



Reference: 16.448r02v01

27 October 2016

RDA Property Group  
Suite 905  
418A Elizabeth Street  
Surry Hills 2010

**traffix**  
traffic & transport planners

Suite 2.08  
50 Holt Street  
Surry Hills NSW 2010  
PO Box 1124  
Strawberry Hills NSW 2012  
**t:** +61 2 8324 8700  
**f:** +61 2 9380 4481  
**w:** www.traffix.com.au  
**director** Graham Pindar  
acn: 065132961  
abn: 66065132961

Attention: Rob Kardos, Development / Project Manager

**Re: 113 Macpherson Street, Bronte – Section 96 Application  
Traffic & Parking Assessment**

Dear Rob,

We refer to the abovementioned residential development and confirm that we have reviewed all relevant information provided to us regarding the subject Section 96 (S96) Application. We advise that we have undertaken an assessment of the proposed truck routes for the Construction Traffic Management Plan and development at the subject site. From our assessment we have determined the impacts arising from the proposed modifications under the S96 Application, with the findings of our assessment discussed below.

### **DA Consent**

The subject development has received a notice of determination of a development application from Waverley Council on 16 December 2015, with reference DA-264/2015. Consent condition number 32 requires a Construction Vehicle and Pedestrian Plan of Management (CVPPM) to be submitted to Council for approval prior to the issue of a Construction Certificate. Condition 32(a) states that the CVPPM shall provide details as follows, which is also the subject of the section 96 application:

*"The proposed route to be taken by demolition/construction vehicles in the Waverley Council area when accessing and exiting the site. The route must not include Chesterfield Parade, St Thomas Street and Arden Street, and must show access to the site only from Macpherson Street.*

### **Proposed Changes under the S96 Application**

A detailed description of the S96 Application is provided in the Statement of Environmental Effects prepared separately. In summary, the subject application for which approval is now sought



comprises of amending the condition of consent 32(a) so that vehicles for demolition and construction may use Chesterfield Parade, St Thomas Street and Arden Street.

### **Demolition**

TRAFFIX does not have Council's reasoning for imposing this condition, however the route to and from the site has been tested using the following routes:

Access: Macpherson Street, Arden Street Chesterfield Parade and Chesterfield Lane  
Egress: Chesterfield Lane, Chesterfield Parade, Arden Street and Macpherson Street.

#### **📍 Swept Path Analysis**

Swept Path Analysis was undertaken for the preferred access route for the subject site for the demolition period. The Analysis demonstrated that the largest vehicle able to be accommodating along the aforementioned routes was a Medium Rigid Vehicle (MRV) being 8.8 metres in length. The Swept path Analysis has been provided in **Attachment 1** for reference.

#### **📍 Existing Vehicle Access**

All vehicle access to the site at 113 Macpherson Street, Bronte is currently provided at the rear of the property off Chesterfield Lane, Bronte. Chesterfield Lane leads to an at grade car park. Pedestrian access from Macpherson Street leads to the second storey of the existing building. Vehicle access is not currently provided from Macpherson Street and significant earthworks would be required to provide an at grade access for the subject site.

#### **📍 Function of Chesterfield Lane**

Chesterfield Lane is a local access lane which provides access to properties that have frontages along Macpherson Street and Chesterfield Parade. The lane traverses, predominantly, and an east-west direction, however turns on both ends to adjoin Chesterfield Parade. The laneway is restricted to one-way traffic flow from the west to the east. Chesterfield Lane has a carriageway of 4 metres on a road reserve of 6 metres. Currently no formal parking restrictions are established on Chesterfield Lane. However it is noted that due to the numerous vehicular accesses being provided in the laneway, a No Parking restriction is subsequently established for the majority of the laneway. However, intermittent kerbside space is available along the lane for parking. Additionally, the eastern end of the laneway provides approximately 8 (eight) parallel parking spaces along the eastern boundary of 78 Chesterfield Parade, Bronte. However it is considered that these parking spaces, when occupied, do not comply with the *Australian Road Rule 208 Parallel parking on a road part (7)* which states:

*"Drivers must position the vehicle so there is at least 3 metres of road alongside the vehicle that is clear for other vehicles to pass, unless otherwise indicated by information on or with a parking control sign."*

It is considered that vehicles are required to mount the kerb in Chesterfield Lane to meet these requirements and therefore the primary function of the laneway is considered to provide access to these developments and parking it not considered to be a function of the laneway.





