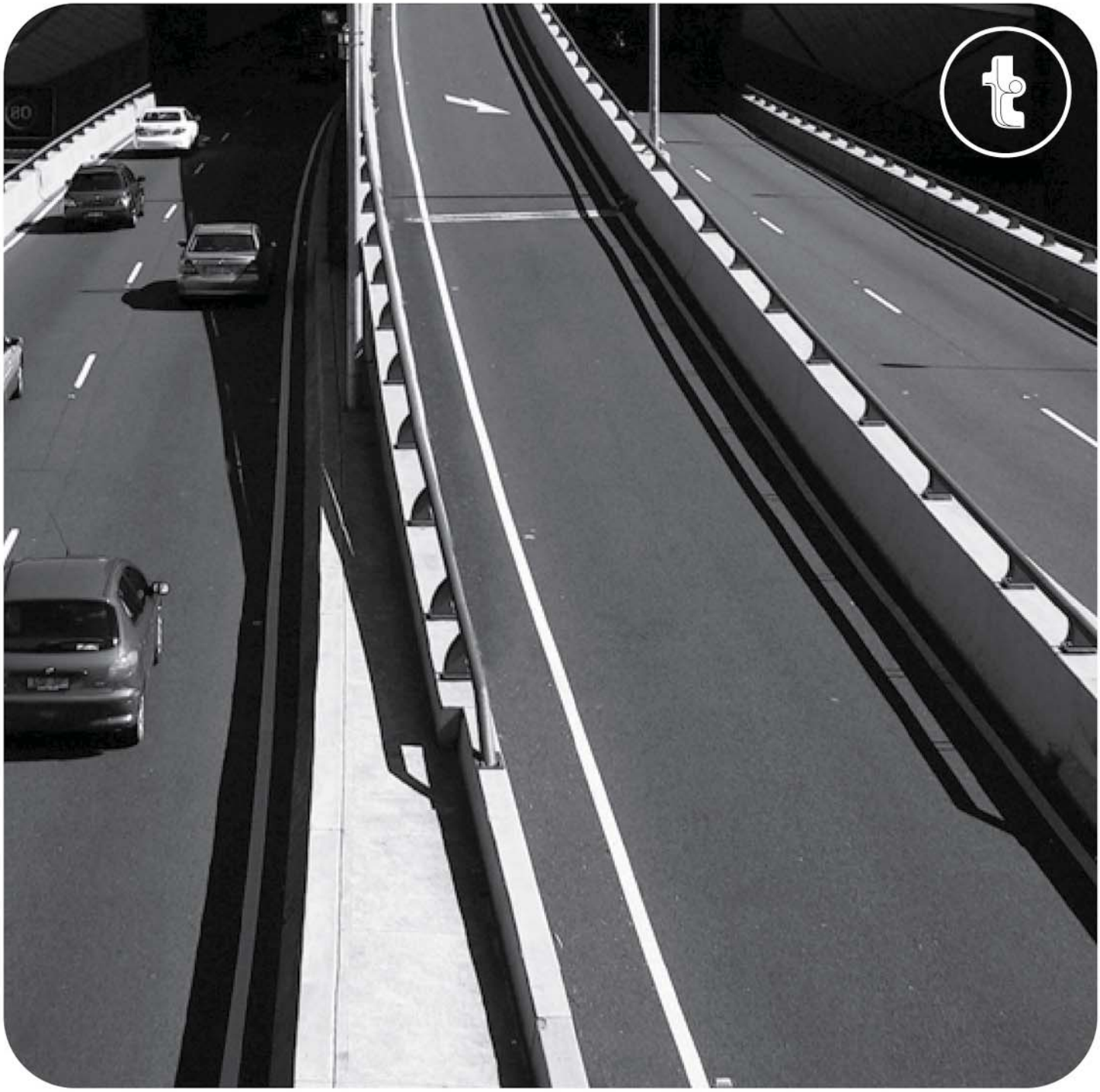

traffic management plan

proposed energy australia cable depot at 9-13 carter street, homebush

prepared on behalf of energy australia. by **TRAFFIX** traffic & transport planners
ref: 09 266 TMP report v2 august 2010

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traffic & transport planners

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abn: 66065132961

contents

1. introduction

TRAFFIX was previously commissioned by Energy Australia to undertake a traffic impact assessment in support of a development application relating to the operation of a cable depot at 9-13 Carter Street, Homebush from within an existing industrial building. The development is located within the Auburn Council LGA and was assessed under that council's controls.

The report was referred by Auburn Council to the RTA's SRDAC and the response of that committee is provided in **appendix a**. Based mainly on Item 1 of that response, but having regard also for other matters raised by Council officers, Council's Information Report that was forwarded to the Joint Regional Planning Panel (JRPP) identified numerous apparent deficiencies. Council's report did not make reference to other information provided to it by the applicant and in addition, the report did not have the benefit of any further response from the SRDAC to that additional information.

The JRPP subsequently requested that a Traffic Management Plan (TMP) be prepared to deal comprehensively with all outstanding matters and this report has been prepared in response to that request.

The JRPP also requested that discussions be held with the RTA with the aim of obtaining 'in principle' approval to the future use of permits as part of the TMP. Following discussions with the RTA, it has been confirmed that the RTA requires that the TMP should be put formally to the SRDAC, so that all relevant internal referrals can be coordinated by the RTA for response to the JRPP.

2. location and site

The site is situated on the northern side of Carter Street, between Birnie Avenue to the east and Uhrig Road to the west. It lies to the immediate south of Sydney Olympic Park with Telstra Stadium and The Sydney Olympic Athletic Centre located 450 metres and 400 metres to the north and east respectively.

A Location Plan is presented in **figure 1**, with a Site Plan presented in **figure 2**. Reference should also be made to the Photographic Record presented in **appendix b**, which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

It is emphasised that Carter Street, Uhrig Road, Australia Avenue and Hill Road are all approved B Double routes as shown in **appendix c**.

