Sunday	
		IN	OUT	IN	OUT	IN	OUT
370	Leichhardt to Coogee	59	56	28	28	28	28
436	Chiswick to Circular Quay	43	40	35	34	24	25
L37	Haberfield to the City	5	4	-	-	-	-
438	Abbotsford to Circular Quay	73	80	62	62	44	46
L38	Abbotsford to Circular Quay	16	12	-	-	-	-
439	Mortlake to Circular Quay	24	23	22	24	10	12
L39	Mortlake to Circular Quay	5	8	-	-	-	-
461	Burwood to City	67	63	35	36	29	29
480	Strathfield to City	30	32	12	17	-	-
483	Strathfield to City	38	37	29	30	20	20
TOTAL		360	355	223	231	155	160

Light Rail Services

As noted in the foregoing, extension of the Central-Lilyfield light railway to Dulwich Hill Station has recently been completed. New *light rail* stations have been constructed at Marion Street and at Taverners Hill, both approximately 350m walking distance from the site via a shared pedestrian/cycle path which extends from Parramatta Road to Marion Street along the western side of the *light rail* line.



The potential exists to reduce the walking distance to the Marion Street *light rail* station to approximately 150m via a through-site pedestrian link, should access through the adjacent Lambert Park eventuate.

The new *light rail* link provides 3 to 5 services per hour in each direction during commuter peak periods. A plan illustrating the route of the *light rail* link is reproduced in the following pages.

Accordingly, it is clear that the site is well served by public transport, with several bus and rail options available which have further enhanced with the recent completion of the *light rail* link.

Suburban Rail Services

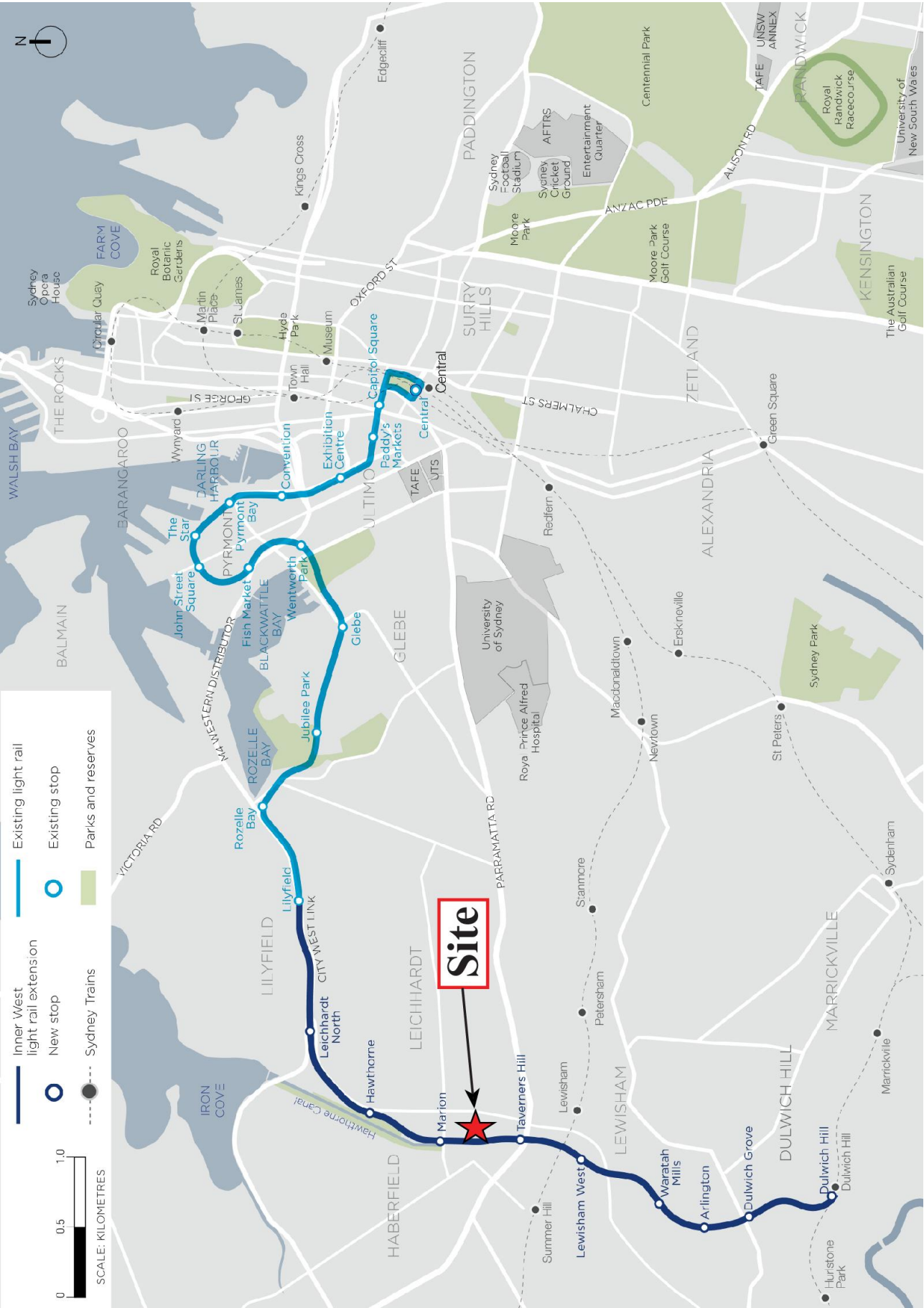
Lewisham Railway Station is located approximately 1 km walking distance to the south of the site, along Tebbutt Street and Old Canterbury Road.

Bicycle Network

There are a number of existing bicycle routes in the vicinity of the site, including the following:

- a north-south cycle route along Tebbutt Street/Flood Street
- a north-south cycle route along Flood Street
- an east-west cycle route along Marion Street, and
- an east-west cycle route along Alan Street.

In addition, a new cycle route has recently been implemented along Lords Road between Flood Street and Hawthorn Parade, via the existing pedestrian underpass which is located adjacent to the site.



The existing cycle routes as detailed above provide a “*safe route*” for commuters cycling to the City via off-road paths. A proposal for future expansion of the bicycle route network within the Leichhardt LGA via the former goods rail corridor will further improve the accessibility of the site by bicycles.

A copy of bicycle routes in the Leichhardt LGA is reproduced in the following pages.

Travel Plan

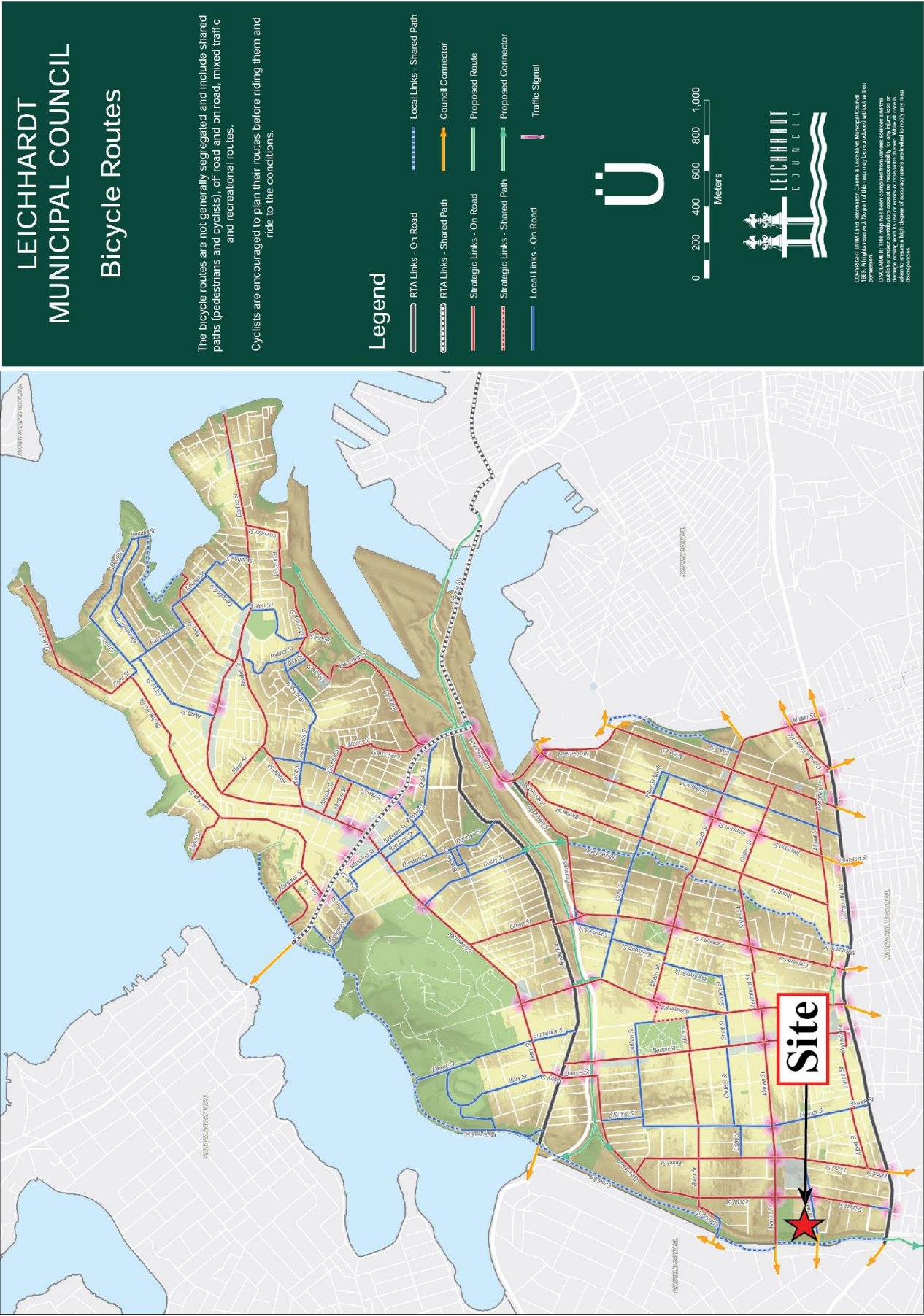
Council’s *Development Control Plan 2013* requires that a Travel Plan must be prepared for all new residential developments comprising more than 50 units. A Travel Plan is a package of actions designed to encourage safe, healthy and sustainable travel options. The objectives of a Travel Plan are to remove barriers to active travel for all users of developments, and to maximise the number of people who walk, cycle or take public transport to and from the development.

In this instance, it is clear that the site is ideally located to facilitate reduced private car usage and to encourage alternate forms of transport such as walking, cycling and public transport.

A key feature of the Travel Plan will be a *Transport Access Guide* plan detailing the location of all public transport services as well as key facilities such as shops, banks, post office etc. which are located within walking distance of the site. In this regard it is noted that the Marion Street and Taverners Hill *light rail* stations are located approximately 350m walking distance to the north of the site. In addition, it is also noted that the Leichhardt Market Place shopping centre is located approximately 300m to the east of the site along Lords Road. Leichhardt Market Place shopping centre offers a wide variety of shops and services and is readily accessible by walking for the prospective future residents of the site.

A Travel Plan will be prepared at DA stage setting out the goals and incentives for achieving sustainable travel behaviour. The Travel Plan will also recommend the establishment of a Travel Plan coordinator to be nominated by the Owners Corporation who will have responsibility for the ongoing monitoring and development of the Travel Plan. Key tasks of the Travel Plan coordinator will include:

- undertake regular surveys to identify the travel modes of building occupants
- maintain an update of the information provided in the Transport Access Guide, and
- set new travel mode targets on an ongoing basis in consultation with the Owners Corporation.



4. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 4.

Parramatta Road is classified by the RMS as a *State Road* and provides the key east-west road link in the area, linking Parramatta to the City. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a centre median island. Clearway restrictions apply during commuter peak periods.

Tebbutt Street / Foster Street / Darley Road are also classified by the RMS as *State Roads* and provide the key north-south road link in the area, linking Parramatta Road to the City West Link. It typically carries one traffic lane in each direction in the vicinity of the site with kerbside parking generally permitted.

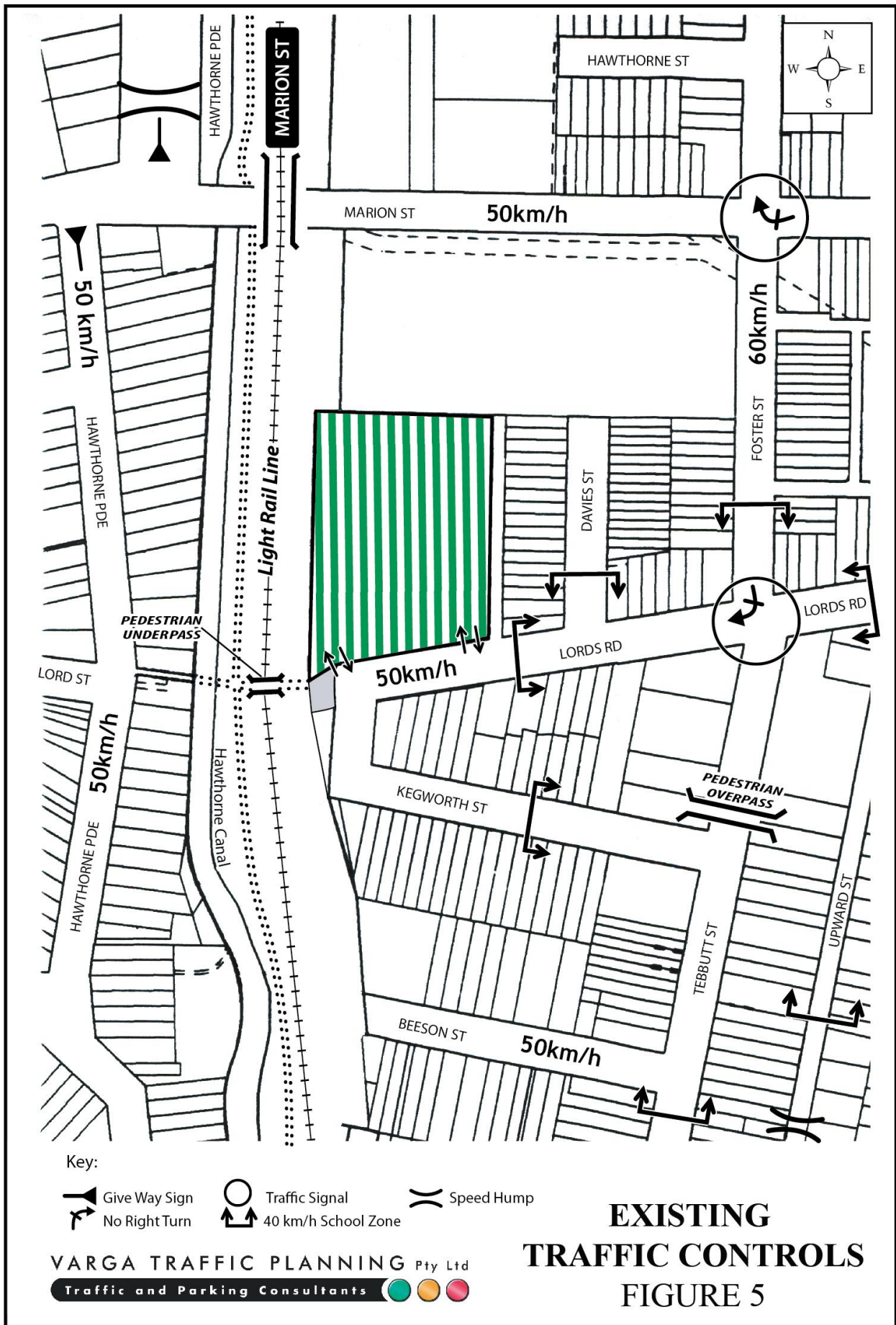
Lords Road is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted on both sides of the road.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 5. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Tebbutt Street and Foster Street
- a 50 km/h SPEED LIMIT which applies to Lords Road and all other local roads in the area
- TRAFFIC SIGNALS in Tebbutt Street / Foster Street where it intersects with Lords Road





- a NO RIGHT-TURN southbound restriction in Foster Street onto Lords Road.

Existing Traffic Conditions

An indication of the existing traffic conditions on the road network in the vicinity of the site is provided by reference to the RMS's most recently available *Annual Average Daily Traffic* data. The relevant count stations nearest to the subject site are summarised below:

Roads & Maritime Services of NSW					
Annual Average Daily Traffic Volumes					
Station No.	Location	1996	1999	2002	2005
00.364	Foster Street & Marion Street (TCS)	30,897	32,559	31,720	-
20058	Foster Street (south of Allen Street)	10,875	11,721	13,194	15,456

A more detailed indication of the existing traffic conditions on the road network in the vicinity of the site is provided by peak period traffic surveys undertaken as part of this traffic study. The traffic surveys were undertaken at the Foster Street/Tebbutt Street/Lords Road intersection as well as the Tebbutt Street/Kegworth Street intersection. The results of the traffic surveys are reproduced in full in Appendix A and reveal that:

- two-way traffic flows in Foster Street are typically in the order of 1,300-1,500 vehicles per hour (vph) during peak periods
- two-way traffic flows in Tebbutt Street are typically in the order of 1,500-1,600 vph during peak periods
- two-way traffic flows in Lords Road (west) are significantly lower, typically in the order of 60-110 vph during peak periods
- two-way traffic flows in Kegworth Street are also significantly lower, typically in the order of 40-70 vph during peak periods.

The traffic surveys were also used to identify the level of traffic activity generated by the existing uses of the site. Those surveys revealed that the site currently generated in the order

of 31 vehicles per hour during the AM peak period and approximately 84 vehicles per hour during the PM peak period.

Projected Traffic Generation

An indication of the traffic generation potential of the Planning Proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)*.

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the development proposal:

Childcare Centres

0.8 peak hour vehicle trips per child

High Density Residential Flat Buildings in Sub-Regional Centres

0.29 peak hour vehicle trips per dwelling

The RMS *Guidelines* also make the following observation in respect of high density residential flat buildings:

Definition

A high density residential flat building refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. *High density residential flat buildings* are usually more than 5 levels, have basement level carparking and are located in close proximity to public transport services. The building may contain a component of commercial use.

Factors

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pick-up/set-down activities.

The RMS traffic generation rates for residential flat buildings have recently been updated with new surveys conducted by the RMS in 2012. The new traffic generation rates have been published by the RMS in its technical direction *TDT 2013/04A Guide to Traffic Generating Developments – Updated Traffic Survey (August 2013)* as follows:

Weekday Rates	Sydney Average	Sydney Range
AM peak (1 hour) vehicle trips per unit	0.19	0.07-0.32
PM peak (1 hour) vehicle trips per unit	0.15	0.06-0.41

For the purposes of this assessment, the maximum traffic generation rates of 0.32 vph /unit and 0.41 vph/unit has been adopted for the AM and PM peak periods respectively.

Application of the above traffic generation rates to the residential and childcare centre components outlined in the development proposal yields a traffic generation potential of approximately 150-180 vehicles per hour during commuter peak periods as set out below:

Projected Future Traffic Generation		
	AM Peak	PM Peak
Residential Apartments (315 Apartments):	101 vehicles per hour	129 vehicles per hour
Childcare Centre (60 Children):	48 vehicles per hour	48 vehicles per hour
TOTAL TRAFFIC GENERATION POTENTIAL	149 vehicles per hour	177 vehicles per hour

That projected future traffic generation potential should however, be offset or *discounted* by the traffic generation potential and the existing uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the development proposal.