On the basis of the above, it is considered that the existing access for the subject site should be utilised during the demolition process and the proposed truck routes for vehicles up to an 8.8 metre MRV design vehicle are supportable on traffic planning grounds, **provided that 'No Parking' restrictions are enforced for the entirety of the laneway.**

## **Construction**

For the construction process, Macpherson Street will be the preferred location for the trucks to gain access to the site. However, with the condition of consent currently prohibiting access to Arden Street, trucks accessing the site from the west (the most likely origin) cannot enter the proposed work zone in front of the site in the correct direction, and will need to turn around in order to do so. There is not a suitable place for trucks to undertake this turning manoeuvre, and the route to and from the site has been tested using the following routes:

Access: Macpherson Street, Arden Street Boundary Street and St Thomas Street  
Egress: Macpherson Street

### **📍 Swept Path Analysis**

Swept Path Analysis was undertaken for the preferred access route for the subject site for the construction period. The Analysis has provided swept path analysis for four (4) different sized trucks, being a 19m Truck and Dog, 17m Truck and Dog, Heavy Rigid Vehicle (HRV) and Medium Rigid Vehicle (MRV). The Swept path Analysis has been provided in **Attachment 2** for reference.

The analysis provided shows that all of the abovementioned vehicles can traverse the proposed route successfully, with some amendments to the road network at specific locations as outlined below:

- For all vehicles from an HRV to the 19m Truck and Dog, amendments will be required at the roundabout at the intersection of Arden Street and Boundary Street. **The amendment will need to be so that the pedestrian splitter island on Boundary Street is reconfigured to allow vehicles to make the turn on the roundabout.** And for both sizes of Truck and Dog vehicles, minor amendments may also be required on the inner kerb radius on the turn from Arden Street onto Boundary Street. MRV's are able to complete the turn without any amendments to the road geometry, however it is expected that larger vehicles may be required at certain times of the construction.
- For all vehicles, amendments will be required to the pedestrian crossing on Macpherson Street at its intersection with St Thomas Street. As the swept path analysis shows, there are varying degrees of amendments that will be required. **However, the common theme is that the pedestrian crossing will need to be relocated further from the intersection, or removed all together to facilitate the turning movement.**





## **Conclusions**

In summary:

- The subject Section 96 Application relates to an amendment to the wording of consent condition 32(a) so that demolition and construction vehicles may use Arden Street, Chesterfield Parade and St Thomas Street to gain access and egress from the site.
- The proposed route for demolition will use Arden Street, Chesterfield Parade and Chesterfield Lane, and will be restricted to a medium rigid design vehicle.
- The proposed route for construction will use Arden Street, Boundary Street and St Thomas Street, and the design vehicle proposed will depend on the amendments to the road geometry at the intersections of Arden Street / Boundary Street and St Thomas Street / Macpherson Street

The subject Section 96 Application is therefore supportable on traffic planning grounds.

Please contact the undersigned should you have any queries regarding the above.

Yours faithfully,

**traffix**

Martin Mallia  
**Senior Engineer**

Email: [martin.mallia@traffix.com.au](mailto:martin.mallia@traffix.com.au)





# Attachment 1

---





**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

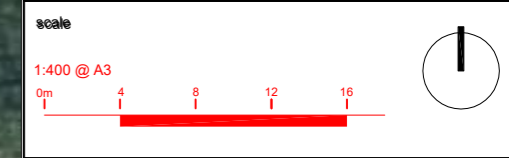
no.	revision note	by.	date
-----	---------------	-----	------

**Swept Path Legend:**

	Wheel Path
	Vehicle Body Envelope
	Clearance Envelope (300mm)

architect

client  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group



project  
 113 Macpherson Street, Bronte.


drawing prepared by

**TRAFFIX**  
 traffic and transport planners

Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010

PO Box 1124  
 Strawberry Hills NSW 2012

t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au



traffix  
 traffic & transport planners

drawing title  
 Intersection of Macpherson Street and Arden Street, Bronte.

drawn: AK	checked: MM	date: 14-Oct-16
-----------	-------------	-----------------

16.448	-	TX.01	-
project no.	drawing phase.	drawing no.	rev



Notes

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date
-----	---------------	-----	------

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- / / / / Clearance Envelope (300mm)

architect

client  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group

scale

1:400 @ A3

project  
 113 Macpherson Street, Bronte.


drawing prepared by

**TRAFFIX**  
 traffic and transport planners

Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010

PO Box 1124  
 Strawberry Hills NSW 2012

t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au



traffix  
 traffic & transport planners

drawing title  
 Intersection of Arden Street and Chesterfield Parade, Bronte.

drawn: AK	checked: MM	date: 14-Oct-16
-----------	-------------	-----------------

16.448	-	TX.02	-
project no.	drawing phase.	drawing no.	rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)


architect

client  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group

scale  
 1:250 @ A3  
 0m 2 4 6 8

project  
 113 Macpherson Street, Bronte.

drawing prepared by  
**TRAFFIX**  
 traffic and transport planners  
 Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010  
 PO Box 1124  
 Strawberry Hills NSW 2012  
 t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au

  
 traffix  
 traffic & transport planners



drawing title  
 Swept Path Analysis at north-western corner of  
 Chesterfield Lane, Bronte

drawn: AK	checked: MM	date: 14-Oct-16
-----------	-------------	-----------------