Source: UBD 2008

N

0 500m

impact assessment: proposed industrial development

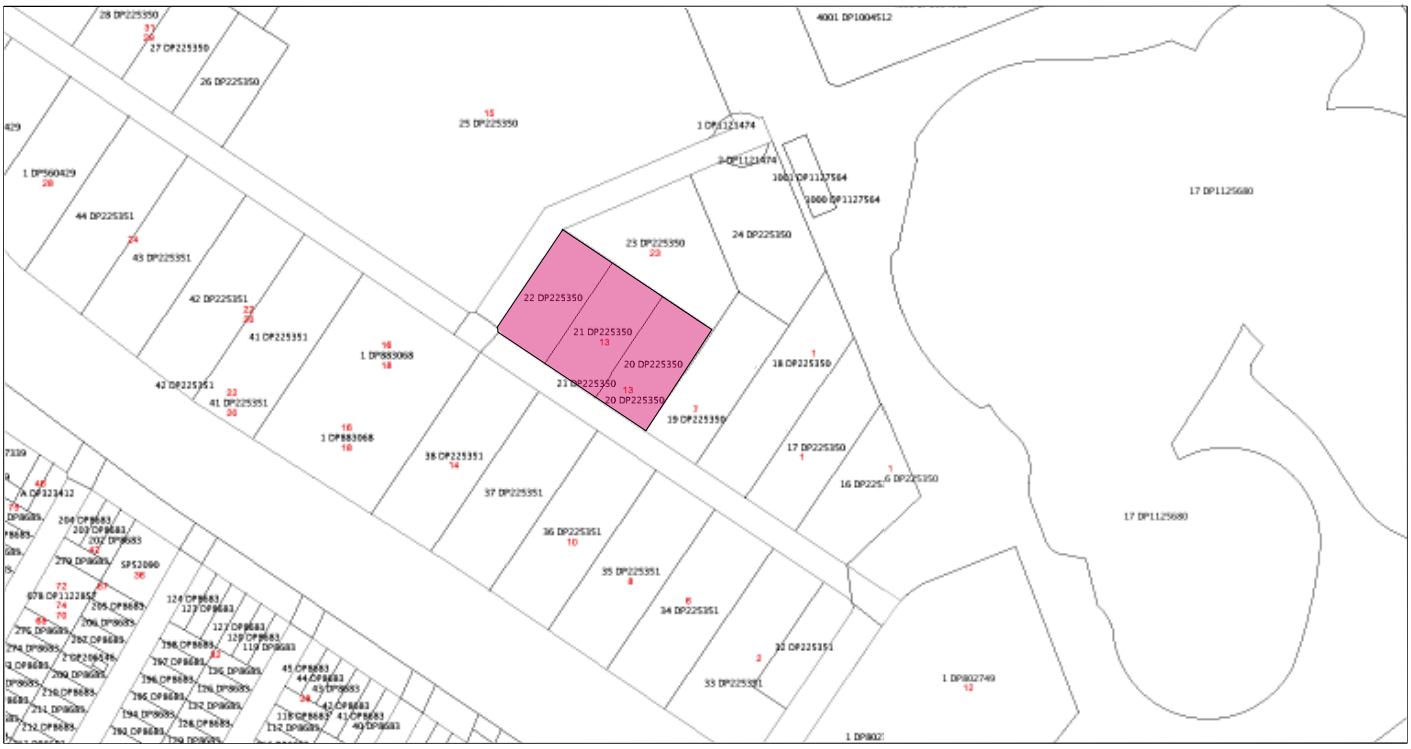
13 carter street, homebush

figure 1

location

prepared on behalf of Custance

by **Traffix traffic & transport planners**



N

lands department cadastre plan +
aerial photograph: dated January 2007

0 200m

impact assessment: proposed industrial development
13 carter street, homebush

figure 2
site

prepared on behalf of Custance
by **Traffix traffic & transport planners**

3. site access arrangements

3.1 Carter Street

Carter Street is constructed with a 13 metre wide undivided carriageway and carries a single lane of traffic in either direction with kerbside parking along both sides and is subject to 50km/hr speed zoning. There is a broken centreline in Carter Street. Under the Australian Road Rules (Rule 134) vehicles can cross the centreline of Carter Street to enter or exit a driveway and this has been previously confirmed by the RTA (refer to email presented in **appendix d**). Nevertheless, the proposed (widened) driveway is able to accommodate the all normal trucks (i.e. that are not required to operate with a permit - up to a 23 metre truck unladen) without any need to cross the centreline as shown in **appendix e**. This requires the driveway to be widened as proposed in the original DA, together with the removal of an additional parking space on the western side of the driveway, assuming vehicles do not cross the centreline. That is, the loss of this parking space is not essential.

3.2 Uhrig Road

Uhrig Road is also constructed with a 13 metre wide undivided carriageway and carries a single lane of traffic in either direction with generally kerbside parking along both sides with and is subject to a 50km/hr speed zoning. There is no centreline in Uhrig Road so that vehicles can cross the centreline on entry or exit if required. Bus Zone restrictions of length 30 metres extend south from the existing Uhrig Road site access on both sides of the road. The driveway was originally proposed to be widened on its southern side under the original DA, with a generous splay to facilitate the left turn exit movement of an unladen 23 metre long truck without crossing the centreline (refer **appendix f**). However, Council has requested that the driveway be narrowed on the grounds of pedestrian safety, with the unavoidable result that such a vehicle turning left out into Uhrig Road would need to cross the centreline, which is nonetheless an acceptable situation given its infrequency.

With regard to truck frequencies under normal (non-permit) operations, these will relate principally to the exit of a 23 metre truck onto Uhrig Road after it has delivered its cable load under permit conditions. This will occur between 1am and 5am with a maximum of 3 trucks over this period. This will occur over a 10 day period on 4 occasions per year. That is, there will be a maximum of 120 exits

per year onto Uhrig Road which would involve a left turn movement across the centreline which can occur without a permit under the Australian Road Rules. It is considered that this very moderate volume, at the times it will occur, does not warrant the widening of the driveway to 24 metres to avoid crossing the centreline. However, in the event that a median is constructed in Uhrig Road, such a driveway would be required. The widened driveway that is proposed is shown on the base drawing in **appendix f** (without the additional splay shown to prevent crossing the centreline). This does not involve any loss of parking as there is a bus stop to south of the driveway and this arrangement is supported by the State Transit Authority.

4. truck generation

4.1 normal daily trucks

The site is expected to generate 74 trucks per day (74 in, 74 out) relating to 'normal' truck operations, which require no permit and would be similar in nature to any industrial use. These normal daily truck operations involve a range of rigid truck types from vans to large rigid trucks and all such vehicles can use the (widened) driveways without crossing any centrelines and this assumes all movements at both driveways. It is noted that this is a superior outcome to the situation that would occur with any use of the existing site for industrial purposes under current approvals, which could use the existing (narrow) driveways without limitation, including by articulated trucks even though these would cross the road centreline on both Carter Street and Uhrig Road for some movements. This level of truck activity equates to an average of only 6 trucks per hour over a 12 hour day which is very moderate in the context of an industrial use.

4.2 special trucks

in addition to this there will be up to 120 special trucks per year (120 in, 120 out) that will occur between 1am and 5am and are involved in the delivery of cables to the site from Port Botany and these arrivals occur under permit (convoy) operations. The departures of these trucks will not require a convoy as the truck returns to its normal configuration with a width of 2.5 metres. These movements occur over a total of 40 days throughout the year, over 4 separate periods of 10 days, with 3 convoys per day.

There will also be deliveries of these cables to projects periodically throughout the year, which will generate an average of a little over two convoys per week to achieve the 'balance' of 120 convoys per year. In practice, these involve more random variations of volumes due to the timing of projects and the demands for cables associated with each project. These also involve the movement of special vehicles under permit for these departures, but not for the arrivals when these trucks are in normal configuration.

Accordingly, if averaged over a one year period, there will be about 240 convoy operations per year (120 cable truck arrivals and 120 separate cable truck departures) and these will all occur between 1am and 5am. This is an average of 4.6 per week throughout the year, though as mentioned, there will be variability due to the concentration of cable delivery activity; and the variability in demands of individual projects.

Nevertheless, all movements will be subject to separate applications to the RTA for permits.

5. truck access routes

5.1 normal operations

As mentioned, normal trucks (operating without any need for a permit) can use the entire public road network in the region. In the case of any unladen 23 metre special trucks, this includes reliance on all approved B Double routes in the locality as shown in **appendix c**, including Carter Street, Uhrig Road, Australia Avenue, Hill Road, Homebush Bay Drive, the M4 Motorway and Parramatta Road.

5.2 permit operation routes

Trucks operating under permit are subject to an application to the RTA for each occasion and these applications will be made by Energy Australia's contractors. This relates to the 120 trucks per year that will be involved in the delivery of coils to the site.