The RMS *Guidelines* nominates the following traffic generation rate which is applicable to the existing development on the site:

Industrial

1.0 peak hour vehicle trips per 100m²

Application of the “industrial” traffic generation rate nominated in the RMS *Guidelines* to the existing industrial buildings on the site (~10,300m²) yields a traffic generation potential of approximately 103 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in an *increase* in the traffic generation “potential” the site of approximately 50 to 70 vph when assessed in accordance with the traffic generation rates nominated in the RMS *Guidelines*, as set out below:

**Projected Nett Increase in Peak Hour Traffic Generation Potential of the Site
As a Consequence of the Development Proposal**

	AM Peak	PM Peak
Projected Future Traffic Generation Potential:	149 vehicles per hour	177 vehicles per hour
Less Existing Traffic Generation Potential	-103 vehicles per hour	-103 vehicles per hour
NETT INCREASE IN TRAFFIC GENERATION POTENTIAL OF THE SITE:	46 vehicles per hour	74 vehicles per hour

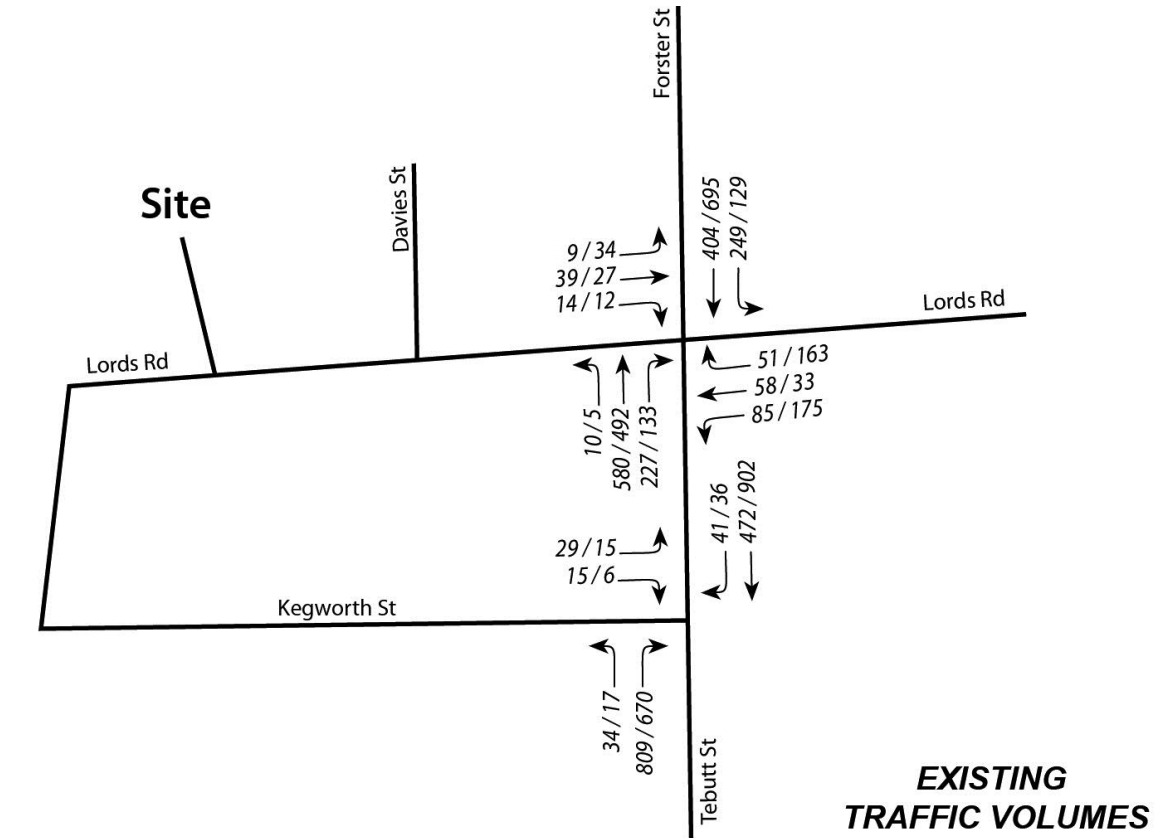
It is pertinent to note however, that:

- the peak hour traffic generated by the residential component of the development proposal will *not* coincide with school peak periods generated by the nearby Kegworth Public School
- it is likely that some of the children attending the proposed child care centre will have siblings at the nearby Kegworth Public School, thereby *reducing* the traffic generation potential of the proposal by enabling parents/carers to drop-off children at *both* locations (on a single vehicle trips), and
- if the child care centre component of the Indicative Masterplan was deleted, the traffic generation potential of the residential component would be similar to the traffic generation potential of the existing industrial uses.

Notwithstanding, it is noted that the site is *underutilised* at present, and currently generates 31 vph during the AM peak period and 84 vph during the PM peak period such that the practical increase in peak hour traffic flows is in the order of 100 vph.

However, in order to provide a more *rigorous* traffic assessment, it has been assumed that *all* of the projected future traffic flows of 149 & 177 vph will be new or *additional* to the existing traffic flows currently using the adjacent road network, as illustrated on Figure 6.

That projected increase in traffic activity as a consequence of the development proposal will not have any unacceptable traffic implications in terms of road network capacity, as is demonstrated by the following section of this report.



LEGEND: AM/PM Vehicles Per Hour
 AM Peak Hour: 7:30-8:30am
 PM Peak Hour: 4:30-5:30pm

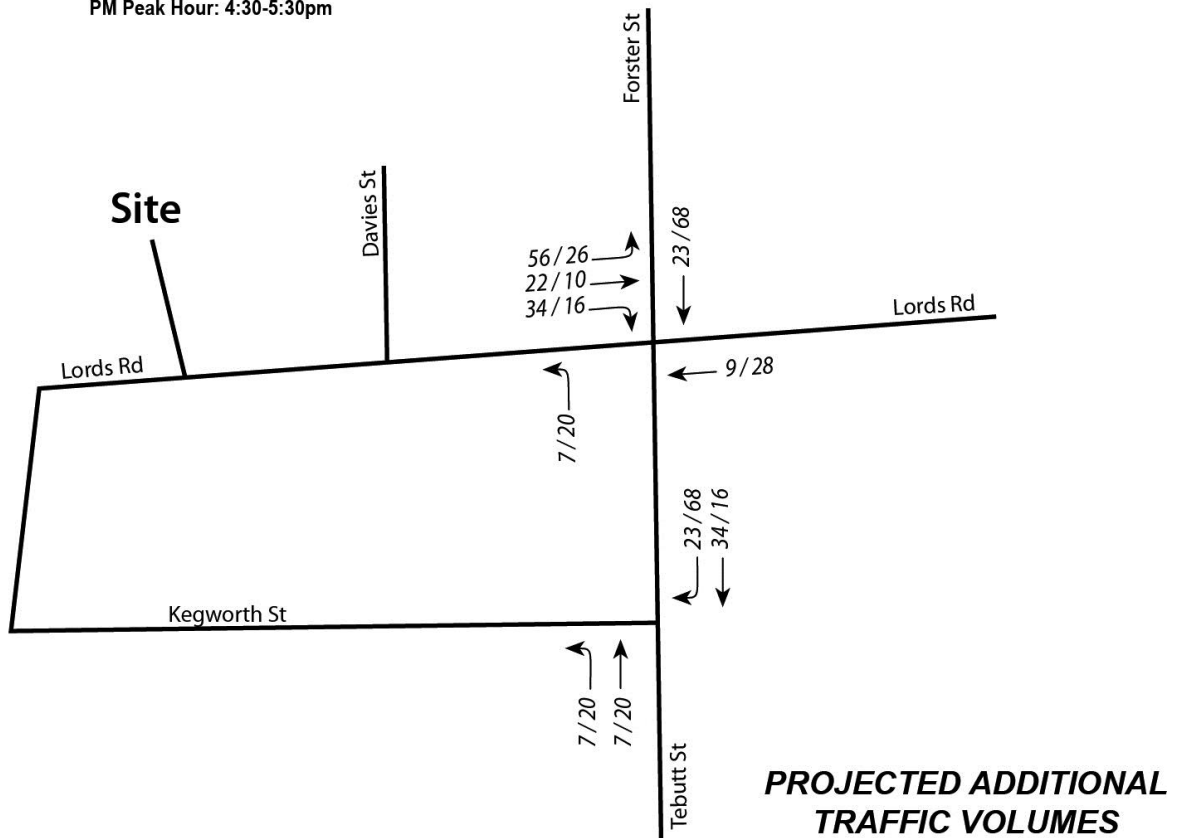


FIGURE 6

Traffic Implications - Road Network Capacity

The traffic implications of development proposals primarily concern the effects that any *additional* traffic flows may have on the operational performance of the nearby road network. Those effects can be assessed using the SIDRA program which is widely used by the RMS and many LGA's for this purpose. Criteria for evaluating the results of SIDRA analysis are reproduced in the following pages, and the detailed results are reproduced in Appendix B.

For comparison purposes, this assessment also provides an analysis of an industrial development scenario whereby the existing industrial buildings are *fully utilised*, thus generating traffic flows of 103 vph which are new or *additional* to the existing traffic flows currently using the adjacent road network.

All of the assessments include the projected additional traffic flows expected to be generated by the nearby *Kolotex and Labelcraft Developments*.

The results of the SIDRA analysis of the Foster Street/Tebbutt Street/Lords Road intersection are summarised on Table 3.1 below, revealing that:

- the Foster Street/Tebbutt Street/Lords Road intersection currently operates at *Level of Service "B"* under the existing traffic demands with total average vehicle delays in the order of 24 seconds/vehicle
- if the existing industrial buildings on the site were fully utilised, the intersection would continue to operate at *Level of Service "B"*, with increases in total average vehicle delays in the order of 1 second per vehicle
- under the projected future traffic demands expected to be generated by the development proposal, the Foster Street/Tebbutt Street/Lords Road intersection will continue to operate at *Level of Service "B"* during peak periods, also with increases in average vehicle delays in the order of 1 second/vehicle.

The results of the SIDRA analysis of the Tebbutt Street/Kegworth Street intersection are summarised on Table 3.2 below, revealing that:

- the Tebbutt Street/Kegworth Street intersection currently operates at *Level of Service “A”* under the existing traffic demands with total average vehicle delays in the order of 4-5 seconds/vehicle
- under the projected future traffic demands expected to be generated by the development proposal, the Tebbutt Street/Kegworth Street intersection will continue to operate at *Level of Service “A”*, with increases in average vehicle delays in the order of 1-2 seconds/vehicle.

In the circumstances, it is clear that the proposed development will not have any unacceptable traffic implications in terms of road network capacity, and that no road improvements or intersection upgrades would be required as a consequence of the development proposal.

**TABLE 3.1 - RESULTS OF SIDRA ANALYSIS OF
FOSTER STREET / TEBBUTT STREET / LORDS ROAD**

Key Indicators	Existing Traffic Demand		Fully Utilised Industrial Uses		Projected Development Traffic Demand	
	AM	PM	AM	PM	AM	PM
Level of Service	B	B	B	B	B	B
Degree of Saturation	0.654	0.667	0.687	0.717	0.698	0.762
TOTAL AVERAGE VEHICLE DELAY	23.4	23.7	23.8	25.3	25.1	25.5

**TABLE 3.2 - RESULTS OF SIDRA ANALYSIS OF
TEBBUTT STREET / KEGWORTH STREET**

Key Indicators	Existing Traffic Demand		Fully Utilised Industrial Uses		Projected Development Traffic Demand	
	AM	PM	AM	PM	AM	PM
Level of Service	A	A	A	A	A	A
Degree of Saturation	0.439	0.549	0.446	0.577	0.443	0.655
TOTAL AVERAGE VEHICLE DELAY	3.9	5.7	4.9	6.2	4.7	8.3

Criteria for Interpreting Results of Sidra Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good operation.	Good operation.
'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 signals¹ 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.

¹ The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.

5. PARKING ASSESSMENT

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 7 and comprise:

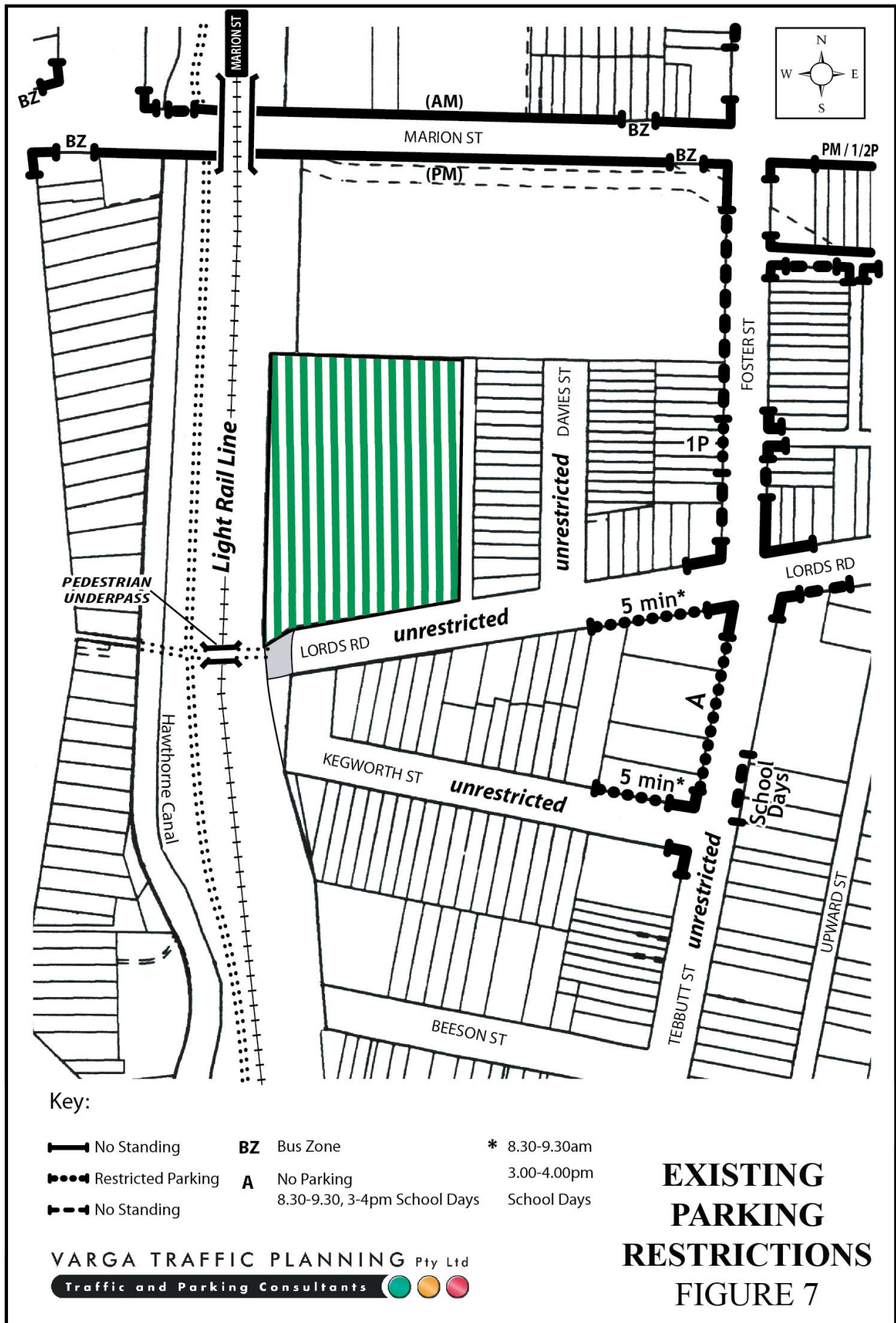
- NO STOPPING restrictions in the vicinity of the Tebbutt Street / Foster Street & Lords Road intersection
- generally UNRESTRICTED kerbside parking elsewhere in Lords Road including along the site frontage.

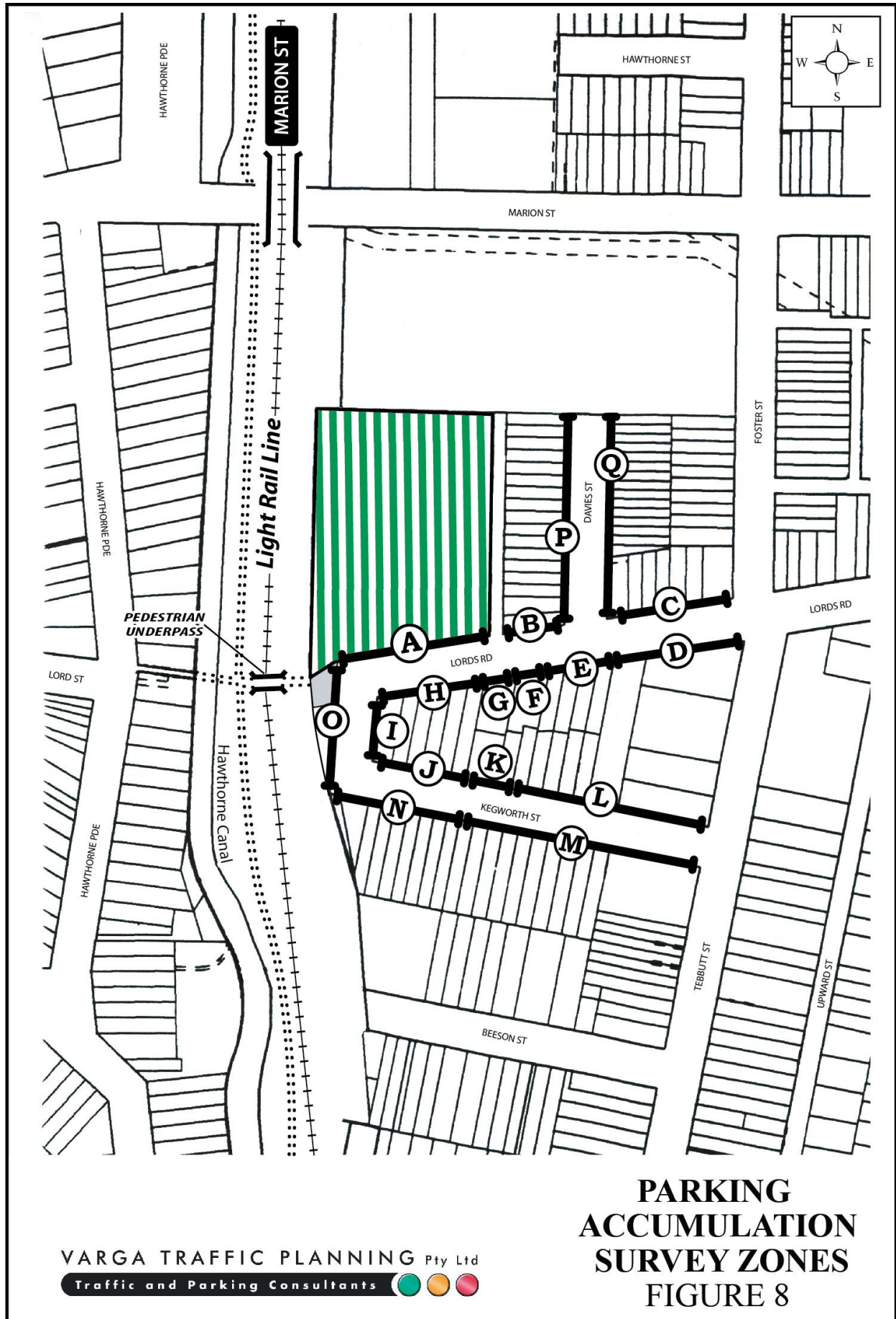
Parking Accumulation Surveys

In order to gain an accurate appreciation of the existing parking demands occurring on the adjacent road network, a detailed survey of on-street car parking accumulations was undertaken between 5:00am-10:00pm on Thursday 31st October, 2013 in the on-street parking zones as illustrated on Figure 8.