16.448	-	TX.03	-
project no.	drawing phase.	drawing no.	rev





<p><b>Notes</b></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 <i>Parking facilities - Off-street car parking</i>, and/or AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i>). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>		
no.	revision note	by. date
<p><b>Swept Path Legend:</b></p> <p>— Wheel Path</p> <p>— Vehicle Body Envelope</p> <p>▨ Clearance Envelope (300mm)</p>		
<p>architect</p>		
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>		
<p>scale</p> <p>1:250 @ A3</p> <p>0m 2 4 6 8</p>		
<p>project</p> <p>113 Macpherson Street, Bronte.</p>		
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners</p> <p>Suite 2.08, 50 Holt Street Surry Hills NSW 2010</p> <p>PO Box 1124 Strawberry Hills NSW 2012</p> <p>t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p>		 <p><b>traffix</b> traffic &amp; transport planners</p>
<p>drawing title</p> <p>Swept Path Analysis at north-western corner of Chesterfield Lane, Bronte</p>		
drawn:	AK	checked: MM date: 14-Oct-16
16.448	-	TX.04 -
project no.	drawing phase.	drawing no. rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

**architect**

**client**  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group

**scale**  
 1:250 @ A3

**project**  
 113 Macpherson Street, Bronte.

**drawing prepared by**  
**TRAFFIX**  
 traffic and transport planners  
 Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010  
 PO Box 1124  
 Strawberry Hills NSW 2012  
 t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au

**traffix**  
 traffic & transport planners

**drawing title**  
 Swept Path Analysis  
 MRV access and egress between Chesterfield Lane and 113 Macpherson St, Bronte

drawn: AK	checked: MM	date: 14-Oct-16
-----------	-------------	-----------------

16.448	-	TX.05	-
project no.	drawing phase.	drawing no.	rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- ▨ Clearance Envelope (300mm)

**architect**

**client**  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group

**scale**  
 1:250 @ A3

**project**  
 113 Macpherson Street, Bronte.

**drawing prepared by**  
**TRAFFIX**  
 traffic and transport planners  
 Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010  
 PO Box 1124  
 Strawberry Hills NSW 2012  
 t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au

**traffix**  
 traffic & transport planners

**drawing title**  
 Swept Path Analysis MRV Vehicle  
 Chesterfield Lane to Chesterfield Parade

drawn: AK	checked: MM	date: 14-Oct-16
-----------	-------------	-----------------

16.448	-	TX.06	-
project no.	drawing phase.	drawing no.	rev









## Attachment 2

---





<b>Notes</b>		
This drawing is prepared for information purposes only. It is not to be used for construction.		
TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.		
Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 <i>Parking facilities - Off-street car parking</i> , and/or AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i> ). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.		
no.	revision note	by. date
<b>Swept Path Legend:</b>		
	Wheel Path	
	Vehicle Body Envelope	
	Clearance Envelope (300mm)	
architect		
client		
Rob Kardos Development / Project Manager RDA Property Group		
scale		
1:400 @ A3		
		
project		
113 Macpherson Street, Bronte.		
drawing prepared by		
<b>TRAFFIX</b> traffic and transport planners		
Suite 2.08, 50 Holt Street Surry Hills NSW 2010		
PO Box 1124 Strawberry Hills NSW 2012		
t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au		
drawing title		
19m Truck and Dog Arden - Boundary - St Thomas - Macpherson		
drawn: AK	checked: MM	date: 26-Oct-16
16.448	-	TX.01 -
project no.	drawing phase.	drawing no. rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

architect

client

Rob Kardos  
Development / Project Manager  
RDA Property Group

scale

1:400 @ A3

0m 4 8 12 16

project

113 Macpherson Street, Bronte.

drawing prepared by

**TRAFFIX**  
traffic and transport planners

Suite 2.08, 50 Holt Street  
Surry Hills NSW 2010

PO Box 1124  
Strawberry Hills NSW 2012

t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@traffix.com.au

traffix  
traffic & transport planners

drawing title

19m Truck and Dog  
Arden - Boundary - St Thomas - Macpherson

drawn: AK	checked: MM	date: 26-Oct-16
-----------	-------------	-----------------

16.448	-	TX.02	-
project no.	drawing phase.	drawing no.	rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

**architect**

**client**

Rob Kardos  
Development / Project Manager  
RDA Property Group

**scale**

1:250 @ A3

**project**

113 Macpherson Street, Bronte.

**drawing prepared by**

**TRAFFIX**  
traffic and transport planners  
Suite 2.08, 50 Holt Street  
Surry Hills NSW 2010  
PO Box 1124  
Strawberry Hills NSW 2012  
t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@traffix.com.au






**drawing title**

19m Truck and Dog  
Arden - Boundary - St Thomas - Macpherson

drawn: AK	checked: MM	date: 26-Oct-16
-----------	-------------	-----------------