Based on advice from Energy Australia and as stated in the letter from EA dated 2 July 2010 (refer to **appendix g**) these deliveries will originate at Port Botany, with trucks using the M4, turning left onto Silverwater Road, then left onto Parramatta Road, then left into Hill Road, then right into Carter Street, to turn left into the site. These movements involve the use of a 23 metre long truck with the chassis expanded to a width of generally 3500mm, though with the potential to increase to 4300mm.

As mentioned, these movements will occur with up to 120 arrivals per year, with up to 3 per day over a 10 day period on 4 occasions per year. These will occur between 1am and 5am.

The departure routes for the cable truck deliveries will depend on the locations of specific projects and will be subject to separate applications.

6. rta permit procedures

6.1 procedures

The RTA's permit procedures will be followed by EA contractors and it is expected that separate approvals will be sought for each of the four 10 day periods per year.

Preliminary advice from the RTA is contained in the email from the RTA's Sydney Region Freight Route Coordinator dated 29th July 2010 which is provided in **appendix d**. This advice anticipates a need for an escort with one pilot vehicle, and for the vehicle to have flags and white vehicle signage. The role of the pilot vehicle is to warn vehicles to slow down and be prepared to pull over and this includes all vehicles encountered along Carter Street.

Notwithstanding, formal 'in principle' approval has been sought by the JRPP from the RTA to confirm that this level of activity can be supported, subject to formal permit applications being made in the future. The RTA's advice that Council are unlikely to have a role in the permit application procedures is noted and the RTA's advice that Council be informed of when trucks will be operating under permit is supported.

It is noted that Energy Australia currently contracts a private transport provider to collect drums from Port Botany and deliver to storage facilities. These operations involve the same class of vehicles under permits as are proposed at the subject site. These occur at the existing facility in Dympna Street Cromer (Dee Why) which is substantially larger than the proposed Carter Street facility and as such has a higher delivery/pick up frequency than will occur at the proposed Carter Street facility. Deliveries and pick ups of the large drums similarly require an RTA permit and movements are also undertaken between the hours of 1am and 5am.

It is emphasised that the movements of these special vehicles under permit are critical to Energy Australia's ongoing operations. Transmission cable used by Energy Australia is imported from Asia and arrives on drums of varying sizes, with the largest being up to 33 tonne (2.85m wide, 4.3m high and 4.3m deep). Energy Australia also contracts the pick up of these drums from their Dympna Street facility to utilise on project sites, such as the laying of overhead or underground transmission lines.

The transport provider utilizes a trailer that can be expanded greater than 2.5m (under RTA permit) to accommodate the maximum width of the cable drums. The transport provider currently obtains all necessary permits directly from the RTA for deliveries and pick ups for large cable drums. This special truck is shown in **appendix k**.

6.2 traffic impacts and safety

Council and the JRPP have raised concerns over the movement of (up to) three heavy vehicles under convoy conditions (with an escort vehicle and flags etc) between 1am and 5am, having regard for the existing traffic volumes, which are evidently quite high between 4am and 5am. In order to assess this in more detail a survey was undertaken between 1am and 5am on Monday 9th August 2010 and the results are provided in **appendix h**. The survey results showed:

- There was an average of 44 veh/hr through the intersection of Carter Street with Uhrig Road between 1am and 5am (sum of all approaches);
- There was a maximum of 75 veh/hr through the intersection of Carter Street with Uhrig Road between 4am and 5am (sum of all approaches);
- At the peak time between 4am and 5am, there were 50 veh/hr on Carter Street west of the intersection; and
- At the peak time between 4am and 5am, there were 18 veh/hr on Uhrig Road northof the intersection.

These volumes are low (less than one vehicle per minute sum of both directions) and the convoy operations will be able to operate safely. In addition, these are numerous opportunities for vehicles to pull over if necessary, making use of kerbside parking and driveways along the route.

7. external road changes

7.1 signals at carter/uhrig intersection

Council has raised the prospect of the future installation of traffic signals at the intersection of Carter Street with Uhrig Road. In this regard, the operation of 23 metre trucks involves arrivals straight through this intersection along Carter Street (eastbound) so that signals would create no difficulties for any vehicles. The exit movements from the site by these vehicles relates to right turn movements from Uhrig Road into Carter Street and this movement is not as critical for the design of the intersection as are other movements. It will require the signal holding line in Carter Street (for eastbound traffic) to be set back a short distance from the intersection, to allow for the right turn swept path.

Other movements are far more critical but it is emphasised that none of these relate to the subject site operations. This includes the left turns of a 25 metre B Double both in and out of Uhrig Road as shown in **appendix i**. Both of these movements require trucks to traverse the centrelines of Uhrig Road and the left turn movement from Uhrig Road also requires the truck to traverse the incorrect side of the carriageway in Carter Street. It is considered that there is no reasonable prospect of traffic signals being able to be installed without road widening. Preliminary discussions with RTA officers, given that the RTA must approve any signals, has also indicated concerns over their feasibility having regard for the need to accommodate B Double operations.

Notwithstanding, information as to the status of these signals and any designs have been requested from Council and as at the time of preparation of this report, no response has been received.

7.2 median in uhrig road

Council's Carter Street Precinct DCP (2003) identifies Council's intention to construct s central median in Uhrig Road to facilitate pedestrian crossings and provide for tree planting. Details of the status of this proposal and any designs have been requested from Council and at the time of preparation of this report, no response has been received.

Nevertheless, having regard for the use of Uhrig Road as a B Double route and also for the road curvature, a swept path assessment has been undertaken and this is provided in **appendix j**. The analysis demonstrates that a median can only be constructed if all on-street parking were eliminated on both sides of Uhrig Road through the bend and including the access driveway to the subject site. This situation is compounded by the inability to construct a median within Uhrig Road on approach to Carter Street due to the need to accommodate B Doubles. Hence, the prospect of a median in Uhrig Road would appear to be very limited.

Nevertheless, should this be constructed in the future, the subject development would be able to respond by widening the driveway. Alternately, options to turn the special 23 metre trucks within the site to exit via a right turn onto Carter Street could also be explored.

8. internal operations

An internal traffic management plan is to be formulated for implementation by the dock manager who will be responsible for supervising the day to day operations of the site. The management plan should be provided to all staff and visitors including regular delivery drivers. The key components of a draft management plan are outlined below and will require additional information subject to input from Energy Australia. It is expected that a final management plan will be prepared in response to a suitable condition of consent.

- The distribution centre is serviced by the following types of operational transport vehicles
    - Small commercial vehicles
    - Rigid vehicles
    - Articulated vehicles;
- Operational transport vehicles will:
    - Only travel on concrete surfaces
    - Follow the instructions of the dock manager at all times
    - Only park in the docks or allocated parking areas;
- Cars will:
    - Only travel on bitumen surfaces;
    - Not access the hardstand area unless allowed by the dock manager;
    - Only park within designated parking bays located on-site;
- Speed Limits;
    - All vehicles and equipment will travel at a speed no greater than 10kph at all times;
    - Speed signs are to be installed around the main traffic routes
- Safety Induction;
    - All operators of operational transport vehicles will be inducted into the site's safety program;
    - The safety inductions are to clearly indicate the safety policies and procedures of Energy Australia;
    - Requirements for personal protective equipment are to be outlined;

- Vehicles entering the site:
    - Vehicles 19.0 metres or longer are to contact the dock manager prior to arrival;
    - All vehicles are to enter from most eastern driveway access to Carter Street unless specifically informed by the dock manager to use an alternate access;
    - The safety inductions are to clearly indicate the safety policies and procedures of Energy Australia;
    - All vehicles are to proceed to the appropriate dock and adhere at all times to the posted speed limit;
    - All vehicles are at all times to follow the instructions of the dock manager;
- Vehicles exiting the site:
    - Vehicles 19.0 metres or larger are to exit the site using the Uhrig Road access;
    - All vehicles are to undergo a safety check to ensure all loads are secured by the dock manager prior to leaving the facility;
    - All vehicles are to adhere to the signposted speed limits;

The implementation of final plan (in response to a suitable condition of consent) will reflect best practice and will ensure a high level of safety for all users on the site.