The results of the parking accumulation surveys are reproduced in full in Appendix A and reveal that:

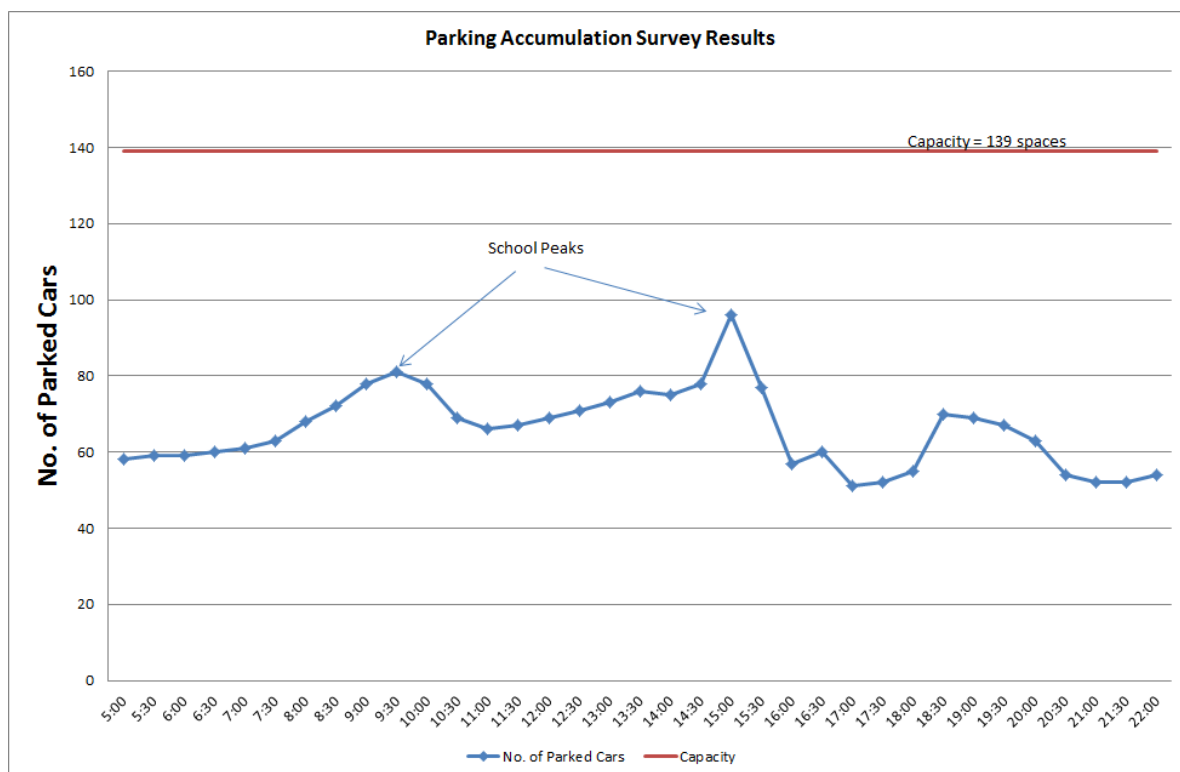
- there are approximately 139 publically accessible kerbside parking spaces located within a short walking distance of the site in Lords Road, Kegworth Street and Davies Street
- the peak parking demand during *business hours* (i.e. 9:00am-5:00pm) occurred at 3:00pm when there were 96 parked cars recorded (i.e. 43 vacant spaces remaining), which was likely a result of the end of the school day at the nearby Kegworth Public School. The parking demand either side of 3:00pm was 77 / 78 parked cars (i.e. 61 / 62 vacant spaces remaining)
- the average parking demand at other times during *business hours* (excluding the 3:00pm result) was in the order of 72 parked cars (i.e. 67 vacant spaces remaining)





- the peak *before hours* parking demand (i.e. 5:00am-9:00am) occurred at 8:30am when there were 72 parked cars recorded (i.e. 67 vacant spaces remaining). The average *before hours* parking demand was in the order of 62 parked cars (i.e. 77 vacant spaces remaining)
- the peak *after hours* parking demand (i.e. 5:00pm-10:00pm) occurred at 6:30pm when there were 70 parked cars recorded (i.e. 69 vacant spaces remaining). The average *after hours* parking demand was in the order of 59 parked cars (i.e. 80 vacant spaces remaining).

The results of the on-street parking accumulation survey are summarised on the graph below, confirming that substantial spare car parking capacity is readily available within a short walking distance of the subject site at all times of the day.



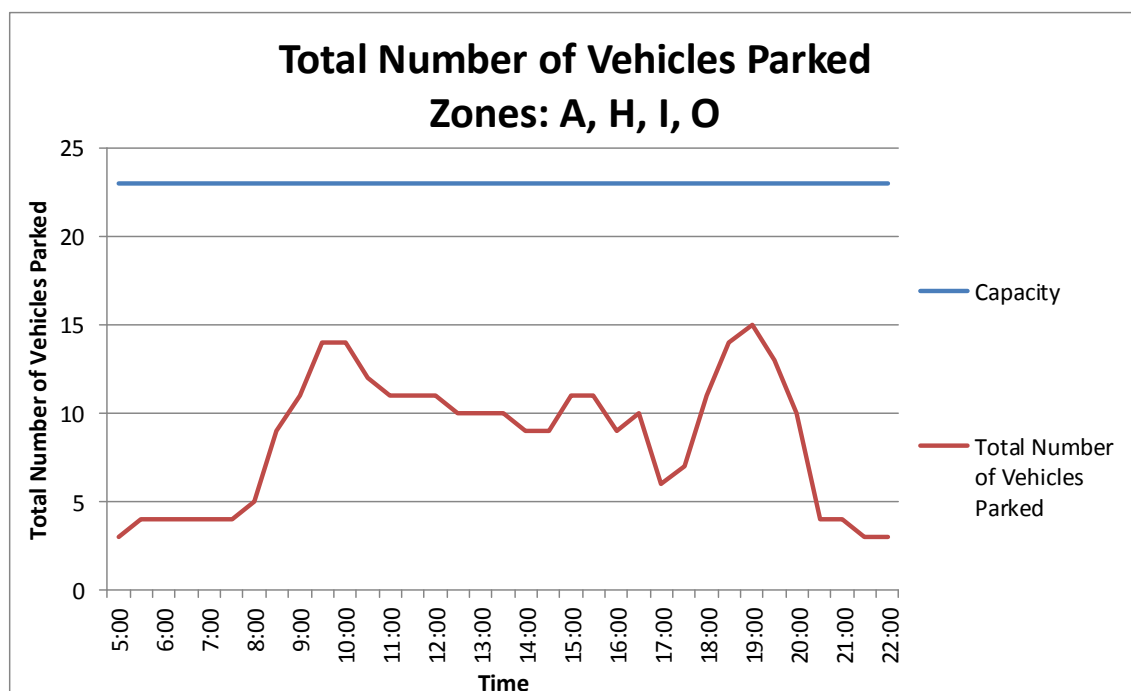
As noted in the foregoing, the proposed change of use from industrial to residential provides the opportunity to realign the section of Lords Road in the vicinity of the site, where it intersects with Kegworth Street. The proposed road realignment will involve reducing the width of the road carriageway to 6.5m to enable additional public benefits including additional landscaping to be provided. The road narrowing has been designed to

accommodate the swept turning path of large 12.5m long HRV rigid trucks. A total of 23 kerbside parking spaces would be lost as a consequence of the proposed road realignment and footpath widening, although some of these spaces could be replaced with an angle parking arrangement in the vicinity of the proposed child care centre

The results of the parking accumulation surveys for the zones affected by the proposed road realignment are summarised in the graph below, revealing that:

- the peak parking demands in the kerbside parking zones where the road is proposed to be realigned are typically in the order of 10-15 spaces
- those peak parking demands tend to occur between 8am-8pm, and
- overnight parking demand in the area tends to be relatively low, typically less than 5 vehicles between 8pm and 8am.

Should the road realignment proceed, the results of the survey data indicate that the kerbside parking demands which would be displaced by the narrowing of the road could be easily accommodated in other parts of Lords Road or Kegworth Street.



Off-Street Parking Provisions

The off-street car parking requirements applicable to most developments within the Leichhardt LGA are specified in Council's *Development Control Plan 2013, Part C1.11 – Parking* document in the following terms:

Table C4: General Vehicle Parking Rates

Residential Flat Buildings

Studio apartments:	Nil (min)	0.5 spaces per dwelling (max)
1 bedroom apartments:	1 space per 3 dwellings (min)	0.5 spaces per dwelling (max)
2 bedroom apartments:	1 space per 2 dwellings (min)	1 space per dwelling (max)
3 bedroom apartments:	1 space per dwelling (min)	1.2 spaces per dwelling (max)
Visitors:	1 space per 11 dwellings (min)	1 space per 8 dwellings (max)

Childcare Centres

Pick-up/drop-off:	2 spaces (min)
Loading/visitors:	1 space (min)
Staff:	1 space per 30 children (min)

Application of the above parking requirements to the various components of the Planning Proposal yields a *minimum* off-street car parking requirement of 178 parking spaces and a maximum off-street parking requirement of approximately 270 spaces, as set out below:

Residents (315 apartments):	144.7 spaces (min)	230.4 spaces (max)
Visitors:	28.6 spaces (min)	39.4 spaces (max)
Childcare Centre (60 children & 10 staff):	5.0 spaces (min)	no maximum
TOTAL:	178.3 spaces (min)	269.8 spaces (approximate max.)

DCP 2013 also requires that a minimum of 1 car share space is provided for all new multi-dwelling residential buildings containing more than 50 dwellings.

The off-street bicycle parking requirements applicable to the development are specified in Council's *Development Control Plan 2013, Table C6 Bicycle Parking Provision Rates* in the following terms:

Table C6: Bicycle Parking Provision Rates

	Residents/Staff	Customers/Visitors
Apartments:	1 space per 2 dwellings	1 space per 10 dwellings
Child Care Facility:	1 space per 10 staff	2 spaces per centre

Application of the above bicycle parking requirements to the development proposal yields a *minimum* bicycle parking requirement of 189 bicycle parking spaces for the residential component plus 3 bicycle parking spaces for the child care centre component.

At this stage the precise number of off-street car and bicycle parking spaces to be provided on the site is not yet known however it is understood that the Planning Proposal will comply with Council's car parking and bicycle parking requirements, although some consideration could be given to reducing the car parking provisions below the DCP rates having regard for the excellent accessibility of the site to public transport.

The geometric design layout of the proposed car parking facilities will ultimately be designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* in respect of parking bay dimensions, ramp gradients and aisle widths.

In summary, the proposed parking facilities will ultimately satisfy the relevant requirements specified in both Council's Parking Code as well as the Australian Standards and it is therefore concluded that the Planning Proposal will not have any unacceptable parking implications.

APPENDIX A

TRAFFIC SURVEY DATA



R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849.

Mobile.0418239019

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

PEDS	NORTH	WEST	SOUTH	
Time Per	Tebutt St	Kegworth St	Tebutt St	TOT
0630 - 0645	0	1	0	1
0645 - 0700	0	3	0	3
0700 - 0715	0	2	2	4
0715 - 0730	1	4	0	5
0730 - 0745	0	1	0	1
0745 - 0800	0	7	0	7
0800 - 0815	0	8	0	8
0815 - 0830	0	4	0	4
0830 - 0845	0	3	0	3
0845 - 0900	0	9	0	9
0900 - 0915	1	3	0	4
0915 - 0930	2	6	1	9
Per End	4	51	3	58

PEDS	NORTH	WEST	SOUTH	
Peak Per	Tebutt St	Kegworth St	Tebutt St	TOT
0630 - 0730	1	10	2	13
0645 - 0745	1	10	2	13
0700 - 0800	1	14	2	17
0715 - 0815	1	20	0	21
0730 - 0830	0	20	0	20
0745 - 0845	0	22	0	22
0800 - 0900	0	24	0	24
0815 - 0915	1	19	0	20
0830 - 0930	3	21	1	25
PEAK HR	0	20	0	20

Lights	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Time Per	I	R	L	R	L	I	TOT
0630 - 0645	93	0	1	0	2	230	326
0645 - 0700	88	4	0	3	2	177	274
0700 - 0715	90	4	0	1	1	232	328
0715 - 0730	107	3	0	1	4	249	364
0730 - 0745	131	2	2	1	0	241	377
0745 - 0800	153	7	1	1	2	215	379
0800 - 0815	141	9	2	1	2	192	347
0815 - 0830	176	4	4	0	4	237	425
0830 - 0845	122	4	1	2	5	237	371
0845 - 0900	118	9	8	3	9	233	380
0900 - 0915	109	17	6	5	14	157	308
0915 - 0930	115	11	14	5	6	175	326
Per End	1443	74	39	23	51	2575	4205

Heavies	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Time Per	I	R	L	R	L	I	TOT
0630 - 0645	1	0	0	0	0	5	6
0645 - 0700	0	1	0	0	0	0	1
0700 - 0715	1	0	0	0	0	1	2
0715 - 0730	1	0	0	0	0	3	4
0730 - 0745	2	0	0	0	0	0	2
0745 - 0800	3	0	0	0	0	3	6
0800 - 0815	3	0	0	0	0	0	3
0815 - 0830	2	0	0	0	0	1	3
0830 - 0845	1	0	0	0	0	3	4
0845 - 0900	1	0	0	0	0	3	4
0900 - 0915	3	0	0	0	0	1	4
0915 - 0930	3	0	0	0	0	0	3
Per End	21	1	0	0	0	20	42

Combined	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Time Per	I	R	L	R	L	I	TOT
0630 - 0645	94	0	1	0	2	235	332
0645 - 0700	88	5	0	3	2	177	275
0700 - 0715	91	4	0	1	1	233	330
0715 - 0730	108	3	0	1	4	252	368
0730 - 0745	133	2	2	1	0	241	379
0745 - 0800	156	7	1	1	2	218	385
0800 - 0815	144	9	2	1	2	192	350
0815 - 0830	178	4	4	0	4	238	428
0830 - 0845	123	4	1	2	5	240	375
0845 - 0900	119	9	8	3	9	236	384
0900 - 0915	112	17	6	5	14	158	312
0915 - 0930	118	11	14	5	6	175	329
Per End	1464	75	39	23	51	2595	4247

Lights	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Peak Per	I	R	L	R	L	I	TOT
0630 - 0730	378	11	1	5	9	888	1292
0645 - 0745	416	13	2	6	7	899	1343
0700 - 0800	481	16	3	4	7	937	1448
0715 - 0815	532	21	5	4	8	897	1467
0730 - 0830	601	22	9	3	8	885	1528
0745 - 0845	592	24	8	4	13	881	1522
0800 - 0900	557	26	15	6	20	899	1523
0815 - 0915	525	34	19	10	32	864	1484
0830 - 0930	464	41	29	15	34	802	1385

Heavies	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Peak Per	I	R	L	R	L	I	TOT
0630 - 0730	3	1	0	0	0	9	13
0645 - 0745	4	1	0	0	0	4	9
0700 - 0800	7	0	0	0	0	7	14
0715 - 0815	9	0	0	0	0	6	15
0730 - 0830	10	0	0	0	0	4	14
0745 - 0845	9	0	0	0	0	7	16
0800 - 0900	7	0	0	0	0	7	14
0815 - 0915	7	0	0	0	0	8	15
0830 - 0930	8	0	0	0	0	7	15

Combined	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St		
Peak Per	I	R	L	R	L	I	TOT
0630 - 0730	381	12	1	5	9	897	1305
0645 - 0745	420	14	2	6	7	903	1352
0700 - 0800	488	16	3	4	7	944	1462
0715 - 0815	541	21	5	4	8	903	1482
0730 - 0830	611	22	9	3	8	889	1542
0745 - 0845	601	24	8	4	13	888	1538
0800 - 0900	564	26	15	6	20	906	1537
0815 - 0915	532	34	19	10	32	872	1499
0830 - 0930	472	41	29	15	34	809	1400

PEAK HR	601	22	9	3	8	885	1528
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PEAK HR	10	0	0	0	0	4	14
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PEAK HR	611	22	9	3	8	889	1542
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R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

AM PEAK
0730 - 0830

1

2

3

4

5

6

7

8

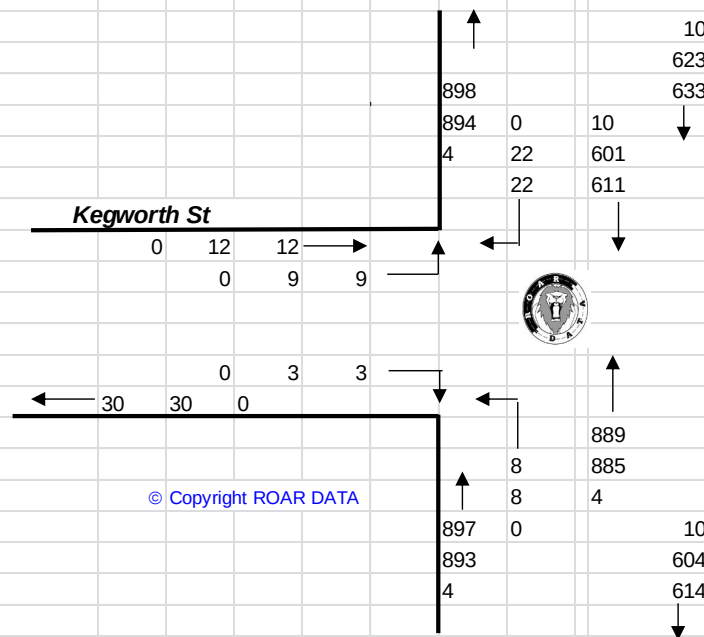
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**TOTAL VOLUMES
FOR COUNT
PERIOD**



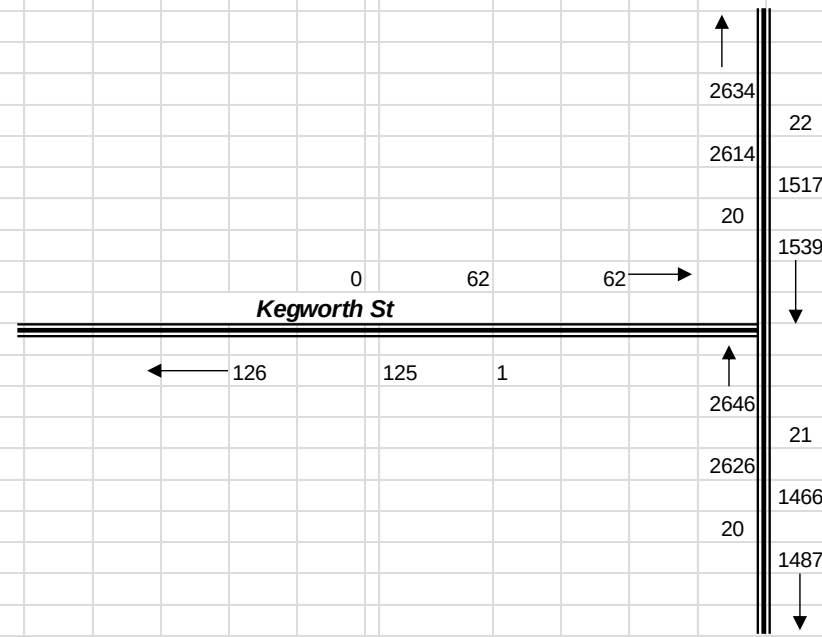
Tebutt St

Tebutt St



© Copyright ROAR DATA

Tebutt St



Tebutt St

**R.O.A.R. DATA****Reliable, Original & Authentic Results**

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

Lights	NORTH		WEST		SOUTH			Heavies	NORTH		WEST		SOUTH			Combined	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St				Tebutt St		Kegworth St		Tebutt St				Tebutt St		Kegworth St		Tebutt St		
Time Per	T	R	L	R	L	T	TOT	Time Per	T	R	L	R	L	T	TOT	Time Per	T	R	L	R	L	T	TOT
1430 - 1445	177	5	2	2	0	128	314	1430 - 1445	4	0	0	0	0	2	6	1430 - 1445	181	5	2	2	0	130	320
1445 - 1500	172	6	1	0	2	120	301	1445 - 1500	1	0	0	0	0	4	5	1445 - 1500	173	6	1	0	2	124	306
1500 - 1515	153	11	3	1	9	129	306	1500 - 1515	3	0	0	0	0	0	3	1500 - 1515	156	11	3	1	9	129	309
1515 - 1530	203	8	22	4	3	168	408	1515 - 1530	4	0	0	0	0	0	4	1515 - 1530	207	8	22	4	3	168	412
1530 - 1545	219	8	3	2	3	138	373	1530 - 1545	3	1	0	0	0	3	7	1530 - 1545	222	9	3	2	3	141	380
1545 - 1600	211	4	2	4	2	134	357	1545 - 1600	2	0	0	0	0	5	7	1545 - 1600	213	4	2	4	2	139	364
1600 - 1615	181	6	3	1	4	130	325	1600 - 1615	0	0	0	0	0	6	6	1600 - 1615	181	6	3	1	4	136	331
1615 - 1630	165	7	4	2	4	132	314	1615 - 1630	2	0	0	0	0	1	3	1615 - 1630	167	7	4	2	4	133	317
1630 - 1645	235	9	4	0	3	152	403	1630 - 1645	1	0	0	0	0	4	5	1630 - 1645	236	9	4	0	3	156	408
1645 - 1700	210	8	5	2	4	167	396	1645 - 1700	1	0	0	0	0	0	1	1645 - 1700	211	8	5	2	4	167	397
1700 - 1715	225	9	2	2	6	172	416	1700 - 1715	1	0	0	0	0	2	3	1700 - 1715	226	9	2	2	6	174	419
1715 - 1730	228	10	4	2	4	171	419	1715 - 1730	1	0	0	0	0	2	3	1715 - 1730	229	10	4	2	4	173	422
1730 - 1745	163	9	1	2	5	160	340	1730 - 1745	0	0	0	0	0	0	0	1730 - 1745	163	9	1	2	5	160	340
1745 - 1800	169	6	0	4	6	188	373	1745 - 1800	0	0	0	0	0	0	0	1745 - 1800	169	6	0	4	6	188	373
1800 - 1815	154	11	1	1	2	137	306	1800 - 1815	0	0	0	0	0	0	0	1800 - 1815	154	11	1	1	2	137	306
1815 - 1830	146	6	2	0	2	151	307	1815 - 1830	0	0	0	0	0	0	0	1815 - 1830	146	6	2	0	2	151	307
Per End	3011	123	59	29	59	2377	5658	Per End	23	1	0	0	0	29	53	Per End	3034	124	59	29	59	2406	5711