16.448	-	TX.03	-
project no.	drawing phase.	drawing no.	rev

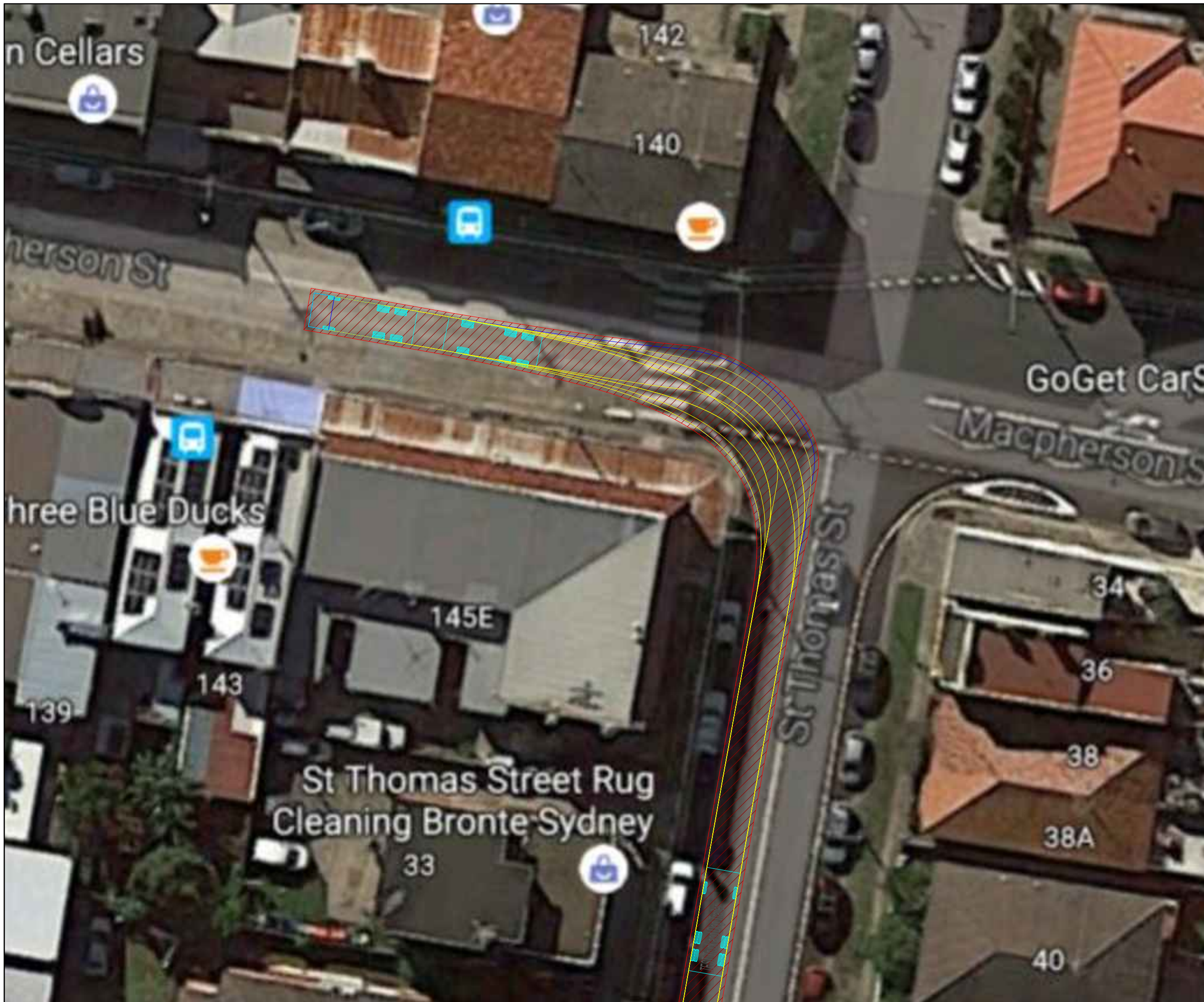


<b>Notes</b>		
This drawing is prepared for information purposes only. It is not to be used for construction.		
TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.		
Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.		
no.	revision note	by. date
<b>Swept Path Legend:</b>		
	Wheel Path	
	Vehicle Body Envelope	
	Clearance Envelope (300mm)	
architect		
client		
Rob Kardos Development / Project Manager RDA Property Group		
scale		
1:250 @ A3		
		
project		
113 Macpherson Street, Bronte.		
drawing prepared by		
<b>TRAFFIX</b> traffic and transport planners Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au		 <b>traffix</b> traffic & transport planners
drawing title		
17m Truck and Dog Arden - Boundary - St Thomas - Macpherson		
drawn: AK	checked: MM	date: 26-Oct-16
16.448	-	TX.04 -
project no.	drawing phase.	drawing no. rev