9. conclusions

Based on the above, the proposed development is considered satisfactory. The formal 'in principle' support of the RTA is requested so that development approval can be obtained with confidence that future permit applications are capable of being approved, subject to proper procedures being followed.

The RTA's response to the future provision of traffic signals at the intersection of Carter Street with Uhrig Road is also requested, though the subject development is capable of operating with any signals that might be approved.

appendix a

rta letter

Your Reference:	DA-64/2010
Our Reference:	CAC 10M552-1 SYD10/00246
Contact:	Aleks Tancevski
Telephone:	8849 2313

RTA

The General Manager
Auburn Council
PO Box 118
Auburn NSW 1835

Attention: Steven Griffiths

ALTERATIONS AND ADDITIONS TO AN EXISTING INDUSTRIAL WAREHOUSE AND ANCILLARY WORKSHOPS AT 9-13 CARTER STREET, LIDCOMBE

Dear Sir/Madam,

I refer to Council's letter dated 29 March 2010 (Council Ref: DA-64/2010) with regard to the above-mentioned development application, which was referred to the Roads and Traffic Authority (RTA) as a 'Traffic Generating Development' in accordance with Clause 104 of State Environmental Planning Policy (Infrastructure) 2007.

The RTA has reviewed the above-mentioned development application and the following comments are provided to Council for it's consideration in the determination of the development application:

1. The swept path analysis of 23.0 metre articulated vehicles submitted with the application is not acceptable as the swept path analysis shows that 23.0 metre articulated vehicles track over the wrong side of Carter Street. In this regard, Council shall ensure that the swept path of 23.0 metre articulated vehicles entering and exiting the subject site, as well as manoeuvrability through the site, can be undertaken in accordance with AUSTROADS.

2. Off street parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1 - 2004 and AS 2890.2 - 2002 for service areas.

3. All vehicles are to enter and leave the site in a forward direction.

4. All loading and unloading shall occur on site.

5. All works/regulatory signposting associated with the proposed development are to be at no cost to the RTA.

27-31 Argyle Street Parramatta NSW 2150
PO Box 973 Parramatta CBD NSW 2150 DX28555 Parramatta
www.rta.nsw.gov.au | 13 17 82

In accordance with Clause 104(4) of State Environmental Planning Policy (Infrastructure) 2007, it is essential that a copy of Council's determination on the proposal (conditions of consent if approved) is forwarded to the RTA at the same time it is sent to the developer.

Any inquiries in relation to this development application can be directed to Assistant Land Use Planner, Aleks Tancevski, by telephone on (02) 8849 2313 or facsimile (02) 8849 2918.

Yours faithfully

James Hall
Senior Land Use Planner
Transport Planning, Sydney Region

4 May 2010

appendix b

photographic record

View looking west past along the Carter Street site frontage.

View east across Uhrig Road towards the access situated in the northwest corner of the site.

View north across Carter Street towards the easternmost access to the site.

View looking south along Uhrig Road along its site frontage.

View looking south along Hill Road towards its intersection with Carter Street.

View northeast towards the site across the Carter Street - Uhrig Road ‘T-junction’

appendix c

approved B Double routes

TRAVEL RESTRICTIONS VEHICLE ROUTES
Sydney Map: E

NSW GOVERNMENT | RTA

B-Doubles, Road Trains, 4.6m High Vehicles
- All Access Approved Zones
- Exemption Routes

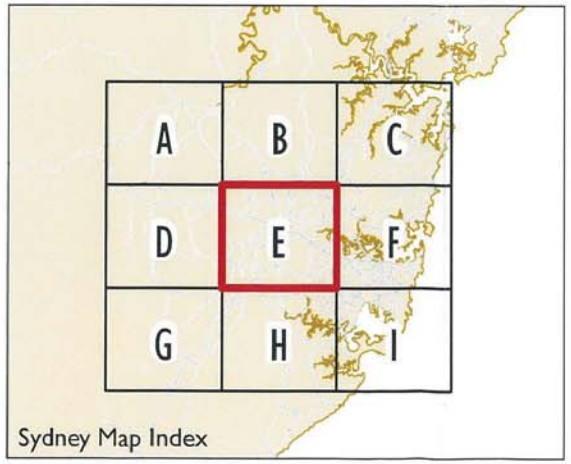
B-Doubles
- 25/26m B-Double Routes
- 23m B-Double Routes
- 19m and >50t B-Double Routes
- B-Double Approved Zones
- B3 — B-Double Route Restrictions Number
- B20 — B-Double Area Restrictions Number

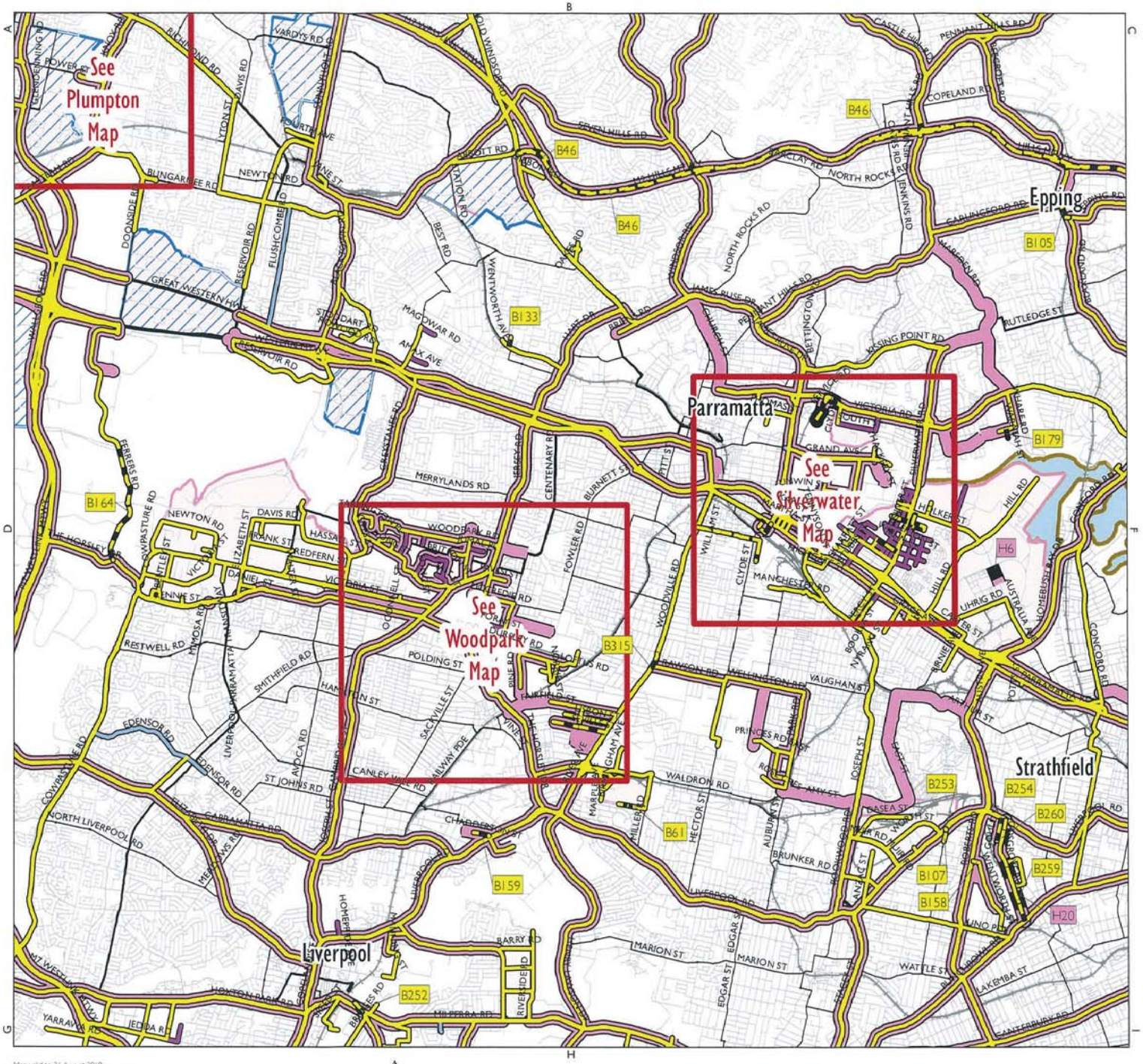
Road Trains
- Road Train Routes
- R3 — Road Train Route Restrictions Number
- R18 — Road Train Area Restrictions Number