Lights	NORTH		WEST		SOUTH			Heavies	NORTH		WEST		SOUTH			Combined	NORTH		WEST		SOUTH		
	Tebutt St		Kegworth St		Tebutt St				Tebutt St		Kegworth St		Tebutt St				Tebutt St		Kegworth St		Tebutt St		
Peak Per	T	R	L	R	L	T	TOT	Peak Per	T	R	L	R	L	T	TOT	Peak Per	T	R	L	R	L	T	TOT
1430 - 1530	705	30	28	7	14	545	1329	1430 - 1530	12	0	0	0	0	6	18	1430 - 1530	717	30	28	7	14	551	1347
1445 - 1545	747	33	29	7	17	555	1388	1445 - 1545	11	1	0	0	0	7	19	1445 - 1545	758	34	29	7	17	562	1407
1500 - 1600	786	31	30	11	17	569	1444	1500 - 1600	12	1	0	0	0	8	21	1500 - 1600	798	32	30	11	17	577	1465
1515 - 1615	814	26	30	11	12	570	1463	1515 - 1615	9	1	0	0	0	14	24	1515 - 1615	823	27	30	11	12	584	1487
1530 - 1630	776	25	12	9	13	534	1369	1530 - 1630	7	1	0	0	0	15	23	1530 - 1630	783	26	12	9	13	549	1392
1545 - 1645	792	26	13	7	13	548	1399	1545 - 1645	5	0	0	0	0	16	21	1545 - 1645	797	26	13	7	13	564	1420
1600 - 1700	791	30	16	5	15	581	1438	1600 - 1700	4	0	0	0	0	11	15	1600 - 1700	795	30	16	5	15	592	1453
1615 - 1715	835	33	15	6	17	623	1529	1615 - 1715	5	0	0	0	0	7	12	1615 - 1715	840	33	15	6	17	630	1541
1630 - 1730	898	36	15	6	17	662	1634	1630 - 1730	4	0	0	0	0	8	12	1630 - 1730	902	36	15	6	17	670	1646
1645 - 1745	826	36	12	8	19	670	1571	1645 - 1745	3	0	0	0	0	4	7	1645 - 1745	829	36	12	8	19	674	1578
1700 - 1800	785	34	7	10	21	691	1548	1700 - 1800	2	0	0	0	0	4	6	1700 - 1800	787	34	7	10	21	695	1554
1715 - 1815	714	36	6	9	17	656	1438	1715 - 1815	1	0	0	0	0	2	3	1715 - 1815	715	36	6	9	17	658	1441
1730 - 1830	632	32	4	7	15	636	1326	1730 - 1830	0	0	0	0	0	0	0	1730 - 1830	632	32	4	7	15	636	1326
PEAK HR	898	36	15	6	17	662	1634	PEAK HR	4	0	0	0	0	8	12	PEAK HR	902	36	15	6	17	670	1646



R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

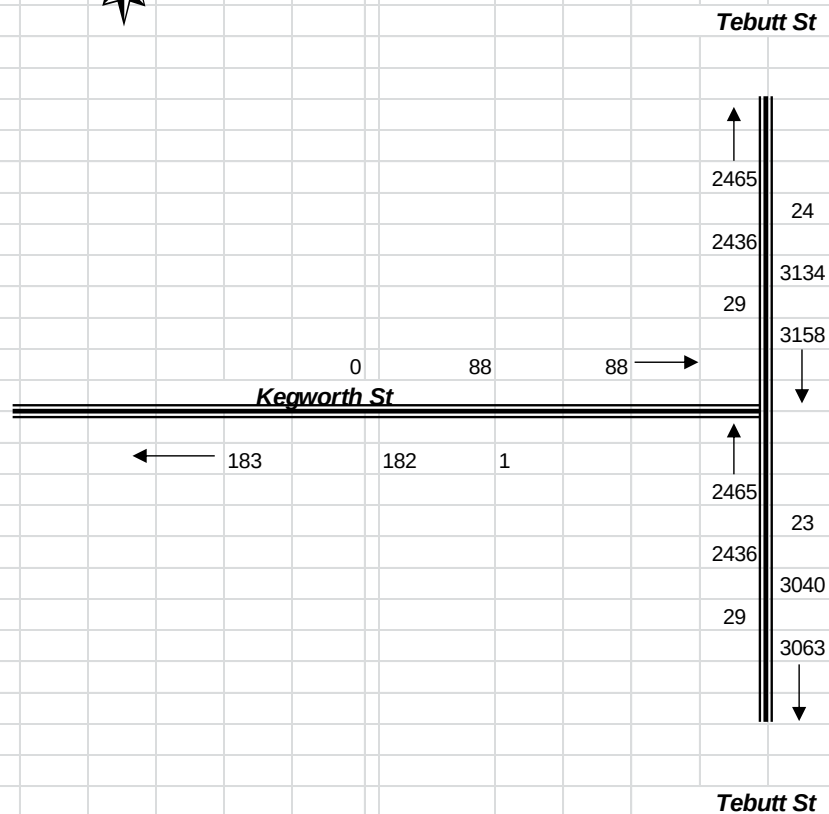
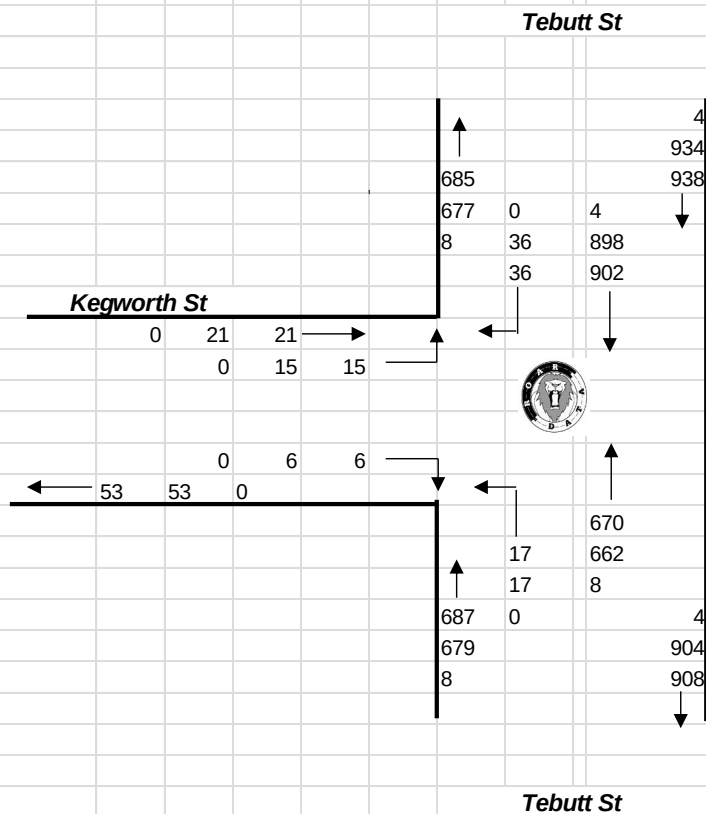
Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

PM PEAK

1630 - 1730

**TOTAL VOLUMES
FOR COUNT
PERIOD**





R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

Peds	NORTH	WEST	SOUTH	
	<i>Tebutt St</i>	<i>Kegworth St</i>	<i>Tebutt St</i>	
Time Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1430 - 1445	0	2	0	2
1445 - 1500	1	2	3	6
1500 - 1515	0	9	3	12
1515 - 1530	2	22	0	24
1530 - 1545	0	3	0	3
1545 - 1600	0	7	0	7
1600 - 1615	0	2	0	2
1615 - 1630	0	3	0	3
1630 - 1645	0	12	0	12
1645 - 1700	0	5	0	5
1700 - 1715	0	5	0	5
1715 - 1730	1	7	1	9
1730 - 1745	0	12	1	13
1745 - 1800	0	6	1	7
1800 - 1815	0	9	0	9
1815 - 1830	1	1	0	2
Period End	5	107	9	121

Peds	NORTH	WEST	SOUTH	
	<i>Tebutt St</i>	<i>Kegworth St</i>	<i>Tebutt St</i>	
Peak Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1430 - 1530	3	35	6	44
1445 - 1545	3	36	6	45
1500 - 1600	2	41	3	46
1515 - 1615	2	34	0	36
1530 - 1630	0	15	0	15
1545 - 1645	0	24	0	24
1600 - 1700	0	22	0	22
1615 - 1715	0	25	0	25
1630 - 1730	1	29	1	31
1645 - 1745	1	29	2	32
1700 - 1800	1	30	3	34
1715 - 1815	1	34	3	38
1730 - 1830	1	28	2	31
PEAK HR	1	29	1	31



R.O.A.R. DATA

Reliable, Original & Authentic Results

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

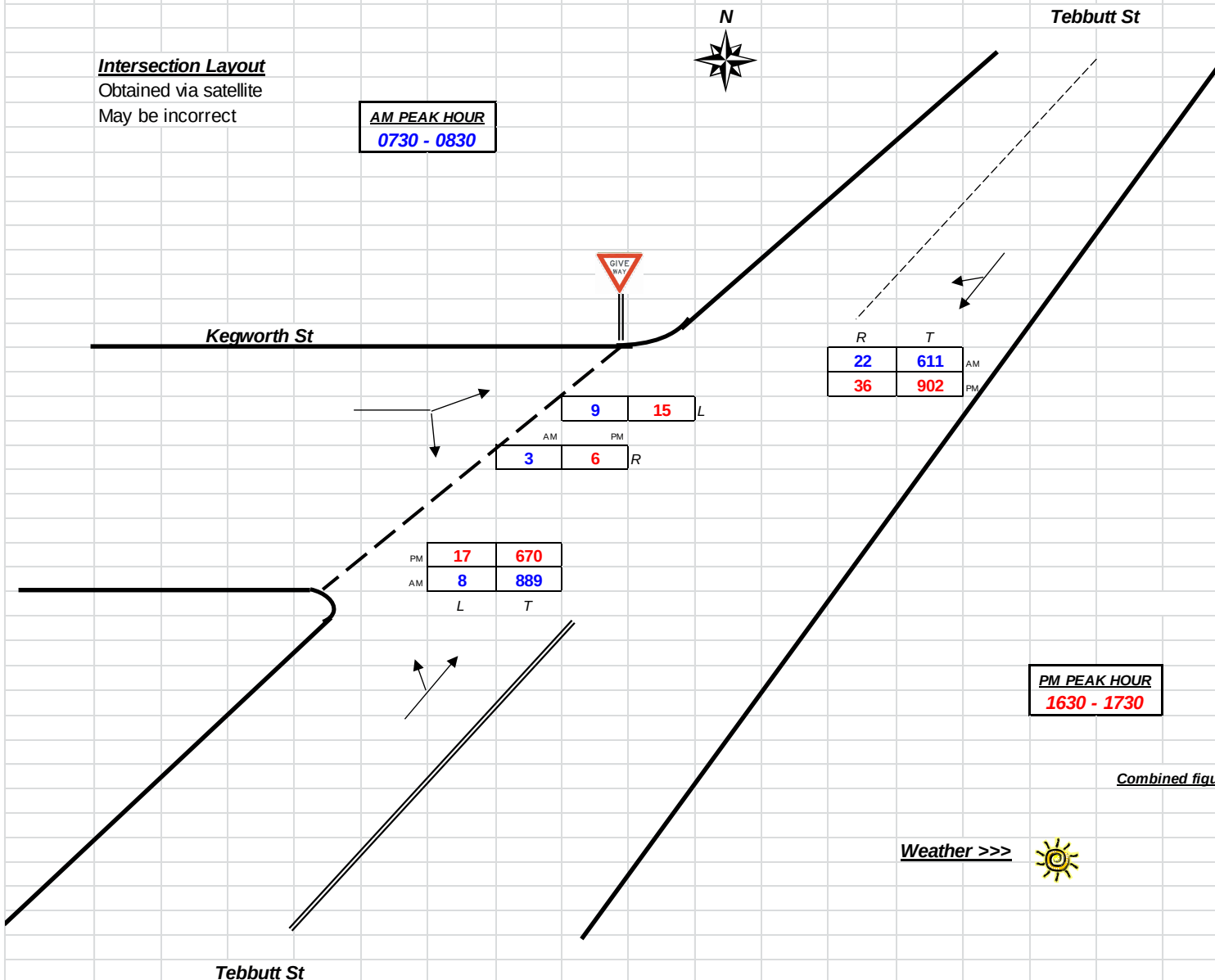
Client : Varga Traffic Planning
Job No/Name : 4867 LEICHHARDT Lords Rd Counts
Day/Date : Thursday / 31st October 2013

Intersection Layout

Obtained via satellite

May be incorrect

AM PEAK HOUR
0730 - 0830



R	T	
22	611	AM
36	902	PM

AM	PM	
9	15	L
3	6	R

PM	AM	
17	670	L
8	889	T

PM PEAK HOUR
1630 - 1730

Combined figures only

Weather >>>





R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Lights	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0645	4	75	0	5	5	5	2	183	40	3	1	4	327
0645 - 0700	11	79	1	4	2	0	4	127	24	4	4	1	261
0700 - 0715	18	96	0	3	2	1	1	174	42	5	1	2	345
0715 - 0730	13	103	0	3	2	3	1	179	54	8	5	8	379
0730 - 0745	24	115	1	4	2	1	1	188	69	14	1	8	428
0745 - 0800	36	136	1	1	4	1	3	136	64	11	7	7	407
0800 - 0815	36	120	0	6	4	2	2	122	55	15	2	2	366
0815 - 0830	35	135	0	4	5	4	2	149	83	21	6	9	453
0830 - 0845	50	103	0	4	7	1	3	158	61	26	9	7	429
0845 - 0900	61	100	0	1	4	2	2	160	67	25	11	12	445
0900 - 0915	68	110	0	0	12	4	4	118	53	15	27	16	427
0915 - 0930	64	84	0	4	16	7	1	138	45	19	11	15	404
Period End	420	1256	3	39	65	31	26	1832	657	166	85	91	4671

Heavies	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0645	0	1	0	0	0	0	0	4	0	0	0	1	6
0645 - 0700	0	1	0	0	0	0	0	0	0	0	0	0	1
0700 - 0715	0	0	0	0	0	1	0	1	0	0	0	0	2
0715 - 0730	1	0	0	0	0	0	0	2	0	0	0	1	4
0730 - 0745	5	2	0	0	0	0	0	0	0	0	0	0	7
0745 - 0800	1	2	0	0	0	0	0	3	0	1	0	0	7
0800 - 0815	2	2	0	0	0	0	0	0	0	0	0	0	4
0815 - 0830	0	4	0	0	0	0	0	1	0	0	0	0	5
0830 - 0845	2	1	0	0	0	0	0	2	1	0	0	0	6
0845 - 0900	0	0	0	0	0	0	0	3	0	0	0	0	3
0900 - 0915	0	3	0	0	0	0	0	1	0	0	0	1	5
0915 - 0930	4	3	0	0	0	0	0	0	0	0	0	0	7
Period End	15	19	0	0	0	1	0	17	1	1	0	3	57

Combined	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0645	4	76	0	5	5	5	2	187	40	3	1	5	333
0645 - 0700	11	80	1	4	2	0	4	127	24	4	4	1	262
0700 - 0715	18	96	0	3	2	2	1	175	42	5	1	2	347
0715 - 0730	14	103	0	3	2	3	1	181	54	8	5	9	383
0730 - 0745	29	117	1	4	2	1	1	188	69	14	1	8	435
0745 - 0800	37	138	1	1	4	1	3	139	64	12	7	7	414
0800 - 0815	38	122	0	6	4	2	2	122	55	15	2	2	370
0815 - 0830	35	139	0	4	5	4	2	150	83	21	6	9	458
0830 - 0845	52	104	0	4	7	1	3	160	62	26	9	7	435
0845 - 0900	61	100	0	1	4	2	2	163	67	25	11	12	448
0900 - 0915	68	113	0	0	12	4	4	119	53	15	27	17	432
0915 - 0930	68	87	0	4	16	7	1	138	45	19	11	15	411
Period End	435	1275	3	39	65	32	26	1849	658	167	85	94	4728

Client : Varga Traffic Planning
 Job No/Name : 4867 LEICHHARDT Lords Rd Counts
 Day/Date : Thursday / 31st October 2013

Lights	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Peak Time	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0730	46	353	1	15	11	9	8	663	160	20	11	15	1312
0645 - 0745	66	393	2	14	8	5	7	668	189	31	11	19	1413
0700 - 0800	91	450	2	11	10	6	6	677	229	38	14	25	1559
0715 - 0815	109	474	2	14	12	7	7	625	242	48	15	25	1580
0730 - 0830	131	506	2	15	15	8	8	595	271	61	16	26	1654
0745 - 0845	157	494	1	15	20	8	10	565	263	73	24	25	1655
0800 - 0900	182	458	0	15	20	9	9	589	266	87	28	30	1693
0815 - 0915	214	448	0	9	28	11	11	585	264	87	53	44	1754
0830 - 0930	243	397	0	9	39	14	10	574	226	85	58	50	1705

PEAK HOUR	243	397	0	9	39	14	10	574	226	85	58	50	1705
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Heavies	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Peak Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0730	1	2	0	0	0	1	0	7	0	0	0	2	13
0645 - 0745	6	3	0	0	0	1	0	3	0	0	0	1	14
0700 - 0800	7	4	0	0	0	1	0	6	0	1	0	1	20
0715 - 0815	9	6	0	0	0	0	0	5	0	1	0	1	22
0730 - 0830	8	10	0	0	0	0	0	4	0	1	0	0	23
0745 - 0845	5	9	0	0	0	0	0	6	1	1	0	0	22
0800 - 0900	4	7	0	0	0	0	0	6	1	0	0	0	18
0815 - 0915	2	8	0	0	0	0	0	7	1	0	0	1	19
0830 - 0930	6	7	0	0	0	0	0	6	1	0	0	1	21

PEAK HOUR	6	7	0	1	0	0	0	6	1	0	0	1	21
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Combined	NORTH			WEST			SOUTH			EAST			
	Foster St			Lords Rd			Tebutt St			Lords Rd			
Peak Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
0630 - 0730	47	355	1	15	11	10	8	670	160	20	11	17	1325
0645 - 0745	72	396	2	14	8	6	7	671	189	31	11	20	1427
0700 - 0800	98	454	2	11	10	7	6	683	229	39	14	26	1579
0715 - 0815	118	480	2	14	12	7	7	630	242	49	15	26	1602
0730 - 0830	139	516	2	15	15	8	8	599	271	62	16	26	1677
0745 - 0845	162	503	1	15	20	8	10	571	264	74	24	25	1677
0800 - 0900	186	465	0	15	20	9	9	595	267	87	28	30	1711
0815 - 0915	216	456	0	9	28	11	11	592	265	87	53	45	1773
0830 - 0930	249	404	0	9	39	14	10	580	227	85	58	51	1726