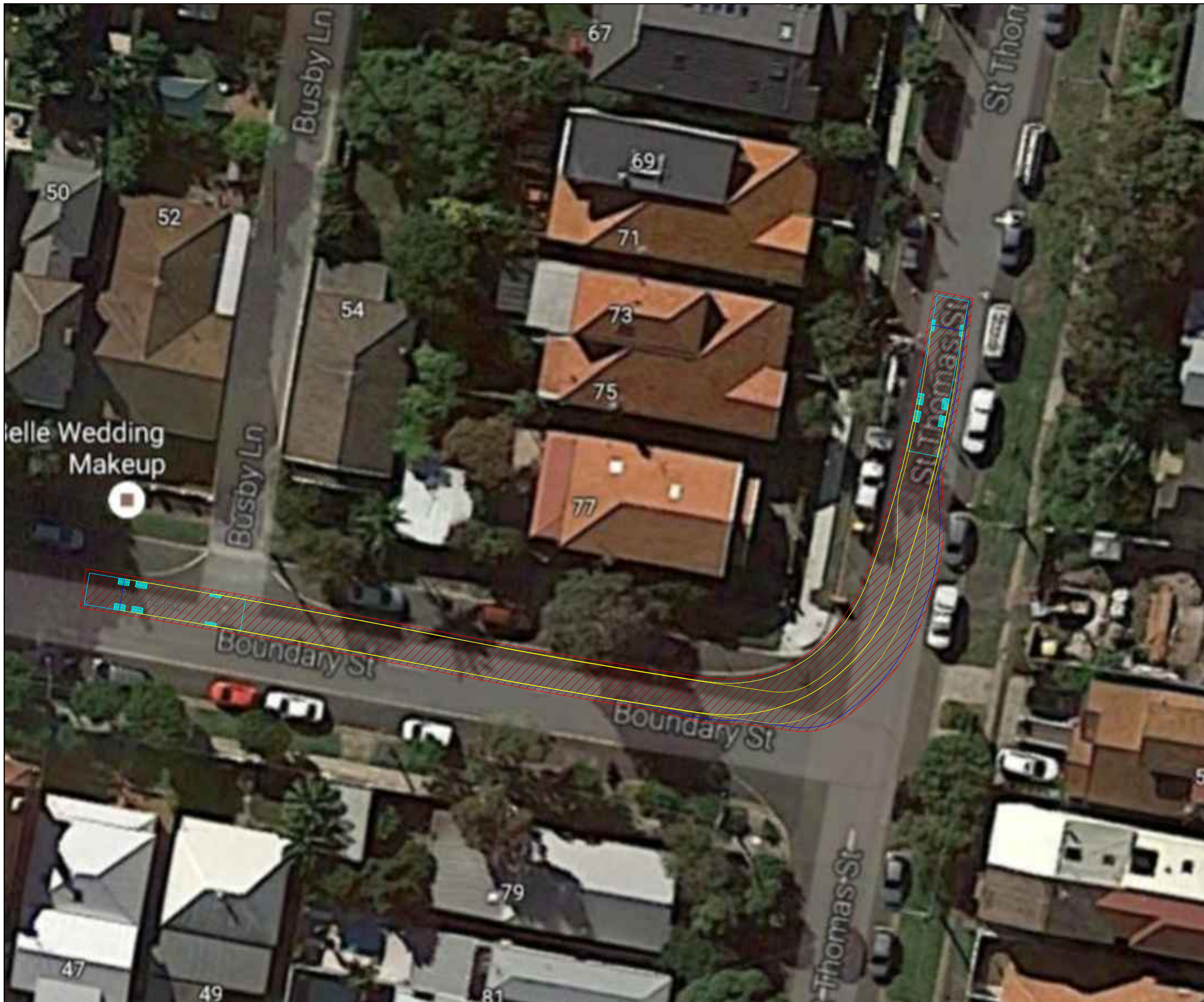
<p><u>Notes</u></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 <i>Parking facilities - Off-street car parking</i>, and/or AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i>). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>		
no.	revision note	by. date
<p><b>Swept Path Legend:</b></p> <p>— Wheel Path</p> <p>— Vehicle Body Envelope</p> <p>▨ Clearance Envelope (300mm)</p>		
<p>architect</p>		
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>		
<p>scale</p> <p>1:250 @ A3</p>		
<p>project</p> <p>113 Macpherson Street, Bronte.</p>		
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners</p> <p>Suite 2.08, 50 Holt Street Surry Hills NSW 2010</p> <p>PO Box 1124 Strawberry Hills NSW 2012</p> <p>t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p>  <p>traffix traffic &amp; transport planners</p>		
<p>drawing title</p> <p>17m Truck and Dog Arden - Boundary - St Thomas - Macpherson</p>		
drawn:	AK	checked: MM date: 26-Oct-16
16.448	-	TX.05 -
project no.	drawing phase.	drawing no. rev