4.6m High Vehicles
- 4.6m High Vehicle Routes
- 4.6m High Vehicle Approved Zones
- H3 — 4.6m High Vehicle Route Restrictions Number
- H20 — 4.6m High Vehicle Area Restrictions Number

Route Travel Restrictions Symbol
Information of travel restrictions are on the Travel Restrictions Table.

Classified Roads
- Regional Roads
- State Roads
- Local Roads





Map valid to 31 August 2010
Map produced by RTA, RIAMT, SIS Unit.

Scale 1:115,000

0 1.25 2.5 5 Km

H6
HILL RD
UHRIG RD
AUSTRALIA AVE
HOMEBUSH BAY DR
CARTER ST
GRACE AVE
PERCY ST
BOOREA ST
NYRAND ST
BIRNIE AVE
AUGHAN ST
PARRAMATTA RD

appendix d

email from rta

Graham Pindar

From: SHOEMARK Peter J
Sent: Tuesday, 3 August 2010 12:20 PM
To: Graham Pindar
Subject: FW: Technical Advice Request
Attachments: 09266 Memo to RTA 28 June 2010.pdf

Graham
Attached is my response to James.
Basically: wide loads move when they can cause minimal disruption and the escort vehicle provides that extra warning protection required because of their width.
Further the number of movements proposed is minimal.
If you have any further queries please don't hesitate to ring me 02)8849 2320
Keep it safe
Peter Shoemark
Sydney Region Freight Route Co-ordinator
Ph: 02 8849 2320
Fax 02 8849 2766
peter_shoemark@rta.nsw.gov.au

From: SHOEMARK Peter J
Sent: Thursday, 29 July 2010 10:26 AM
To: HALL James C
Subject: FW: Technical Advice Request

James
This is an amazing concept that pushes vehicle design to a new area and I appreciate Auburn Cnls issues.
However:
Australian Road Rules

134 Exceptions to keeping to the left of a dividing line

(1) This rule applies to a driver on a road with a dividing line.

Note ***Dividing line*** is defined the dictionary.

(2) If the dividing line is a broken dividing line only, or a broken

dividing line to the left of a single continuous dividing line, the

driver may drive to the right of the dividing line:

(a) to overtake another driver; or

(b) to perform a U–turn, unless another rule would prohibit

the driver performing the U–turn.

Note 1 ***Overtake*** is defined the dictionary.

Note 2 A driver must not overtake another driver unless the driver has a

clear view of any approaching traffic, and it is safe to overtake the other

driver — see rule 140.

Keeping left, overtaking and other driving rules Part 11

Keeping to the left Division 2

Rule 134

October 2003 *Australian Road Rules* 11

(3) If the dividing line is not 2 parallel continuous dividing lines,

the driver may drive to the right of the dividing line:

(a) to enter or leave the road; or

(b) to enter a part of the road of one kind from a part of the

road of another kind (for example, moving to or from a

service road or emergency stopping lane).

* I've looked at Google and Carter and Uhrig Sts and these centre line is not continuous doubles lines so vehicles can cross when entering and leaving the streets or their sites.

* The vehicle will be moving at 1-5 am so there will be minimal disruption to local traffic.

* The vehicle will be in a "convoy" - ie under escort

Permits Unit advise"

One pilot vehicle required for 23x 4.3m

Unit to have flags and wide vehicle signage.

The pilot's role is to warn vehicles to slow down and be prepared to pull over.

Council can object, but they need to prove that the route is unsuitable.

It is the RTA that issues the Permit.

It would be good PR for Energy Aust to advise Council of when the unit will be operating, but it's the RTA that issue the permit.

Due to the importance of Energy Aust operation, one would think they would have special powers anyway- like the National interest.

Keep it safe
Peter Shoemark
Sydney Region Freight Route Co-ordinator
Ph: 02 8849 2320
Fax 02 8849 2766
peter_shoemark@rta.nsw.gov.au

From: HALL James C
Sent: Wednesday, 28 July 2010 7:38 PM
To: SHOEMARK Peter J
Cc: MOON Ken E; QU Stella B
Subject: FW: Technical Advice Request

Peter,

At your earliest convenience, can you please review the technical note regarding trucks traversing over the centreline of Carter Street (for the left turn entry) and the wrong side of Uhrig Street (for the left turn exit) and provide your comments directly to myself.

Many Thanks

James Hall
Senior Land Use & Transport Planner
Transport Planning
Sydney Region

Ph: 8849-2047
Fax: 8849-2918

Email: James_Hall@rta.nsw.gov.au

From: Graham Pindar [mailto:graham.pindar@traffix.com.au]
Sent: Wednesday, 28 July 2010 18:37 PM
To: MOON Ken E
Cc: HALL James C; SHOEMARK Peter J
Subject: Technical Advice Request