PEAK HOUR	249	404	0	9	39	14	10	580	227	85	58	51	1726
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R.O.A.R DATA

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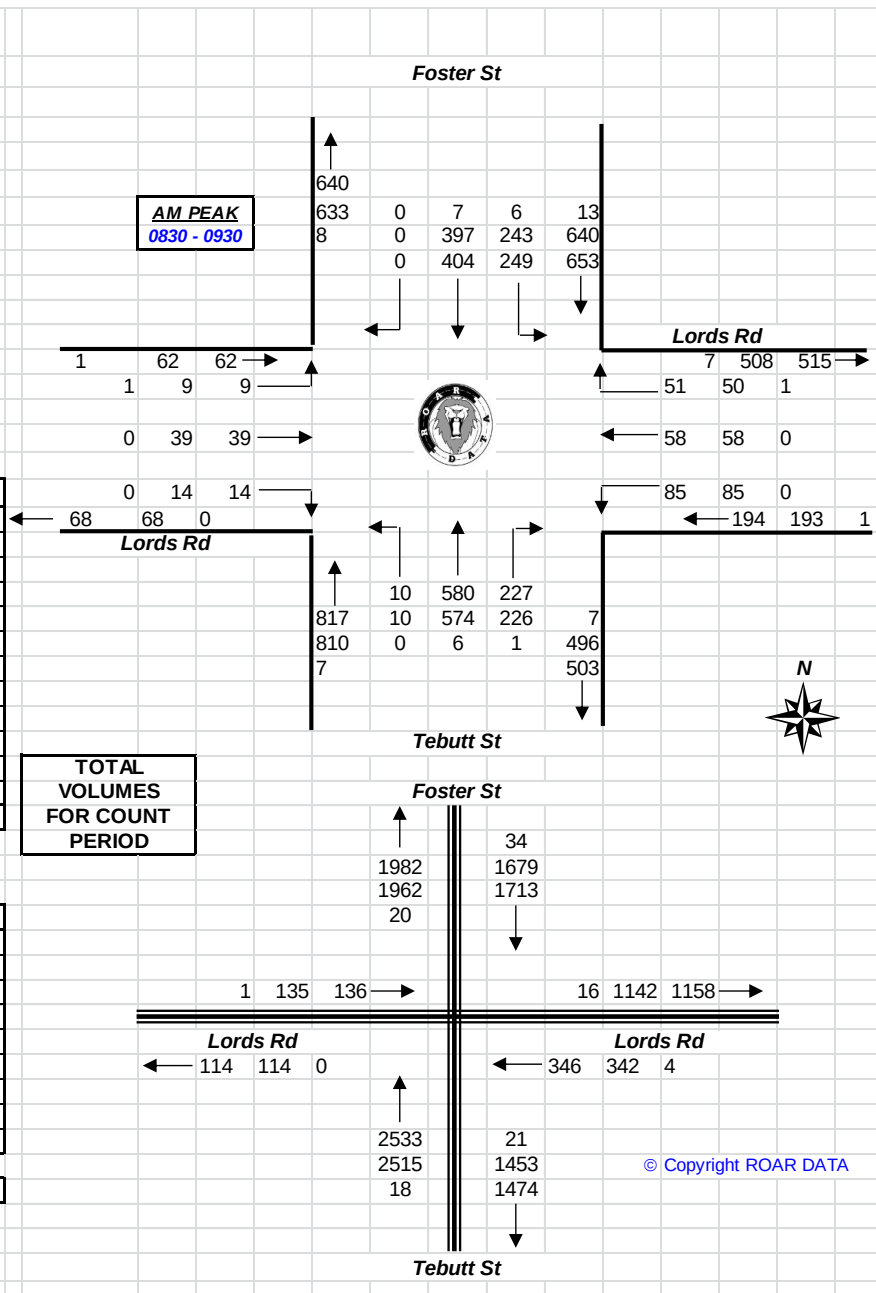
Ph.88196847, Fax 88196849, Mob.0418-239019

Client : Varga Traffic Planning
Job No/Name : 4867 LEICHHARDT Lords Rd Counts
Day/Date : Thursday / 31st October 2013

Peds	NORTH Foster St	WEST Lords Rd	SOUTH Tebutt St	EAST Lords Rd	
Time Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
0630 - 0645	2	2	4	0	8
0645 - 0700	2	2	0	1	5
0700 - 0715	0	2	0	0	2
0715 - 0730	0	0	3	2	5
0730 - 0745	0	2	1	1	4
0745 - 0800	0	3	7	1	11
0800 - 0815	0	9	2	2	13
0815 - 0830	2	1	7	0	10
0830 - 0845	3	0	6	4	13
0845 - 0900	5	10	12	2	29
0900 - 0915	1	13	41	6	61
0915 - 0930	5	7	28	5	45
Period End	20	51	111	24	206

Peds	NORTH Foster St	WEST Lords Rd	SOUTH Tebutt St	EAST Lords Rd	
Peak Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
0630 - 0730	4	6	7	3	20
0645 - 0745	2	6	4	4	16
0700 - 0800	0	7	11	4	22
0715 - 0815	0	14	13	6	33
0730 - 0830	2	15	17	4	38
0745 - 0845	5	13	22	7	47
0800 - 0900	10	20	27	8	65
0815 - 0915	11	24	66	12	113
0830 - 0930	14	30	87	17	148

PEAK HR	14	30	87	17	148
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R.O.A.R. DATA

Reliable, Original & Authentic Results

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Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

Lights	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
1430 - 1445	40	157	0	5	3	2	1	105	27	38	4	36	418
1445 - 1500	48	130	0	1	2	3	1	73	24	23	12	37	354
1500 - 1515	33	139	0	3	3	4	5	100	25	27	18	33	390
1515 - 1530	40	158	0	6	17	7	4	141	42	30	12	26	483
1530 - 1545	42	150	0	3	14	2	1	93	35	44	6	37	427
1545 - 1600	29	157	0	4	1	4	1	103	26	51	8	41	425
1600 - 1615	34	175	0	1	9	3	2	101	31	35	3	46	440
1615 - 1630	20	150	0	7	7	0	1	120	36	36	5	32	414
1630 - 1645	32	182	0	9	8	0	0	113	29	44	8	37	462
1645 - 1700	32	167	0	10	7	2	2	124	39	33	7	51	474
1700 - 1715	31	168	0	12	10	8	1	118	29	39	7	41	464
1715 - 1730	27	175	0	3	2	2	2	131	33	59	11	34	479
1730 - 1745	25	139	0	2	3	1	3	143	39	42	8	48	453
1745 - 1800	25	127	0	9	6	4	4	135	37	44	4	45	440
1800 - 1815	33	125	0	3	4	2	2	96	30	44	5	22	366
1815 - 1830	32	136	1	2	4	0	2	134	23	22	5	31	392
Period End	523	2435	1	80	100	44	32	1830	505	611	123	597	6881

Heavies	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
1430 - 1445	0	4	0	0	0	0	0	1	1	0	0	0	6
1445 - 1500	4	1	0	0	0	0	0	3	1	0	0	0	9
1500 - 1515	2	2	0	0	0	0	0	0	0	0	0	0	4
1515 - 1530	0	3	0	0	0	0	0	0	0	2	0	0	5
1530 - 1545	3	3	0	0	0	0	0	3	0	0	0	0	9
1545 - 1600	1	2	0	0	0	1	0	2	1	0	0	0	7
1600 - 1615	1	0	0	0	0	0	0	8	0	0	0	0	9
1615 - 1630	1	2	0	0	0	0	0	2	0	0	0	0	5
1630 - 1645	1	1	0	0	0	0	0	4	0	0	0	0	6
1645 - 1700	4	1	0	0	0	0	0	1	0	0	0	0	6
1700 - 1715	0	1	0	0	0	0	0	0	2	0	0	0	3
1715 - 1730	2	0	0	0	0	0	0	1	1	0	0	0	4
1730 - 1745	1	0	0	0	0	0	0	0	0	0	0	0	1
1745 - 1800	1	0	0	0	0	0	0	0	0	0	0	0	1
1800 - 1815	1	0	0	0	0	0	0	0	0	0	0	0	1
1815 - 1830	1	0	0	0	0	0	0	0	0	0	0	0	1
Period End	23	20	0	0	0	1	0	25	6	2	0	0	77

Lights	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Peak Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
1430 - 1530	161	584	0	15	25	16	11	419	118	118	46	132	1645
1445 - 1545	163	577	0	13	36	16	11	407	126	124	48	133	1654
1500 - 1600	144	604	0	16	35	17	11	437	128	152	44	137	1725
1515 - 1615	145	640	0	14	41	16	8	438	134	160	29	150	1775
1530 - 1630	125	632	0	15	31	9	5	417	128	166	22	156	1706
1545 - 1645	115	664	0	21	25	7	4	437	122	166	24	156	1741
1600 - 1700	118	674	0	27	31	5	5	458	135	148	23	166	1790
1615 - 1715	115	667	0	38	32	10	4	475	133	152	27	161	1814
1630 - 1730	122	692	0	34	27	12	5	486	130	175	33	163	1879
1645 - 1745	115	649	0	27	22	13	8	516	140	173	33	174	1870
1700 - 1800	108	609	0	26	21	15	10	527	138	184	30	168	1836
1715 - 1815	110	566	0	17	15	9	11	505	139	189	28	149	1738
1730 - 1830	115	527	1	16	17	7	11	508	129	152	22	146	1651

PEAK HOUR	122	692	0	34	27	12	5	486	130	175	33	163	1879
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Heavies	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Peak Per	L	I	R	L	I	R	L	I	R	L	I	R	TOT
1430 - 1530	6	10	0	0	0	0	0	4	2	2	0	0	24
1445 - 1545	9	9	0	0	0	0	0	6	1	2	0	0	27
1500 - 1600	6	10	0	0	0	1	0	5	1	2	0	0	25
1515 - 1615	5	8	0	0	0	1	0	13	1	2	0	0	30
1530 - 1630	6	7	0	0	0	1	0	15	1	0	0	0	30
1545 - 1645	4	5	0	0	0	1	0	16	1	0	0	0	27
1600 - 1700	7	4	0	0	0	0	0	15	0	0	0	0	26
1615 - 1715	6	5	0	0	0	0	0	7	2	0	0	0	20
1630 - 1730	7	3	0	0	0	0	0	6	3	0	0	0	19
1645 - 1745	7	2	0	0	0	0	0	2	3	0	0	0	14
1700 - 1800	4	1	0	0	0	0	0	1	3	0	0	0	9
1715 - 1815	5	0	0	0	0	0	0	1	1	0	0	0	7
1730 - 1830	4	0	0	0	0	0	0	0	0	0	0	0	4

PEAK HOUR	7	3	0	0	0	0	0	6	3	0	0	0	19
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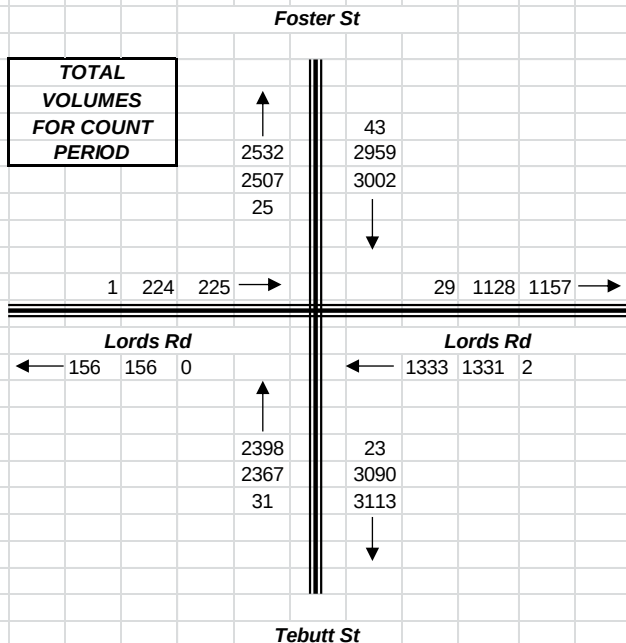


R.O.A.R. DATA

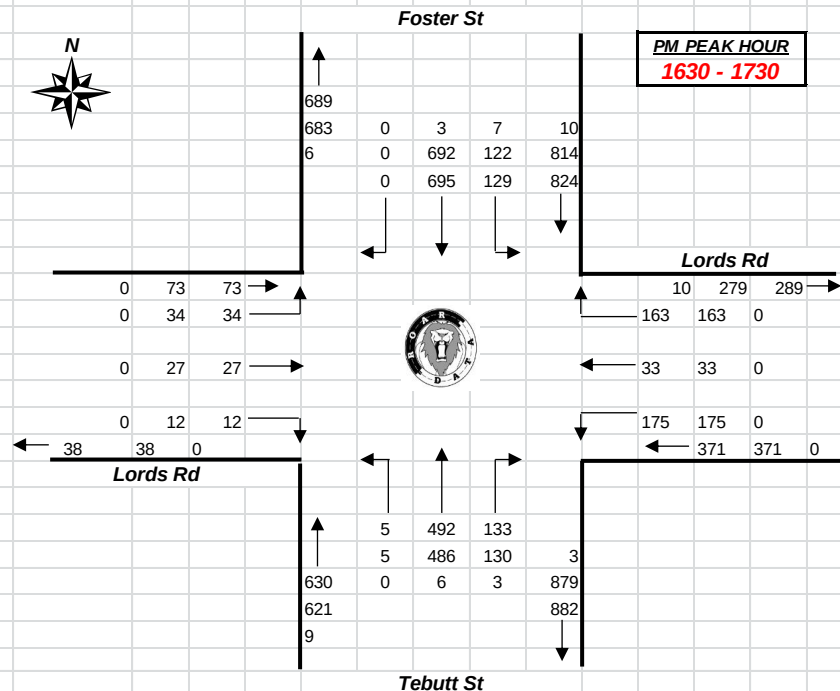
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COMBINED	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Time Per	L	I	R	L	I	R	L	I	R	L	I	R	
1430 - 1445	40	161	0	5	3	2	1	106	28	38	4	36	424
1445 - 1500	52	131	0	1	2	3	1	76	25	23	12	37	363
1500 - 1515	35	141	0	3	3	4	5	100	25	27	18	33	394
1515 - 1530	40	161	0	6	17	7	4	141	42	32	12	26	488
1530 - 1545	45	153	0	3	14	2	1	96	35	44	6	37	436
1545 - 1600	30	159	0	4	1	5	1	105	27	51	8	41	432
1600 - 1615	35	175	0	1	9	3	2	109	31	35	3	46	449
1615 - 1630	21	152	0	7	7	0	1	122	36	36	5	32	419
1630 - 1645	33	183	0	9	8	0	0	117	29	44	8	37	468
1645 - 1700	36	168	0	10	7	2	2	125	39	33	7	51	480
1700 - 1715	31	169	0	12	10	8	1	118	31	39	7	41	467
1715 - 1730	29	175	0	3	2	2	2	132	34	59	11	34	483
1730 - 1745	26	139	0	2	3	1	3	143	39	42	8	48	454
1745 - 1800	26	127	0	9	6	4	4	135	37	44	4	45	441
1800 - 1815	34	125	0	3	4	2	2	96	30	44	5	22	367
1815 - 1830	33	136	1	2	4	0	2	134	23	22	5	31	393
Period End	546	2455	1	80	100	45	32	1855	511	613	123	597	6958



													Client : Varga Traffic Planning
													Job No/Name : 4867 LEICHHARDT Lords Rd Counts
													Day/Date : Thursday / 31st October 2013
COMBINED	NORTH Foster St			WEST Lords Rd			SOUTH Tebutt St			EAST Lords Rd			TOT
Peak Per	L	I	R	L	I	R	L	I	R	L	I	R	
1430 - 1530	167	594	0	15	25	16	11	423	120	120	46	132	1669
1445 - 1545	172	586	0	13	36	16	11	413	127	126	48	133	1681
1500 - 1600	150	614	0	16	35	18	11	442	129	154	44	137	1750
1515 - 1615	150	648	0	14	41	17	8	451	135	162	29	150	1805
1530 - 1630	131	639	0	15	31	10	5	432	129	166	22	156	1736
1545 - 1645	119	669	0	21	25	8	4	453	123	166	24	156	1768
1600 - 1700	125	678	0	27	31	5	5	473	135	148	23	166	1816
1615 - 1715	121	672	0	38	32	10	4	482	135	152	27	161	1834
1630 - 1730	129	695	0	34	27	12	5	492	133	175	33	163	1898
1645 - 1745	122	651	0	27	22	13	8	518	143	173	33	174	1884
1700 - 1800	112	610	0	26	21	15	10	528	141	184	30	168	1845
1715 - 1815	115	566	0	17	15	9	11	506	140	189	28	149	1745
1730 - 1830	119	527	1	16	17	7	11	508	129	152	22	146	1655
PEAK HOUR	129	695	0	34	27	12	5	492	133	175	33	163	1898





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Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

<u>Peds</u>	NORTH <i>Foster St</i>	WEST <i>Lords Rd</i>	SOUTH <i>Tebutt St</i>	EAST <i>Lords Rd</i>	
Time Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1430 - 1445	0	1	7	0	8
1445 - 1500	0	1	0	1	2
1500 - 1515	5	7	17	8	37
1515 - 1530	3	29	53	12	97
1530 - 1545	3	5	4	1	13
1545 - 1600	5	2	4	1	12
1600 - 1615	0	1	2	2	5
1615 - 1630	1	1	3	2	7
1630 - 1645	4	3	5	6	18
1645 - 1700	3	8	0	3	14
1700 - 1715	5	4	2	1	12
1715 - 1730	3	7	8	2	20
1730 - 1745	0	9	2	4	15
1745 - 1800	1	1	9	1	12
1800 - 1815	3	1	16	0	20
1815 - 1830	1	2	1	0	4
Period End	37	82	133	44	296

<u>Peds</u>	NORTH <i>Foster St</i>	WEST <i>Lords Rd</i>	SOUTH <i>Tebutt St</i>	EAST <i>Lords Rd</i>	
Peak Per	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1430 - 1530	8	38	77	21	144
1445 - 1545	11	42	74	22	149
1500 - 1600	16	43	78	22	159
1515 - 1615	11	37	63	16	127
1530 - 1630	9	9	13	6	37
1545 - 1645	10	7	14	11	42
1600 - 1700	8	13	10	13	44
1615 - 1715	13	16	10	12	51
1630 - 1730	15	22	15	12	64
1645 - 1745	11	28	12	10	61
1700 - 1800	9	21	21	8	59
1715 - 1815	7	18	35	7	67
1730 - 1830	5	13	28	5	51
PEAK HR	15	22	15	12	64



R.O.A.R. DATA

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Client : Varga Traffic Planning
Job No/Name : 4867 LEICHHARDT Lords Rd Counts
Day/Date : Thursday / 31st October 2013