<p><b>Notes</b></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>					
no.	revision note	by.	date		
<p><b>Swept Path Legend:</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Wheel Path</li> <li><span style="color: blue;">—</span> Vehicle Body Envelope</li> <li><span style="border: 1px solid red; border-style: dashed; padding: 2px;"> </span> Clearance Envelope (300mm)</li> </ul>					
<p>architect</p>					
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>					
<p>scale</p> <p>1:250 @ A3</p>					
<p>project</p> <p>113 Macpherson Street, Bronte.</p>					
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners</p> <p>Suite 2.08, 50 Holt Street Surry Hills NSW 2010</p> <p>PO Box 1124 Strawberry Hills NSW 2012</p> <p>t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p> <p>traffix traffic &amp; transport planners</p>					
<p>drawing title</p> <p>17m Truck and Dog Arden - Boundary - St Thomas - Macpherson</p>					
drawn:	AK	checked:	MM	date:	26-Oct-16
16.448	-	TX.06	-		
project no.	drawing phase.	drawing no.	rev		



<p><b>Notes</b></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 <i>Parking facilities - Off-street car parking</i>, and/or AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i>). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>		
no.	revision note	by. date
<p><b>Swept Path Legend:</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Wheel Path</li> <li><span style="color: blue;">—</span> Vehicle Body Envelope</li> <li><span style="border: 1px solid red; padding: 2px;">/ / /</span> Clearance Envelope (300mm)</li> </ul>		
<p>architect</p>		
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>		
<p>scale</p> <p>1:250 @ A3</p>		
<p>project</p> <p>113 Macpherson Street, Bronte.</p>		
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners</p> <p>Suite 2.08, 50 Holt Street Surry Hills NSW 2010</p> <p>PO Box 1124 Strawberry Hills NSW 2012</p> <p>t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p> <p>traffix traffic &amp; transport planners</p>		
<p>drawing title</p> <p>HRV Arden - Boundary - St Thomas - Macpherson</p>		
drawn:	AK	checked: MM date: 26-Oct-16
16.448	-	TX.04 -
project no.	drawing phase.	drawing no. rev



<p><b>Notes</b></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 <i>Parking facilities - Off-street car parking</i>, and/or AS 2890.2-2002 <i>Parking facilities - Off-street commercial vehicle facilities</i>). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>		
no.	revision note	by. date
<p><b>Swept Path Legend:</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Wheel Path</li> <li><span style="color: blue;">—</span> Vehicle Body Envelope</li> <li><span style="border: 1px solid red; border-style: dashed; padding: 2px;"> </span> Clearance Envelope (300mm)</li> </ul>		
<p>architect</p>		
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>		
<p>scale</p> <p>1:250 @ A3</p>		
<p>project</p> <p>113 Macpherson Street, Bronte.</p>		
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p> <p>traffix traffic &amp; transport planners</p>		
<p>drawing title</p> <p>HRV Arden - Boundary - St Thomas - Macpherson</p>		
drawn:	AK	checked: MM date: 26-Oct-16
16.448	-	TX.05 -
project no.	drawing phase.	drawing no. rev



<b>Notes</b>		
This drawing is prepared for information purposes only. It is not to be used for construction.		
TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.		
Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.		
no.	revision note	by. date
<b>Swept Path Legend:</b>		
	Wheel Path	
	Vehicle Body Envelope	
	Clearance Envelope (300mm)	
architect		
client		
Rob Kardos Development / Project Manager RDA Property Group		
scale		
1:250 @ A3		
project		
113 Macpherson Street, Bronte.		
drawing prepared by		
<b>TRAFFIX</b> traffic and transport planners Suite 2.08, 50 Holt Street Surry Hills NSW 2010 PO Box 1124 Strawberry Hills NSW 2012 t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au		 <b>traffix</b> traffic & transport planners
drawing title		
HRV Arden - Boundary - St Thomas - Macpherson		
drawn: AK	checked: MM	date: 26-Oct-16
16.448	-	TX.06   -
project no.	drawing phase.	drawing no. rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

architect

client

Rob Kardos  
Development / Project Manager  
RDA Property Group

scale

1:250 @ A3

project

113 Macpherson Street, Bronte.

drawing prepared by

**TRAFFIX**  
traffic and transport planners  
Suite 2.08, 50 Holt Street  
Surry Hills NSW 2010  
PO Box 1124  
Strawberry Hills NSW 2012  
t: +61 2 8324 8700  
f: +61 2 9380 4481  
e: info@trafix.com.au