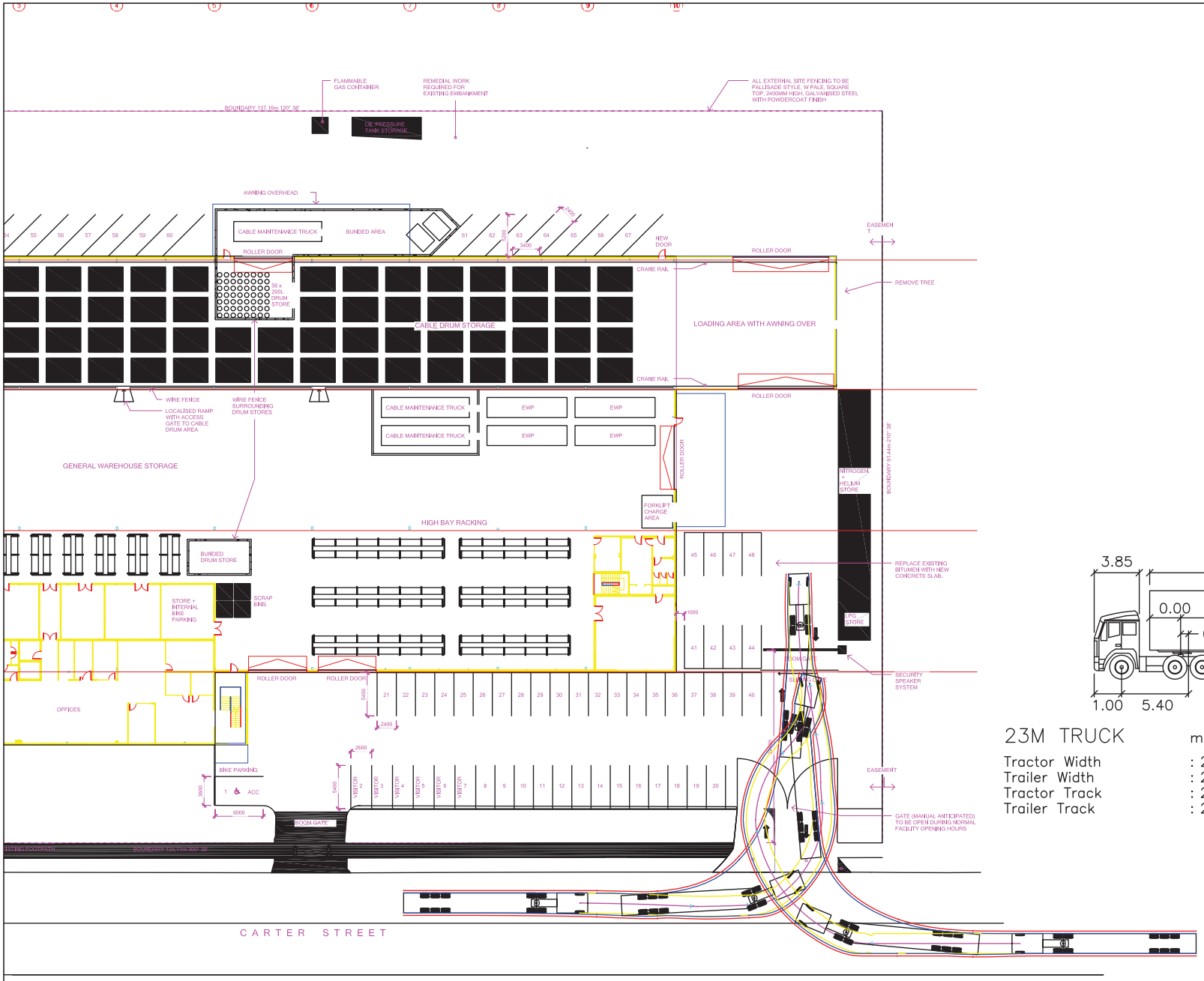
Ken et al
Please see attached request for technical advice.
Regards

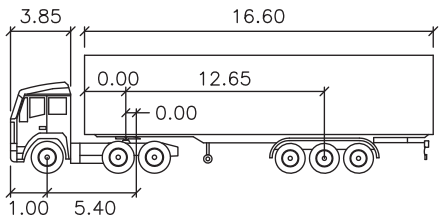
Graham Pindar
Director

a: suite 3.08 46a macleay street potts point nsw 2011 | PO Box 1061 potts point nsw 1035
t: +61 2 8324 8700 d: +61 2 8324 8701 m: +61 419 495 776 f: +61 2 9380 4481 w: www.traffix.com.au

appendix e

carter street entry





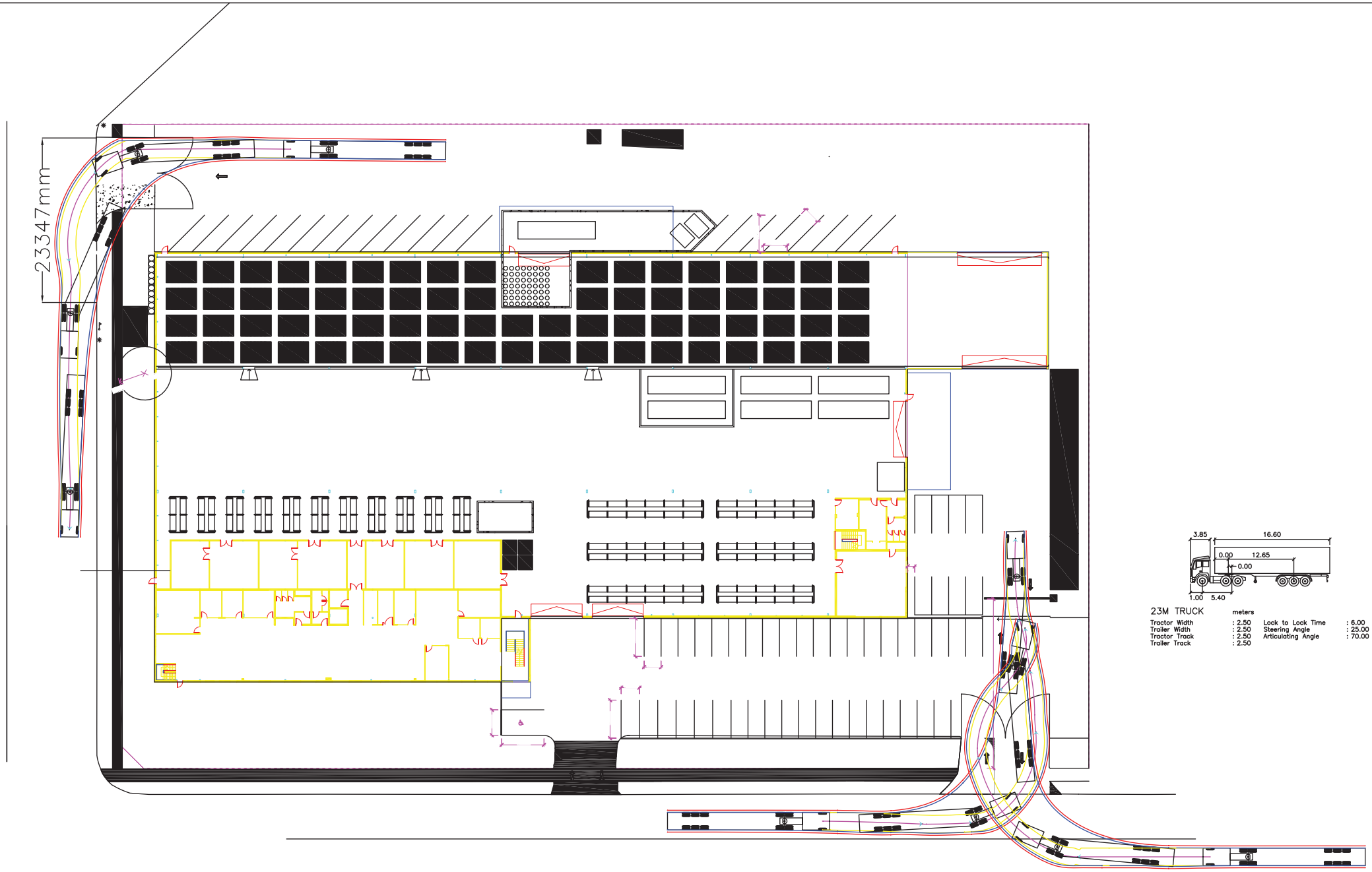
23M TRUCK

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.00
Trailer Width	: 2.50	Steering Angle	: 25.00
Tractor Track	: 2.50	Articulating Angle	: 70.00
Trailer Track	: 2.50		