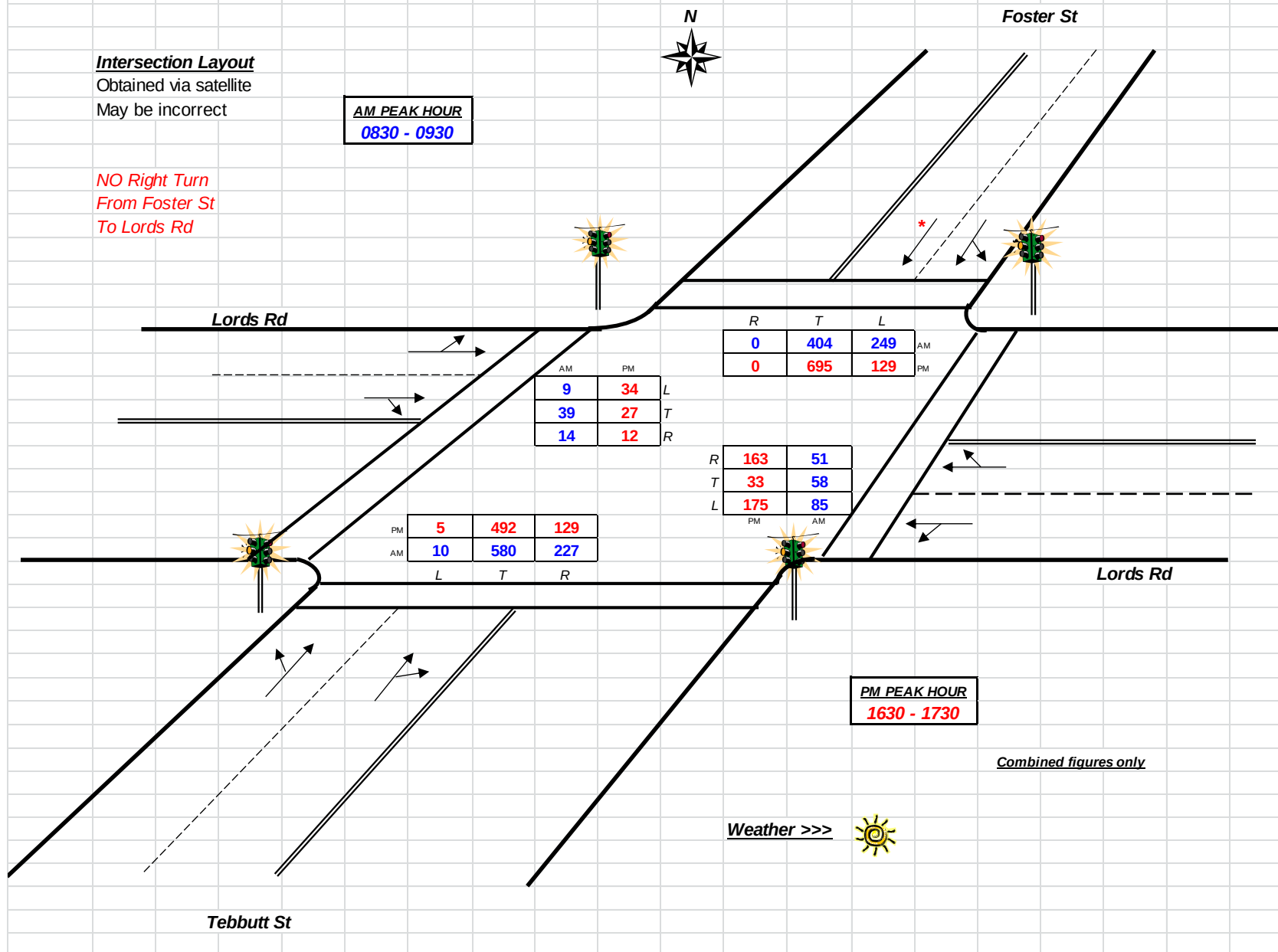
Intersection Layout

Obtained via satellite

May be incorrect

AM PEAK HOUR
0830 - 0930

NO Right Turn
From Foster St
To Lords Rd





R.O.A.R. DATA

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Mobile.0418239019

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

WEST Driveway

Lights	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	3	2	0	2	1	0	8
0645 - 0700	5	0	1	3	1	0	10
0700 - 0715	1	2	1	1	2	0	7
0715 - 0730	2	1	0	2	2	0	7
0730 - 0745	0	0	0	3	0	0	3
0745 - 0800	5	2	0	0	1	0	8
0800 - 0815	3	1	0	1	0	1	6
0815 - 0830	3	0	0	4	1	1	9
0830 - 0845	3	2	0	0	0	2	7
0845 - 0900	5	2	0	0	0	2	9
0900 - 0915	10	2	0	1	1	7	21
0915 - 0930	6	4	0	1	3	0	14
Per End	46	18	2	18	12	13	109

Lights	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	11	5	2	8	6	0	32
0645 - 0745	8	3	2	9	5	0	27
0700 - 0800	8	5	1	6	5	0	25
0715 - 0815	10	4	0	6	3	1	24
0730 - 0830	11	3	0	8	2	2	26
0745 - 0845	14	5	0	5	2	4	30
0800 - 0900	14	5	0	5	1	6	31
0815 - 0915	21	6	0	5	2	12	46
0830 - 0930	24	10	0	2	4	11	51

PEAK HR	24	10	0	2	4	11	51
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PEDS	WEST	NORTH	EAST	
Time Per	Lords Rd	Way	Lords Rd	TOT
0630 - 0645				0
0645 - 0700				0
0700 - 0715				0
0715 - 0730		NOT		0
0730 - 0745		REQUIRED		0
0745 - 0800				0
0800 - 0815				0
0815 - 0830				0
0830 - 0845				0
0845 - 0900				0
0900 - 0915				0
0915 - 0930				0
Per End	0	0	0	0

Heavies	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	0	0	0	0	0	0	0
0645 - 0700	1	0	0	0	0	0	1
0700 - 0715	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0
0900 - 0915	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0
Per End	1	0	0	0	0	0	1

Heavies	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	1	0	0	0	0	0	1
0645 - 0745	1	0	0	0	0	0	1
0700 - 0800	0	0	0	0	0	0	0
0715 - 0815	0	0	0	0	0	0	0
0730 - 0830	0	0	0	0	0	0	0
0745 - 0845	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0
0815 - 0915	0	0	0	0	0	0	0
0830 - 0930	0	0	0	0	0	0	0

PEAK HR	0	0	0	0	0	0	0
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PEDS	WEST	NORTH	EAST	
Peak Per	Lords Rd	Way	Lords Rd	TOT
0630 - 0730	0	0	0	0
0645 - 0745	0	0	0	0
0700 - 0800	0	0	0	0
0715 - 0815	0	0	0	0
0730 - 0830	0	0	0	0
0745 - 0845	0	0	0	0
0800 - 0900	0	0	0	0
0815 - 0915	0	0	0	0
0830 - 0930	0	0	0	0

PEAK HR	0	0	0	0
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Combined	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	3	2	0	2	1	0	8
0645 - 0700	6	0	1	3	1	0	11
0700 - 0715	1	2	1	1	2	0	7
0715 - 0730	2	1	0	2	2	0	7
0730 - 0745	0	0	0	3	0	0	3
0745 - 0800	5	2	0	0	1	0	8
0800 - 0815	3	1	0	1	0	1	6
0815 - 0830	3	0	0	4	1	1	9
0830 - 0845	3	2	0	0	0	2	7
0845 - 0900	5	2	0	0	0	2	9
0900 - 0915	10	2	0	1	1	7	21
0915 - 0930	6	4	0	1	3	0	14
Per End	47	18	2	18	12	13	110

Combined	WEST		NORTH		EAST		
	Lords Rd		Western D- Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	12	5	2	8	6	0	33
0645 - 0745	9	3	2	9	5	0	28
0700 - 0800	8	5	1	6	5	0	25
0715 - 0815	10	4	0	6	3	1	24
0730 - 0830	11	3	0	8	2	2	26
0745 - 0845	14	5	0	5	2	4	30
0800 - 0900	14	5	0	5	1	6	31
0815 - 0915	21	6	0	5	2	12	46
0830 - 0930	24	10	0	2	4	11	51

PEAK HR	24	10	0	2	4	11	51
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R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

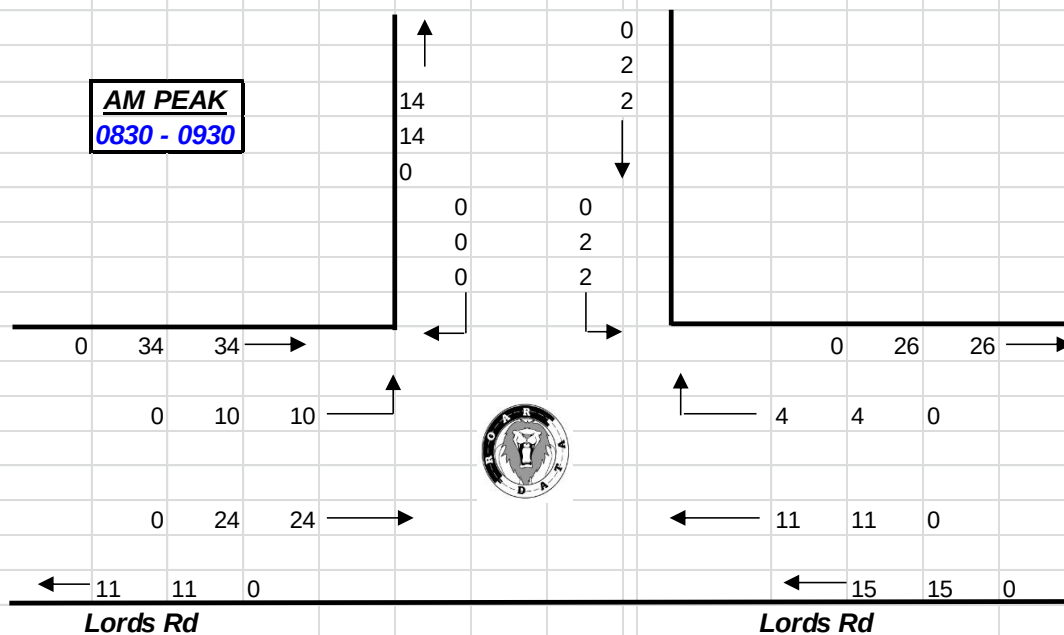
WEST Driveway



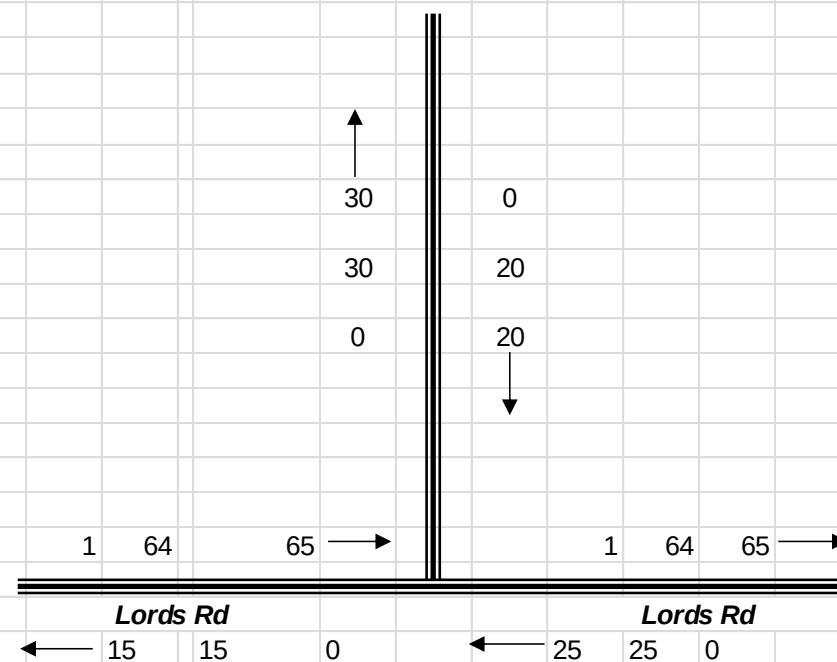
**TOTAL VOLUMES
FOR COUNT
PERIOD**

Western D-Way

AM PEAK
0830 - 0930



Western D-Way





R.O.A.R. DATA

Reliable, Original & Authentic Results

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Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

WESTERN CAR PARK

Accumulation

At Start **12**

0630 - 0645	13
0645 - 0700	10
0700 - 0715	12
0715 - 0730	13
0730 - 0745	10
0745 - 0800	13
0800 - 0815	13
0815 - 0830	10
0830 - 0845	12
0845 - 0900	14
0900 - 0915	16
0915 - 0930	22

At Finish **28**

Capacity **65**



R.O.A.R. DATA

Reliable, Original & Authentic Results

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Mobile.0418239019

Client : Varga Traffic Planning
 Job No/Name : 4867 LEICHHARDT Lords Rd Counts
 Day/Date : Thursday / 31st October 2013

EAST Driveway

Lights	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	5	0	0	6	1	0	12
0645 - 0700	8	0	1	0	1	0	10
0700 - 0715	1	1	0	2	0	0	4
0715 - 0730	3	1	0	3	1	0	8
0730 - 0745	2	1	0	1	1	0	5
0745 - 0800	5	0	0	0	1	0	6
0800 - 0815	3	1	0	1	1	1	7
0815 - 0830	7	0	0	3	0	1	11
0830 - 0845	3	0	0	1	1	3	8
0845 - 0900	4	1	0	1	1	2	9
0900 - 0915	10	1	0	0	3	10	24
0915 - 0930	4	3	0	1	1	3	12
Per End	55	9	1	19	12	20	116

Lights	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	17	2	1	11	3	0	34
0645 - 0745	14	3	1	6	3	0	27
0700 - 0800	11	3	0	6	3	0	23
0715 - 0815	13	3	0	5	4	1	26
0730 - 0830	17	2	0	5	3	2	29
0745 - 0845	18	1	0	5	3	5	32
0800 - 0900	17	2	0	6	3	7	35
0815 - 0915	24	2	0	5	5	16	52
0830 - 0930	21	5	0	3	6	18	53

PEAK HR	21	5	0	3	6	18	53
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PEDS	WEST	NORTH	EAST	
Time Per	Lords Rd	Eastern D-Way	Lords Rd	TOT
0630 - 0645				0
0645 - 0700				0
0700 - 0715				0
0715 - 0730		NOT		0
0730 - 0745		REQUIRED		0
0745 - 0800				0
0800 - 0815				0
0815 - 0830				0
0830 - 0845				0
0845 - 0900				0
0900 - 0915				0
0915 - 0930				0
Per End	0	0	0	0

Heavies	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	0	0	0	0	0	0	0
0645 - 0700	0	1	0	1	0	0	2
0700 - 0715	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0
0900 - 0915	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0
Per End	0	1	0	1	0	0	2

Heavies	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	0	1	0	1	0	0	2
0645 - 0745	0	1	0	1	0	0	2
0700 - 0800	0	0	0	0	0	0	0
0715 - 0815	0	0	0	0	0	0	0
0730 - 0830	0	0	0	0	0	0	0
0745 - 0845	0	0	0	0	0	0	0
0800 - 0900	0	0	0	0	0	0	0
0815 - 0915	0	0	0	0	0	0	0
0830 - 0930	0	0	0	0	0	0	0

PEAK HR	0	0	0	0	0	0	0
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PEDS	WEST	NORTH	EAST	
Peak Per	Lords Rd	Eastern D-Way	Lords Rd	TOT
0630 - 0730	0	0	0	0
0645 - 0745	0	0	0	0
0700 - 0800	0	0	0	0
0715 - 0815	0	0	0	0
0730 - 0830	0	0	0	0
0745 - 0845	0	0	0	0
0800 - 0900	0	0	0	0
0815 - 0915	0	0	0	0
0830 - 0930	0	0	0	0
PEAK HR	0	0	0	0

Combined	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Time Per	I	L	R	L	R	I	TOT
0630 - 0645	5	0	0	6	1	0	12
0645 - 0700	8	1	1	1	1	0	12
0700 - 0715	1	1	0	2	0	0	4
0715 - 0730	3	1	0	3	1	0	8
0730 - 0745	2	1	0	1	1	0	5
0745 - 0800	5	0	0	0	1	0	6
0800 - 0815	3	1	0	1	1	1	7
0815 - 0830	7	0	0	3	0	1	11
0830 - 0845	3	0	0	1	1	3	8
0845 - 0900	4	1	0	1	1	2	9
0900 - 0915	10	1	0	0	3	10	24
0915 - 0930	4	3	0	1	1	3	12
Per End	55	10	1	20	12	20	118

Combined	WEST		NORTH		EAST		
	Lords Rd		Eastern D-Way		Lords Rd		
Peak Per	I	L	R	L	R	I	TOT
0630 - 0730	17	3	1	12	3	0	36
0645 - 0745	14	4	1	7	3	0	29
0700 - 0800	11	3	0	6	3	0	23
0715 - 0815	13	3	0	5	4	1	26
0730 - 0830	17	2	0	5	3	2	29
0745 - 0845	18	1	0	5	3	5	32
0800 - 0900	17	2	0	6	3	7	35
0815 - 0915	24	2	0	5	5	16	52
0830 - 0930	21	5	0	3	6	18	53

PEAK HR	21	5	0	3	6	18	53
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R.O.A.R. DATA

Reliable, Original & Authentic Results

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Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

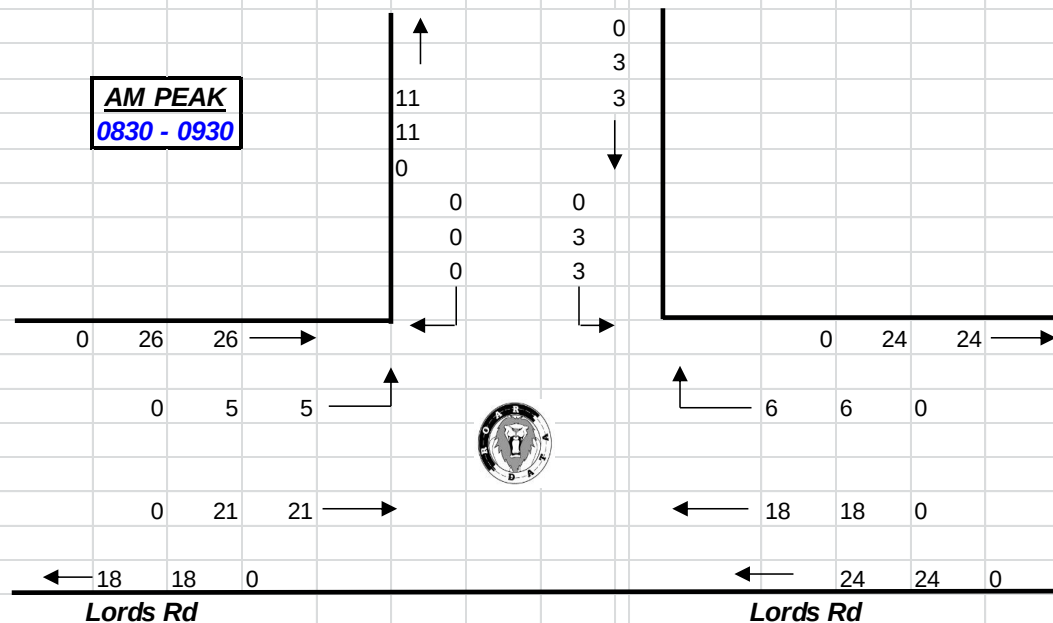
EAST Driveway

TOTAL VOLUMES
FOR COUNT
PERIOD

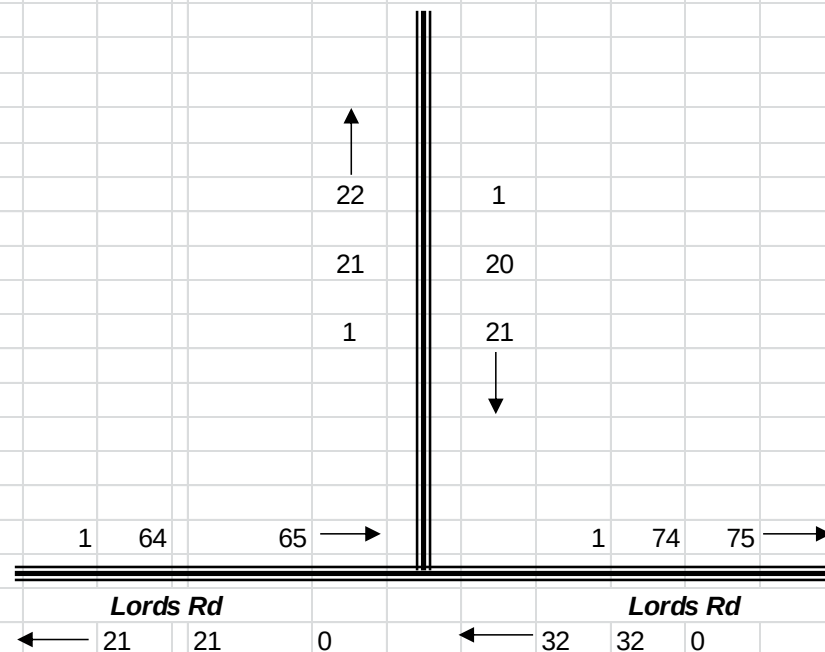


Eastern D-Way

AM PEAK
0830 - 0930



Eastern D-Way





R.O.A.R. DATA

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Day/Date : Thursday / 31st October 2013