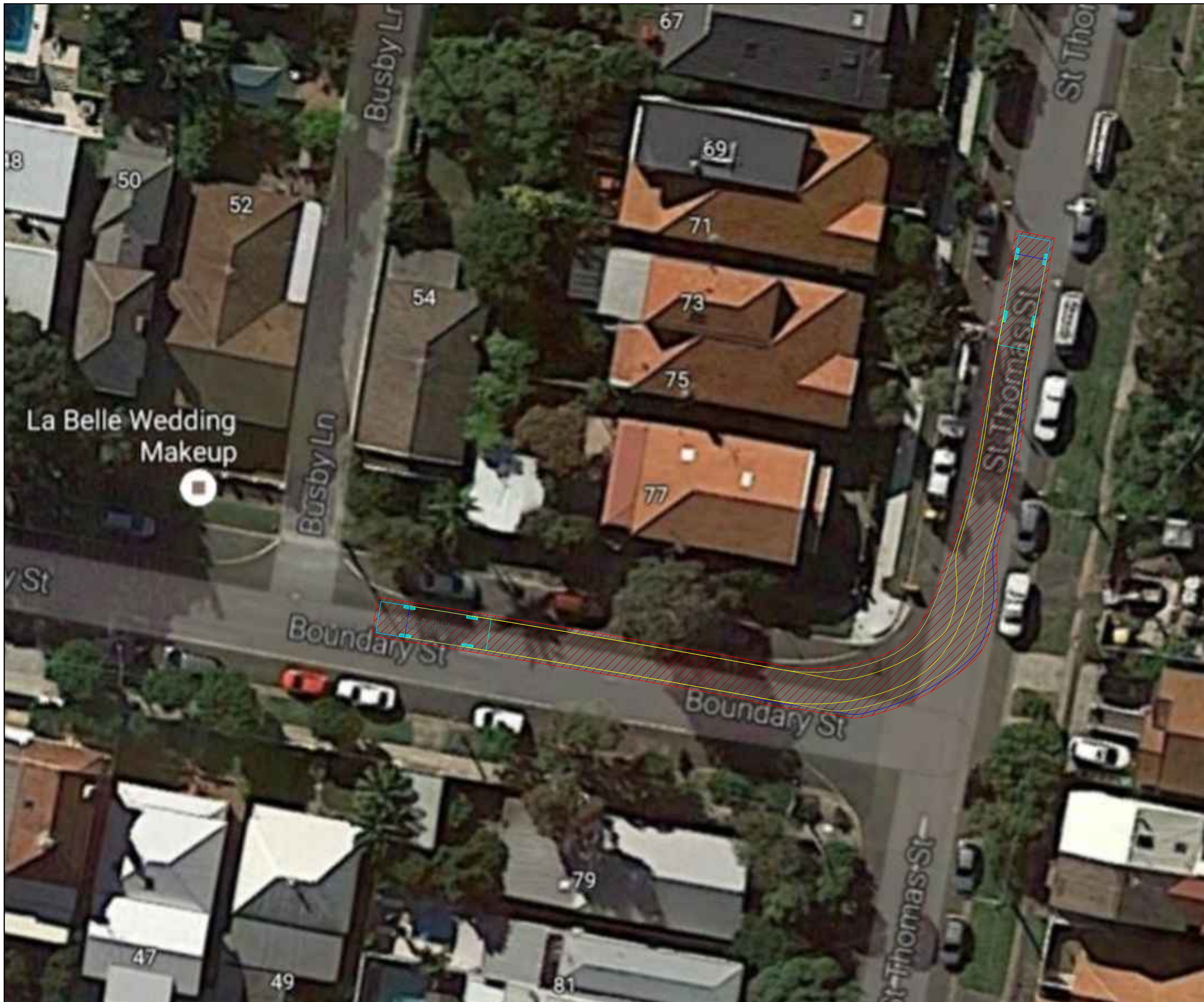
trafix  
traffic & transport planners

drawing title

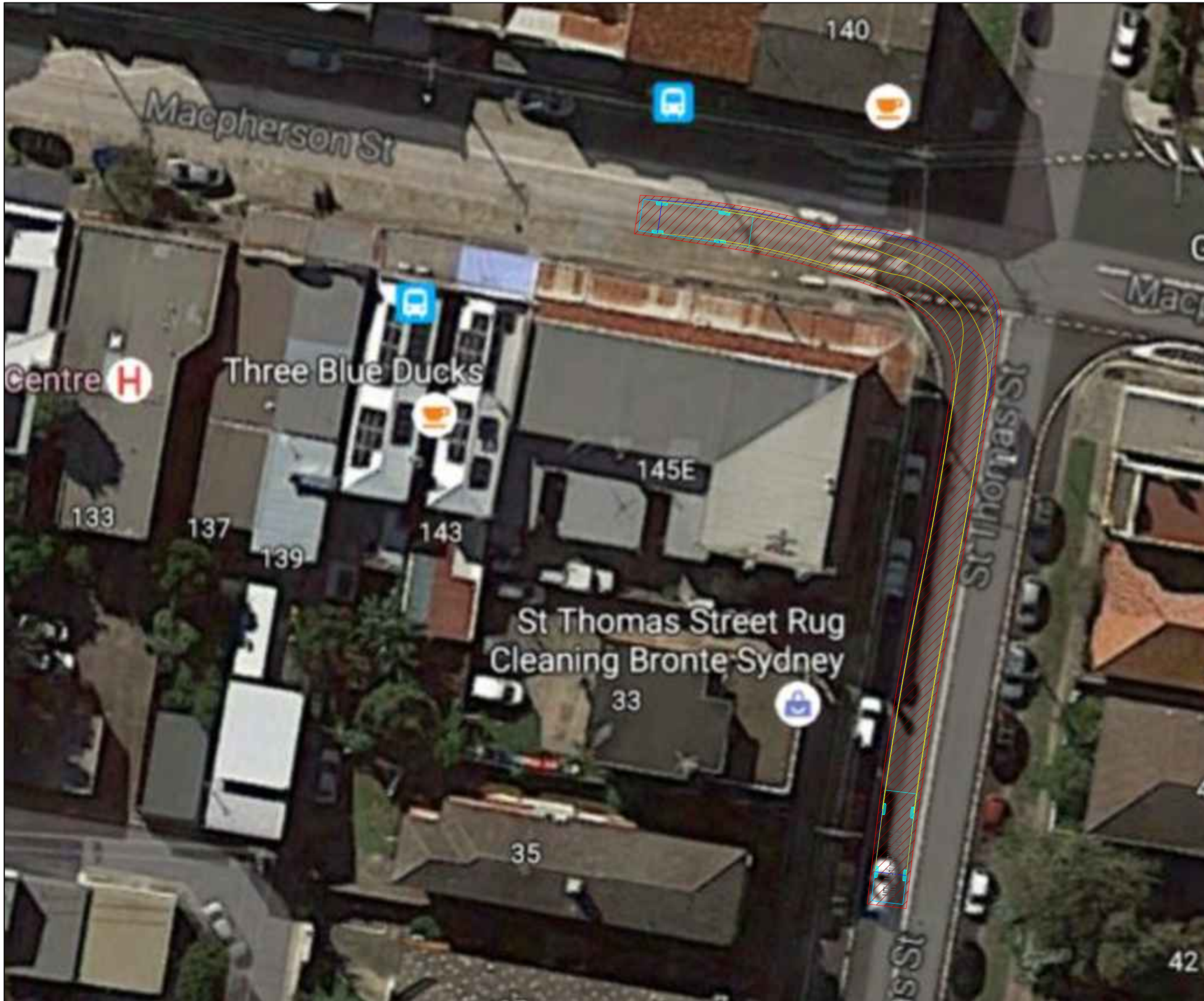
MRV  
Arden - Boundary - St Thomas - Macpherson

drawn: AK	checked: MM	date: 26-Oct-16
-----------	-------------	-----------------

16.448	-	TX.04	-
project no.	drawing phase.	drawing no.	rev



<p><b>Notes</b></p> <p>This drawing is prepared for information purposes only. It is not to be used for construction.</p> <p>TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.</p> <p>Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 Parking facilities - Off-street car parking, and/or AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.</p>		
no.	revision note	by. date
<p><b>Swept Path Legend:</b></p> <ul style="list-style-type: none"> <li><span style="color: yellow;">—</span> Wheel Path</li> <li><span style="color: blue;">—</span> Vehicle Body Envelope</li> <li><span style="border: 1px solid red; padding: 2px;"> </span> Clearance Envelope (300mm)</li> </ul>		
<p>architect</p>		
<p>client</p> <p>Rob Kardos Development / Project Manager RDA Property Group</p>		
<p>scale</p> <p>1:250 @ A3</p>		
<p>project</p> <p>113 Macpherson Street, Bronte.</p>		
<p>drawing prepared by</p> <p><b>TRAFFIX</b> traffic and transport planners</p> <p>Suite 2.08, 50 Holt Street Surry Hills NSW 2010</p> <p>PO Box 1124 Strawberry Hills NSW 2012</p> <p>t: +61 2 8324 8700 f: +61 2 9380 4481 e: info@traffix.com.au</p>		