Client:	Energy Australia	Swept Path Analysis	Address:	9-13 Carter Street, Homebush	PO Box 1061 potts point nsw 1035 t: +61 2 8324 8700 f: +61 2 9380 4481 info@traffix.com.au
23.0m Cable Drum Truck Access		Scale 1:500 at A3	Job No.:	09 266	traffix
			Date:	28 July 2010	

appendix f

uhrig road exit



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23.0m Cable Drum Truck Access		Scale 1:500 at A3	Job No.:	09 266	
			Date:	28 July 2010	

traffix

appendix g

energy australia advice

570 George Street
Sydney NSW 2000

Address all mail to
GPO Box 4009 Sydney
NSW 2001 Australia

www.energy.com.au

EnergyAustralia®
We're on it

Direct Telephone Number: 9269 2169
Mobile: 0403 070 770

2 July 2010

Mr. John Burgess
General Manager
Auburn Council
1 Susan Street
AUBURN NSW 2144

Attention: Steven Griffiths

Dear Steven,

RE: Request for additional Traffic Management Information

Further to your request on Thursday 17th June 2010 regarding Traffic Management information, we provide an attached spreadsheet detailing the following:

- Category of vehicle deliveries and access requirements,
- Estimated times,
- Frequencies (normal and worse case scenarios).

I would also like to clarify the comment

"....new cable is ordered in large batches, so delivery could be as much as ten times on one day."

appearing on page 5 in my letter dated 13th May 2010 under the heading 'Environmental Health Department". In accordance with the enclosed spread sheet the reference to ten deliveries per day would be an extreme worst case scenario.

It is advised that EnergyAustralia subcontracts the transportation of cable drums to an industry provider. The current Transport Provider has indicated that the following route would be probable:

- depart Port Botany,
- access the M4,
- turn off at Silverwater Road,
- turn left at Parramatta Road,
- turn left at Hill Road,
- turn right at Carter Street.

Should Council require any additional information in relation to this request please feel free to contact me directly.