EASTERN CAR PARK

Accumulation

At Start **14**

0630 - 0645	9
0645 - 0700	9
0700 - 0715	8
0715 - 0730	7
0730 - 0745	8
0745 - 0800	9
0800 - 0815	10
0815 - 0830	7
0830 - 0845	7
0845 - 0900	8
0900 - 0915	12
0915 - 0930	15

At Finish **20**

Capacity **37**



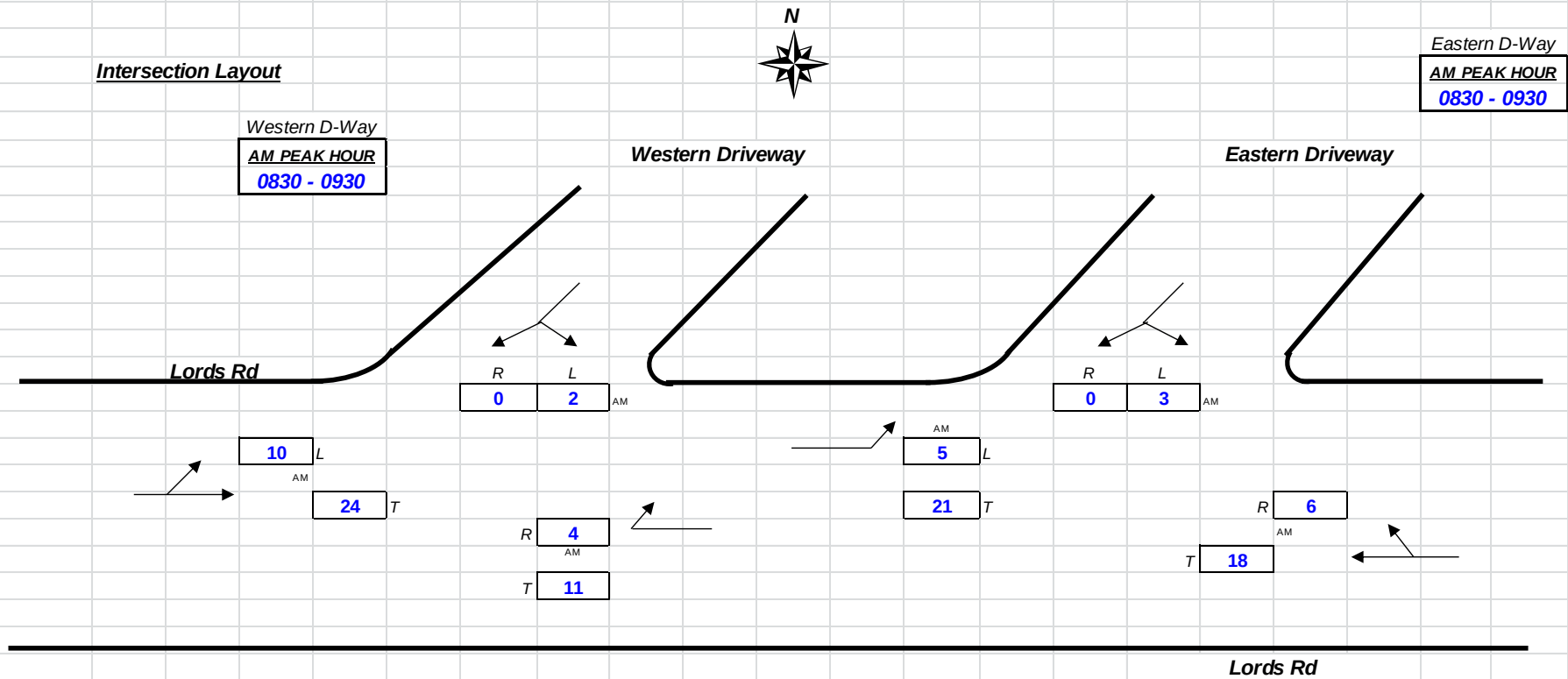
R.O.A.R. DATA

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Client : Varga Traffic Planning
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Day/Date : Thursday / 31st October 2013

Intersection Layout



Combined figures only

Weather >>>



**R.O.A.R. DATA****Reliable, Original & Authentic Results**

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 Job No/Name : 4867 LEICHHARDT Lords Rd Counts
 Day/Date : Thursday / 31st October 2013

WESTERN Driveway

Lights	WEST		NORTH		EAST				Heavies	WEST		NORTH		EAST				Combined	WEST		NORTH		EAST				
	Lords Rd		western D- Wav		Lords Rd					Lords Rd		Lords Rd		Lords Rd					Lords Rd		Lords Rd		Lords Rd				Lords Rd
Time Per	T	L	R	L	R	T	TOT		Time Per	T	L	R	L	R	T	TOT		Time Per	T	L	R	L	R	T	TOT		
1430 - 1445	0	3	0	4	1	2	10		1430 - 1445	0	0	0	0	0	0	0		1430 - 1445	0	3	0	4	1	2	10		
1445 - 1500	1	1	1	1	2	0	6		1445 - 1500	0	0	0	0	0	0	0		1445 - 1500	1	1	1	1	2	0	6		
1500 - 1515	7	2	0	3	1	8	21		1500 - 1515	0	0	0	0	0	0	0		1500 - 1515	7	2	0	3	1	8	21		
1515 - 1530	9	1	0	1	2	6	19		1515 - 1530	0	0	0	0	0	0	0		1515 - 1530	9	1	0	1	2	6	19		
1530 - 1545	5	6	0	1	3	1	16		1530 - 1545	0	0	0	0	0	0	0		1530 - 1545	5	6	0	1	3	1	16		
1545 - 1600	2	2	1	3	1	2	11		1545 - 1600	0	1	0	1	0	0	2		1545 - 1600	2	3	1	4	1	2	13		
1600 - 1615	2	5	0	2	5	1	15		1600 - 1615	0	0	0	0	0	0	0		1600 - 1615	2	5	0	2	5	1	15		
1615 - 1630	3	4	0	8	3	1	19		1615 - 1630	0	0	0	0	0	0	0		1615 - 1630	3	4	0	8	3	1	19		
1630 - 1645	7	1	0	6	0	1	15		1630 - 1645	0	0	0	0	0	0	0		1630 - 1645	7	1	0	6	0	1	15		
1645 - 1700	5	2	1	7	1	3	19		1645 - 1700	0	0	0	0	0	0	0		1645 - 1700	5	2	1	7	1	3	19		
1700 - 1715	4	7	1	18	6	0	36		1700 - 1715	0	0	0	0	0	0	0		1700 - 1715	4	7	1	18	6	0	36		
1715 - 1730	2	5	1	2	4	2	16		1715 - 1730	0	0	0	0	0	0	0		1715 - 1730	2	5	1	2	4	2	16		
1730 - 1745	4	7	1	3	4	2	21		1730 - 1745	0	0	0	0	0	0	0		1730 - 1745	4	7	1	3	4	2	21		
1745 - 1800	2	4	2	7	2	0	17		1745 - 1800	0	0	0	0	0	0	0		1745 - 1800	2	4	2	7	2	0	17		
1800 - 1815	2	3	0	6	1	0	12		1800 - 1815	0	0	0	0	0	0	0		1800 - 1815	2	3	0	6	1	0	12		
1815 - 1830	2	0	0	2	1	2	7		1815 - 1830	0	0	0	0	0	0	0		1815 - 1830	2	0	0	2	1	2	7		
Per End	57	53	8	74	37	31	260		Per End	0	1	0	1	0	0	2		Per End	57	54	8	75	37	31	262		
Lights	WEST		NORTH		EAST				Heavies	WEST		NORTH		EAST				Combined	WEST		NORTH		EAST				
	Lords Rd		western D- Wav		Lords Rd					Lords Rd		Lords Rd		Lords Rd					Lords Rd		Lords Rd		Lords Rd				Lords Rd
Peak Per	T	L	R	L	R	T	TOT		Peak Per	T	L	R	L	R	T	TOT		Peak Per	T	L	R	L	R	T	TOT		
1430 - 1530	17	7	1	9	6	16	56		1430 - 1530	0	0	0	0	0	0	0		1430 - 1530	17	7	1	9	6	16	56		
1445 - 1545	22	10	1	6	8	15	62		1445 - 1545	0	0	0	0	0	0	0		1445 - 1545	22	10	1	6	8	15	62		
1500 - 1600	23	11	1	8	7	17	67		1500 - 1600	0	1	0	1	0	0	2		1500 - 1600	23	12	1	9	7	17	69		
1515 - 1615	18	14	1	7	11	10	61		1515 - 1615	0	1	0	1	0	0	2		1515 - 1615	18	15	1	8	11	10	63		
1530 - 1630	12	17	1	14	12	5	61		1530 - 1630	0	1	0	1	0	0	2		1530 - 1630	12	18	1	15	12	5	63		
1545 - 1645	14	12	1	19	9	5	60		1545 - 1645	0	1	0	1	0	0	2		1545 - 1645	14	13	1	20	9	5	62		
1600 - 1700	17	12	1	23	9	6	68		1600 - 1700	0	0	0	0	0	0	0		1600 - 1700	17	12	1	23	9	6	68		
1615 - 1715	19	14	2	39	10	5	89		1615 - 1715	0	0	0	0	0	0	0		1615 - 1715	19	14	2	39	10	5	89		
1630 - 1730	18	15	3	33	11	6	86		1630 - 1730	0	0	0	0	0	0	0		1630 - 1730	18	15	3	33	11	6	86		
1645 - 1745	15	21	4	30	15	7	92		1645 - 1745	0	0	0	0	0	0	0		1645 - 1745	15	21	4	30	15	7	92		
1700 - 1800	12	23	5	30	16	4	90		1700 - 1800	0	0	0	0	0	0	0		1700 - 1800	12	23	5	30	16	4	90		
1715 - 1815	10	19	4	18	11	4	66		1715 - 1815	0	0	0	0	0	0	0		1715 - 1815	10	19	4	18	11	4	66		
1730 - 1830	10	14	3	18	8	4	57		1730 - 1830	0	0	0	0	0	0	0		1730 - 1830	10	14	3	18	8	4	57		
PEAK HR	12	23	5	30	16	4	90		PEAK HR	0	0	0	0	0	0	0		PEAK HR	12	23	5	30	16	4	90		



R.O.A.R. DATA

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Client : Varga Traffic Planning

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Day/Date : Thursday / 31st October 2013

WESTERN Driveway

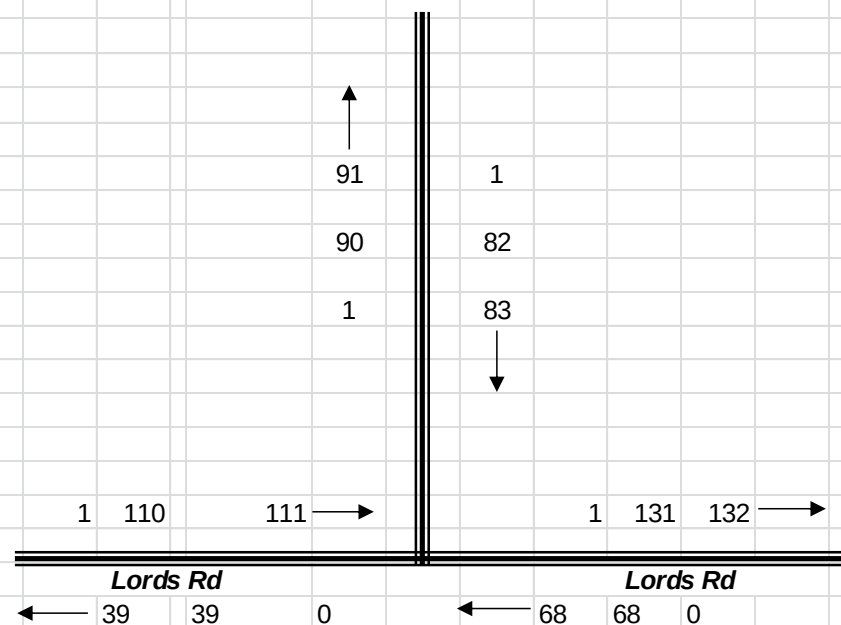
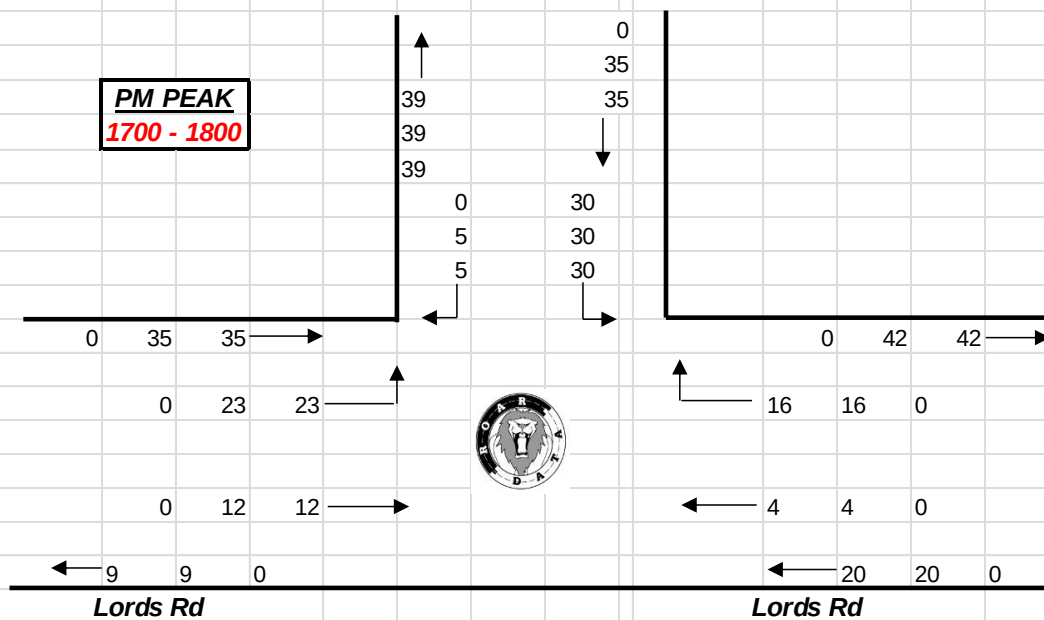
**TOTAL VOLUMES
FOR COUNT
PERIOD**



Western D-Way

Western D-Way

**PM PEAK
1700 - 1800**





R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

WESTERN CAR PARK

Accumulation

At Start **25**

1430 - 1445	25
1445 - 1500	26
1500 - 1515	26
1515 - 1530	28
1530 - 1545	36
1545 - 1600	35
1600 - 1615	43
1615 - 1630	42
1630 - 1645	37
1645 - 1700	32
1700 - 1715	26
1715 - 1730	32
1730 - 1745	39
1745 - 1800	36
1800 - 1815	34
1815 - 1830	33

At Finish **31**

Capacity **65**

**R.O.A.R. DATA****Reliable, Original & Authentic Results**

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

Client : Varga Traffic Planning
 Job No/Name : 4867 LEICHHARDT Lords Rd Counts
 Day/Date : Thursday / 31st October 2013

EASTERN Driveway

Lights	WEST		NORTH		EAST			Heavies	WEST		NORTH		EAST			Combined	WEST		NORTH		EAST		
	Lords Rd		Eastern D- Wave		Lords Rd				Lords Rd		Eastern D- Wave		Lords Rd				Lords Rd		Eastern D- Wave		Lords Rd		
Time Per	T	L	R	L	R	T	TOT	Time Per	T	L	R	L	R	T	TOT	Time Per	T	L	R	L	R	T	TOT
1430 - 1445	3	1	0	4	0	3	11	1430 - 1445	0	0	0	0	0	0	0	1430 - 1445	3	1	0	4	0	3	11
1445 - 1500	2	0	0	3	3	2	10	1445 - 1500	0	0	0	0	0	0	0	1445 - 1500	2	0	0	3	3	2	10
1500 - 1515	9	1	0	3	1	9	23	1500 - 1515	0	0	0	0	0	0	0	1500 - 1515	9	1	0	3	1	9	23
1515 - 1530	10	0	0	0	2	8	20	1515 - 1530	0	0	0	0	0	0	0	1515 - 1530	10	0	0	0	2	8	20
1530 - 1545	5	1	0	2	0	4	12	1530 - 1545	0	0	0	0	0	0	0	1530 - 1545	5	1	0	2	0	4	12
1545 - 1600	5	0	0	3	4	3	15	1545 - 1600	1	0	0	0	0	0	1	1545 - 1600	6	0	0	3	4	3	16
1600 - 1615	4	0	0	5	2	6	17	1600 - 1615	0	0	0	0	0	0	0	1600 - 1615	4	0	0	5	2	6	17
1615 - 1630	10	1	0	2	2	4	19	1615 - 1630	0	0	0	0	0	0	0	1615 - 1630	10	1	0	2	2	4	19
1630 - 1645	11	2	0	2	4	1	20	1630 - 1645	0	0	0	0	0	0	0	1630 - 1645	11	2	0	2	4	1	20
1645 - 1700	11	1	0	2	1	4	19	1645 - 1700	0	0	0	0	0	0	0	1645 - 1700	11	1	0	2	1	4	19
1700 - 1715	21	1	0	6	0	6	34	1700 - 1715	0	0	0	0	0	0	0	1700 - 1715	21	1	0	6	0	6	34
1715 - 1730	4	0	0	0	3	6	13	1715 - 1730	0	0	0	0	0	0	0	1715 - 1730	4	0	0	0	3	6	13
1730 - 1745	7	0	0	4	2	6	19	1730 - 1745	0	0	0	0	0	0	0	1730 - 1745	7	0	0	4	2	6	19
1745 - 1800	7	2	0	2	6	2	19	1745 - 1800	0	0	0	0	0	0	0	1745 - 1800	7	2	0	2	6	2	19
1800 - 1815	7	1	0	3	3	1	15	1800 - 1815	0	0	0	0	0	0	0	1800 - 1815	7	1	0	3	3	1	15
1815 - 1830	2	2	0	2	4	3	13	1815 - 1830	0	0	0	0	0	0	0	1815 - 1830	2	2	0	2	4	3	13
Per End	118	13	0	43	37	68	279	Per End	1	0	0	0	0	0	1	Per End	119	13	0	43	37	68	280

Lights	WEST		NORTH		EAST				Heavies	WEST		NORTH		EAST				Combined	WEST		NORTH		EAST								
	Lords Rd		Eastern D-Way		Lords Rd					Lords Rd		Lords Rd		Lords Rd					Lords Rd		Lords Rd		Lords Rd					Lords Rd			
Peak Per	T	L	R	L	R	T	TOT	Peak Per	T	L	R	L	R	T	TOT	Peak Per	T	L	R	L	R	T	TOT	Peak Per	T	L	R	T	TOT		
1430 - 1530	24	2	0	10	6	22	64	1430 - 1530	0	0	0	0	0	0	0	1430 - 1530	24	2	0	10	6	22	64	1430 - 1530	24	2	0	10	6	22	64
1445 - 1545	26	2	0	8	6	23	65	1445 - 1545	0	0	0	0	0	0	0	1445 - 1545	26	2	0	8	6	23	65	1445 - 1545	26	2	0	8	6	23	65
1500 - 1600	29	2	0	8	7	24	70	1500 - 1600	1	0	0	0	0	0	1	1500 - 1600	30	2	0	8	7	24	71	1500 - 1600	30	2	0	8	7	24	71
1515 - 1615	24	1	0	10	8	21	64	1515 - 1615	1	0	0	0	0	0	1	1515 - 1615	25	1	0	10	8	21	65	1515 - 1615	25	1	0	10	8	21	65
1530 - 1630	24	2	0	12	8	17	63	1530 - 1630	1	0	0	0	0	0	1	1530 - 1630	25	2	0	12	8	17	64	1530 - 1630	25	2	0	12	8	17	64
1545 - 1645	30	3	0	12	12	14	71	1545 - 1645	1	0	0	0	0	0	1	1545 - 1645	31	3	0	12	12	14	72	1545 - 1645	31	3	0	12	12	14	72
1600 - 1700	36	4	0	11	9	15	75	1600 - 1700	0	0	0	0	0	0	0	1600 - 1700	36	4	0	11	9	15	75	1600 - 1700	36	4	0	11	9	15	75
1615 - 1715	53	5	0	12	7	15	92	1615 - 1715	0	0	0	0	0	0	0	1615 - 1715	53	5	0	12	7	15	92	1615 - 1715	53	5	0	12	7	15	92
1630 - 1730	47	4	0	10	8	17	86	1630 - 1730	0	0	0	0	0	0	0	1630 - 1730	47	4	0	10	8	17	86	1630 - 1730	47	4	0	10	8	17	86
1645 - 1745	43	2	0	12	6	22	85	1645 - 1745	0	0	0	0	0	0	0	1645 - 1745	43	2	0	12	6	22	85	1645 - 1745	43	2	0	12	6	22	85
1700 - 1800	39	3	0	12	11	20	85	1700 - 1800	0	0	0	0	0	0	0	1700 - 1800	39	3	0	12	11	20	85	1700 - 1800	39	3	0	12	11	20	85
1715 - 1815	25	3	0	9	14	15	66	1715 - 1815	0	0	0	0	0	0	0	1715 - 1815	25	3	0	9	14	15	66	1715 - 1815	25	3	0	9	14	15	66
1730 - 1830	23	5	0	11	15	12	66	1730 - 1830	0	0	0	0	0	0	0	1730 - 1830	23	5	0	11	15	12	66	1730 - 1830	23	5	0	11	15	12	66
PEAK HR	23	5	0	11	15	12	66	PEAK HR	0	0	0	0	0	0	0	PEAK HR	23	5	0	11	15	12	66	PEAK HR	23	5	0	11	15	12	66