<p>drawing title</p> <p>MRV Arden - Boundary - St Thomas - Macpherson</p>		
drawn:	AK	checked: MM date: 26-Oct-16
16.448	-	TX.05 -
project no.	drawing phase.	drawing no. rev



**Notes**

This drawing is prepared for information purposes only. It is not to be used for construction.

TRAFFIX is responsible for vehicle swept path diagrams and/or drawing mark-ups only. Base drawing prepared by others.

Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no.	revision note	by.	date

**Swept Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)


architect

client  
 Rob Kardos  
 Development / Project Manager  
 RDA Property Group

scale  
 1:250 @ A3  
 0m 1 2 4 6 8

project  
 113 Macpherson Street, Bronte.

drawing prepared by  
**TRAFFIX**  
 traffic and transport planners  
 Suite 2.08, 50 Holt Street  
 Surry Hills NSW 2010  
 PO Box 1124  
 Strawberry Hills NSW 2012  
 t: +61 2 8324 8700  
 f: +61 2 9380 4481  
 e: info@traffix.com.au

  
 traffix  
 traffic & transport planners

drawing title  
**MRV**  
 Arden - Boundary - St Thomas - Macpherson

drawn: AK	checked: MM	date: 26-Oct-16
-----------	-------------	-----------------

16.448	-	TX.06	-
project no.	drawing phase.	drawing no.	rev