Yours faithfully

Grant Greene-Smith
Manager Property Portfolio

appendix h

traffic survey results

Curtis Traffic Surveys

Turning movement count

Job: 100805tx

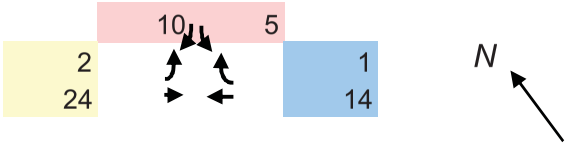
Day, date: Tue 10 Aug 10

Location: Carter St & Uhrig Rd

Weather: Fine

Client: Traffix

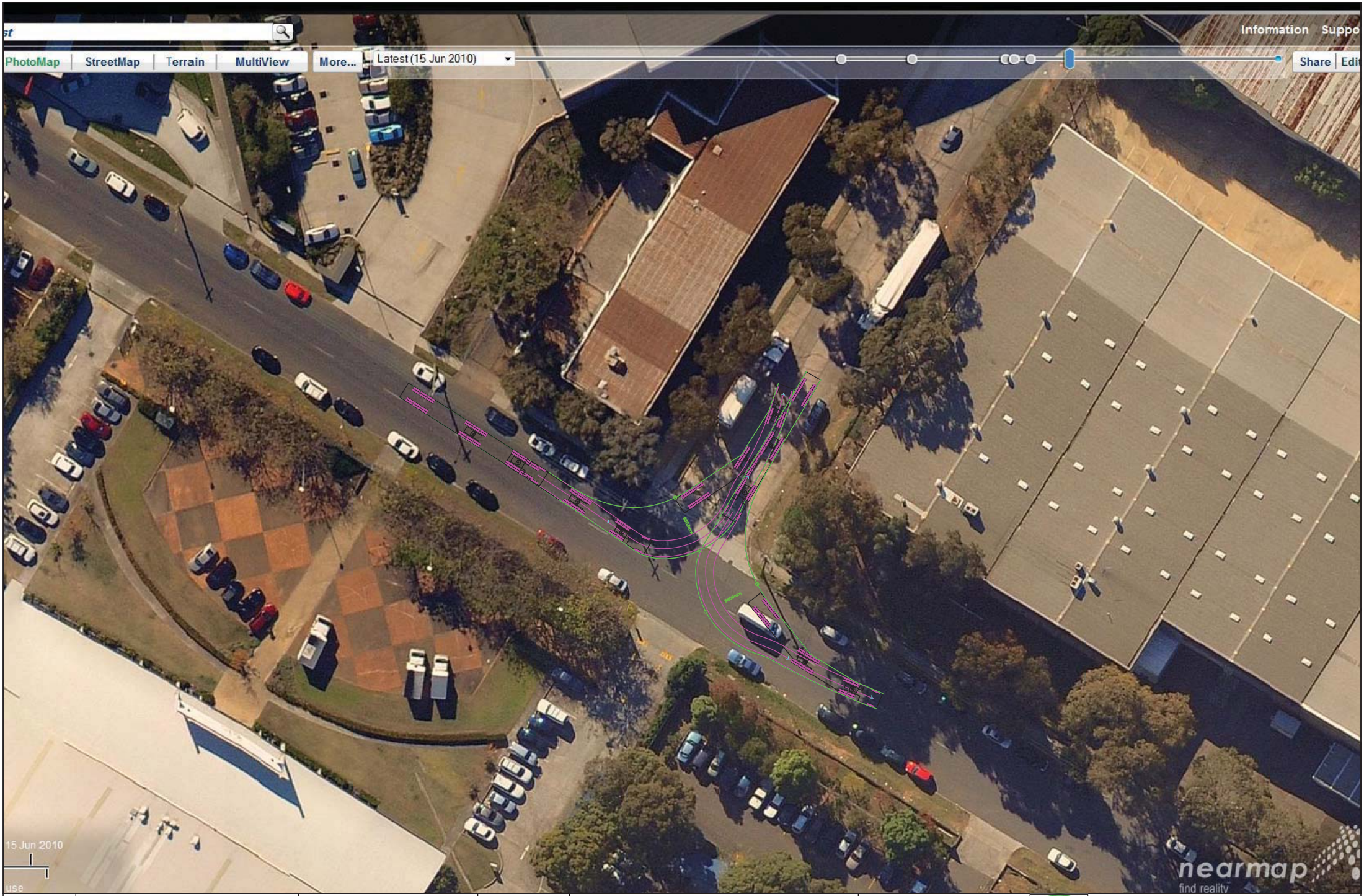
Peak Hour Volumes



Time Period	From Carter St east				From Uhrig Rd				From Carter St west				Total
	Through		Right		Left		Right		Left		Through		
	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	
01:00 to 01:15	1	2	0	0	0	0	1	0	0	0	0	0	4
01:15 to 01:30	2	0	0	0	0	0	1	0	0	0	2	1	6
01:30 to 01:45	2	0	0	0	0	0	2	0	0	0	0	1	5
01:45 to 02:00	1	1	0	0	0	0	0	0	1	0	1	1	5
02:00 to 02:15	4	1	0	0	1	0	1	0	0	0	1	2	10
02:15 to 02:30	3	1	0	0	1	0	2	1	0	0	1	2	11
02:30 to 02:45	1	0	0	0	0	0	1	0	0	0	6	2	10
02:45 to 03:00	2	2	0	0	0	0	1	0	0	0	4	1	10
03:00 to 03:15	0	2	0	0	0	0	2	0	0	0	5	1	10
03:15 to 03:30	1	1	0	0	1	0	2	0	1	0	3	2	11
03:30 to 03:45	1	1	0	0	1	0	1	0	0	0	4	1	9
03:45 to 04:00	1	1	0	0	0	0	1	1	0	0	3	2	9
04:00 to 04:15	2	2	0	0	1	0	1	0	1	0	3	3	13
04:15 to 04:30	2	3	0	0	1	0	2	1	1	0	2	2	14
04:30 to 04:45	1	2	1	0	2	1	4	0	0	0	5	4	20
04:45 to 05:00	4	3	1	0	3	1	4	0	2	0	7	3	28 peak
Total	28	22	2	0	11	2	26	3	6	0	47	28	
Hourly summary													
01:00 to 02:00	6	3	0	0	0	0	4	0	1	0	3	3	20
01:15 to 02:15	9	2	0	0	1	0	4	0	1	0	4	5	26
01:30 to 02:30	10	3	0	0	2	0	5	1	1	0	3	6	31
01:45 to 02:45	9	3	0	0	2	0	4	1	1	0	9	7	36
02:00 to 03:00	10	4	0	0	2	0	5	1	0	0	12	7	41
02:15 to 03:15	6	5	0	0	1	0	6	1	0	0	16	6	41
02:30 to 03:30	4	5	0	0	1	0	6	0	1	0	18	6	41
02:45 to 03:45	4	6	0	0	2	0	6	0	1	0	16	5	40
03:00 to 04:00	3	5	0	0	2	0	6	1	1	0	15	6	39
03:15 to 04:15	5	5	0	0	3	0	5	1	2	0	13	8	42
03:30 to 04:30	6	7	0	0	3	0	5	2	2	0	12	8	45
03:45 to 04:45	6	8	1	0	4	1	8	2	2	0	13	11	56
04:00 to 05:00	9	10	2	0	7	2	11	1	4	0	17	12	75 peak hour

appendix i

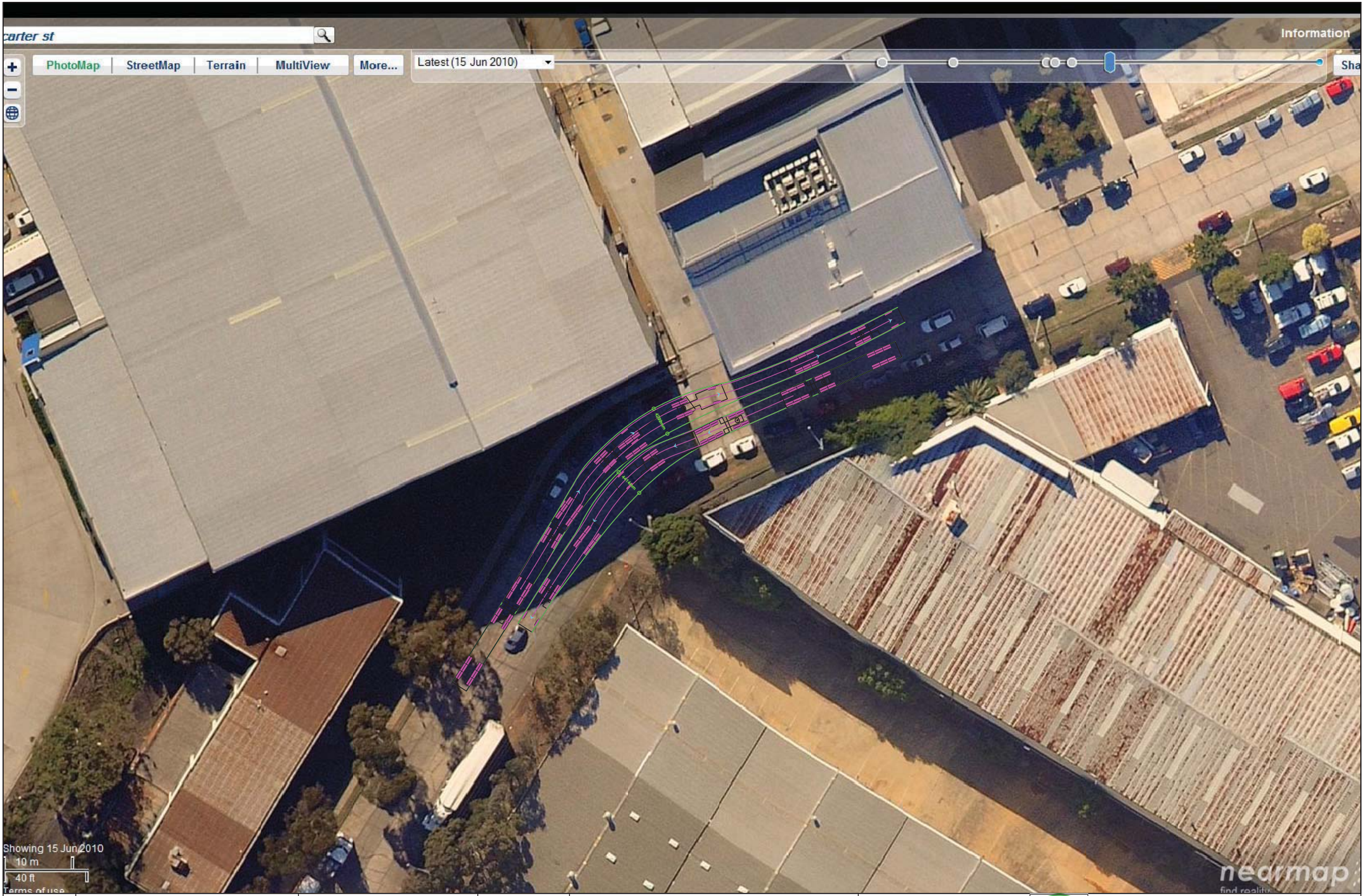
25m B Double movements at uhrig/ carter intersection



Client:	Energy Australia	Swept Path Analysis	Address:	9-13 Carter Street, Homebush	PO Box 1061 potts point nsw 1035 t: +61 2 8324 8700 f: +61 2 9380 4481 info@traffix.com.au	traffix
25.0m B. Double Maneuverability Test 1		Scale 1:500 at A3	Job No.:	09 266		
			Date:	16 June 2010		

appendix j

25m B Double movements along uhrig road



Client:	Energy Australia	Swept Path Analysis	Address:	9-13 Carter Street, Homebush	PO Box 1061 potts point nsw 1035 t: +61 2 8324 8700 f: +61 2 9380 4481 info@traffix.com.au	traffix
25.0m B. Double Maneuverability Test 3		Scale 1:500 at A3	Job No.:	09 266		
			Date:	16 June 2010		

appendix k

23m special truck


PRIME TIME