R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

EASTERN Driveway

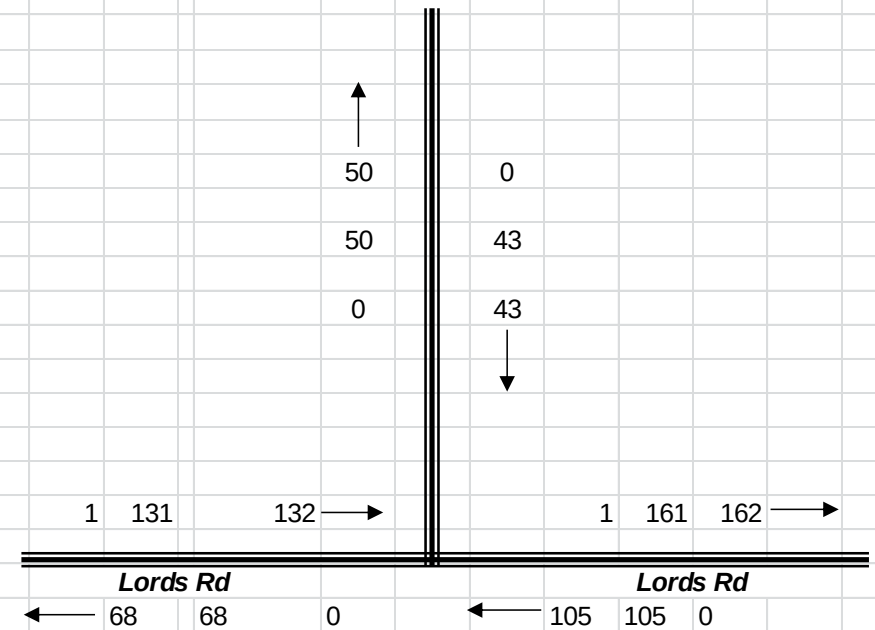
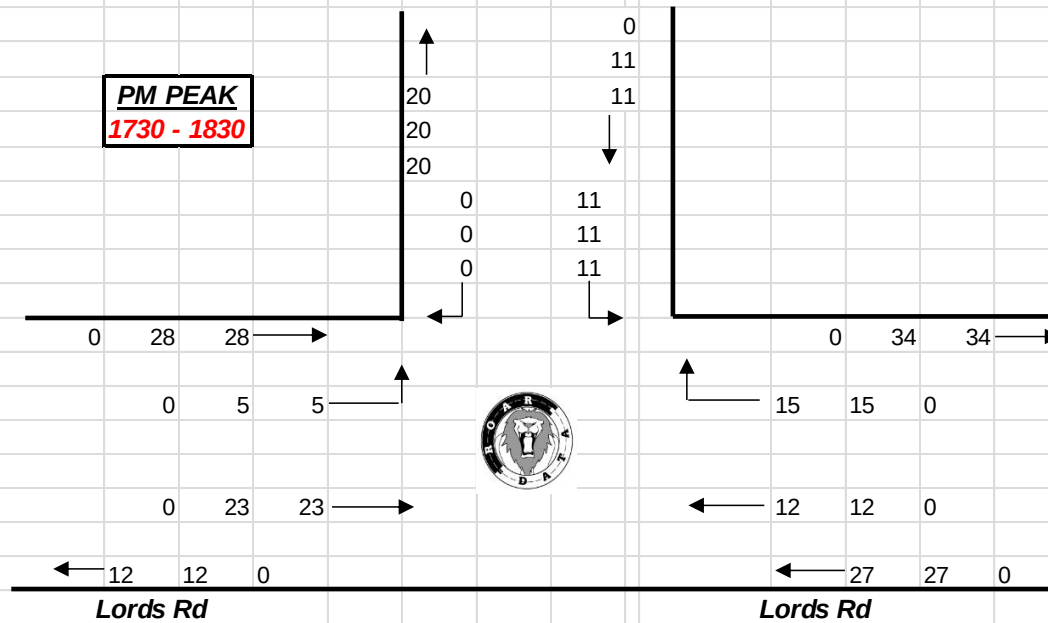


TOTAL VOLUMES
FOR COUNT
PERIOD

Eastern D-Way

Eastern D-Way

PM PEAK
1730 - 1830





R.O.A.R. DATA

Reliable, Original & Authentic Results

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

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

EASTERN CAR PARK

Accumulation

At Start **21**

1430 - 1445	18
1445 - 1500	18
1500 - 1515	17
1515 - 1530	19
1530 - 1545	18
1545 - 1600	19
1600 - 1615	16
1615 - 1630	17
1630 - 1645	21
1645 - 1700	21
1700 - 1715	16
1715 - 1730	19
1730 - 1745	17
1745 - 1800	23
1800 - 1815	24
1815 - 1830	28

At Finish **27**

Capacity **37**



R.O.A.R. DATA

Reliable, Original & Authentic Results

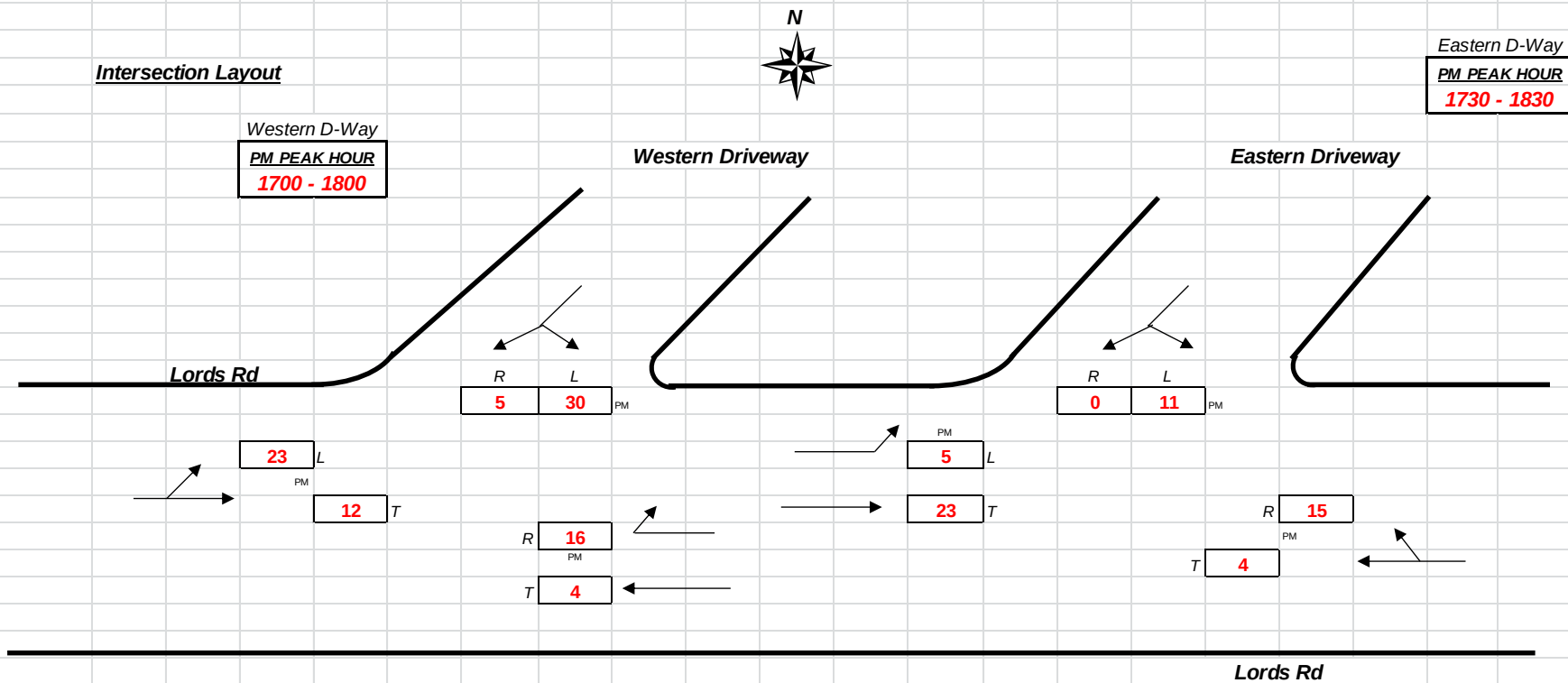
Ph.88196847, Fax 88196849, Mob.0418-239019

Client : Varga Traffic Planning

Job No/Name : 4867 LEICHHARDT Lords Rd Counts

Day/Date : Thursday / 31st October 2013

Intersection Layout



Combined figures only

Weather >>>



**R.O.A.R. DATA****Reliable, Original & Authentic Results**

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



Client

: Varga Traffic Planning

Job No / Name

: 4867 LEICHHARDT Lords Rd Parking & Counts

Day/Date

: Thursday 31st October 2013

Area	Location	Cap	0500	0530	0600	0630	0700	0730	0800	0830	0900	0930	1000	1030	1100	1130	1200	1230	1300	1330
A	Lords Rd North / Side	8	0	1	1	1	1	1	2	6	7	8	8	7	7	7	7	7	7	7
B	Lords Rd North / Side	4	2	2	2	2	2	3	4	4	4	4	4	4	4	4	4	4	4	4
C	Lords Rd North / Side	7	4	4	4	4	6	6	7	7	6	6	5	5	5	5	7	6	5	6
D	Lords Rd South / Side	10	0	0	0	0	0	0	3	3	6	1	0	0	0	0	0	0	0	0
E	Lords Rd South / Side	6	1	1	1	1	3	3	4	4	5	5	5	5	5	5	5	5	6	5
F	Lords Rd South / Side	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0
G	Lords Rd South / Side	2	1	1	1	2	2	2	2	2	2	1	2	2	1	1	1	1	2	2
H	Lords Rd South / Side	3	0	0	0	0	0	0	0	0	1	2	2	1	1	1	1	1	1	1
I	Kegworth St East / Side	5	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2
J	Kegworth St North / Side	7	6	6	5	5	4	3	3	2	1	1	1	1	0	0	0	2	2	2
K	Kegworth St North / Side	3	1	1	1	1	2	2	1	2	0	2	2	0	0	0	0	0	0	1
L	Kegworth St North / Side (5 mins)	15	0	0	0	0	0	2	2	2	6	11	8	7	6	7	5	6	6	6
M	Kegworth St South / Side	17	8	8	8	8	9	9	9	11	11	10	11	8	9	9	11	10	14	16
N	Kegworth St South / Side	9	6	6	7	7	4	4	2	1	1	2	2	2	1	1	1	2	2	2
O	Kegworth St West / Side	7	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0
P	Davies St West / Side	25	20	20	20	20	18	18	16	15	15	16	16	15	16	16	16	17	13	14
Q	Davies St East / Side	10	6	6	6	6	7	7	9	9	9	7	7	7	7	7	7	7	8	8
	Car Parks																			
1	Western	65	4	7	12	12	12	15	17	15	20	28	29	33	29	31	28	34	30	27
2	Eastern	37	5	13	17	14	12	12	15	14	11	20	24	27	22	22	17	16	16	17
Total of Vehicles		241	67	79	88	86	85	90	100	101	109	129	131	129	117	120	114	121	119	120
Number of Vacant Vehicles			174	162	153	155	156	151	141	140	132	112	110	112	124	121	127	120	122	121
% of Capacity Used			27.8%	32.8%	36.5%	35.7%	35.3%	37.3%	41.5%	41.9%	45.2%	53.5%	54.4%	53.5%	48.5%	49.8%	47.3%	50.2%	49.4%	49.8%

**R.O.A.R. DATA****Reliable, Original & Authentic Results**

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



Client

: Varga Traffic Planning

Job No / Name

: 4867 LEICHHARDT Lords Rd Parking & Counts

Day/Date

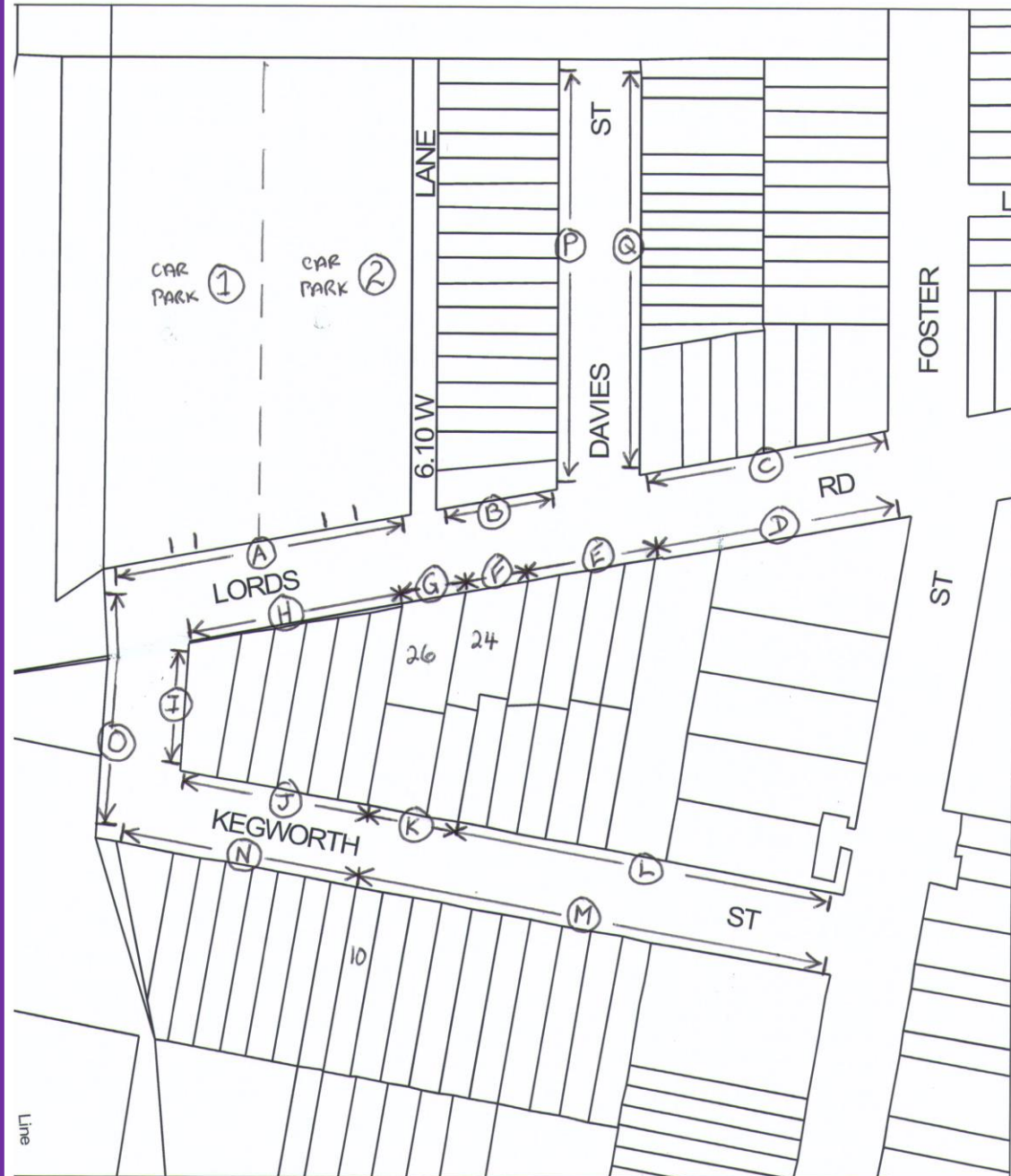
: Thursday 31st October 2013

Area	Location	Cap	1400	1430	1500	1530	1600	1630	1700	1730	1800	1830	1900	1930	2000	2030	2100	2130	2200
A	Lords Rd North / Side	8	6	6	8	8	6	6	3	3	7	8	8	6	5	0	0	0	0
B	Lords Rd North / Side	4	3	4	4	4	4	4	3	2	3	4	4	2	2	1	1	1	1
C	Lords Rd North / Side	7	7	7	7	6	5	5	4	5	2	2	2	3	4	4	4	4	4
D	Lords Rd South / Side	10	0	1	8	2	2	1	4	1	1	1	1	1	1	1	1	1	1
E	Lords Rd South / Side	6	5	5	5	3	3	3	2	2	3	5	4	4	1	1	1	1	1
F	Lords Rd South / Side	1	0	0	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1
G	Lords Rd South / Side	2	2	2	2	2	2	2	1	2	2	2	2	1	1	1	1	1	1
H	Lords Rd South / Side	3	1	1	1	1	1	2	0	1	1	3	3	3	1	1	1	1	1
I	Kegworth St East / Side	5	2	2	2	2	2	2	3	3	3	3	4	4	4	3	3	2	2
J	Kegworth St North / Side	7	2	3	3	4	1	1	2	3	2	4	4	7	7	7	6	6	5
K	Kegworth St North / Side	3	1	1	1	0	1	2	1	2	2	2	2	2	2	2	2	3	3
L	Kegworth St North / Side (5 mins)	15	8	9	13	7	3	3	1	0	0	0	0	0	0	1	1	1	1
M	Kegworth St South / Side	17	15	13	14	12	8	7	6	8	10	13	12	11	12	11	10	8	10
N	Kegworth St South / Side	9	1	1	1	4	2	4	3	3	3	4	4	4	4	4	4	4	5
O	Kegworth St West / Side	7	0	0	0	1	0	0	0	0	0	1	2	3	3	0	0	0	0
P	Davies St West / Side	25	14	15	17	13	9	9	9	9	10	11	11	10	10	10	10	12	12
Q	Davies St East / Side	10	8	8	9	7	7	8	8	7	6	7	6	6	6	6	6	6	6
	Car Parks																		
1	Western	65	28	25	28	28	33	40	32	30	30	31	33	14	15	14	14	4	3
2	Eastern	37	19	21	20	23	25	23	25	22	24	27	30	22	19	12	10	7	5
Total of Vehicles		241	122	124	144	128	115	123	108	104	109	128	132	103	97	80	76	63	62
Number of Vacant Vehicles			119	117	97	113	126	118	133	137	132	113	109	138	144	161	165	178	179
% of Capacity Used			50.6%	51.5%	59.8%	53.1%	47.7%	51.0%	44.8%	43.2%	45.2%	53.1%	54.8%	42.7%	40.2%	33.2%	31.5%	26.1%	25.7%



R.O.A.R. DATA
Reliable, Original & Authentic Results
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Client : Varga Traffic Planning
Job No / Name : 4867 LEICHHARDT Lords Rd Parking & Counts
Day/Date : Thursday 31st October 2013



APPENDIX B

SIDRA ANALYSIS RESULTS