

FRASERS PROPERT GROUP

PROPOSED CHILD CARE CENTRE  
EASTERN CREEK BUSINESS HUB  
TRAFFIC REPORT

MAY 2019

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## I. INTRODUCTION

- I.1. Colston Budd Rogers and Kafes (CBRK) have been engaged to assess the traffic effects of the proposed child care centre within Lot 2 of the Eastern Creek Business Hub. Eastern Creek Business Hub is located on a parcel of land located between Rooty Hill Road South, the M7 Motorway and the Great Western Highway as shown in Figure 1. The site has development consent for a concept plan which includes 52,800m<sup>2</sup> GFA within three lots, comprising:
- 14,000m<sup>2</sup> large format retail (such as hardware/building supplies) on Lot 1.
  - 9,500m<sup>2</sup> retail centre (including a 3,500m<sup>2</sup> – 4,000m<sup>2</sup> supermarket plus 5,500m<sup>2</sup> – 6,000m<sup>2</sup> specialty retail) on Lot 2; and
  - 29,300m<sup>2</sup> bulky goods on Lot 3;
- I.2. Vehicular access to the site is approved from Rooty Hill Road South, via a new signalised intersection at Cable Place. This intersection would provide access to the site via a new internal access road. Access to Lot 2 is from this new internal access road.
- I.3. In July 2018, approval was granted for the retail centre on Lot 2 (generally consistent with the approved concept plan) comprising a supermarket, specialty retail and commercial uses. The traffic assessment of the approved retail centre included consideration of a child care centre (50 places). The approved plans provided 432 parking spaces which is surplus of 43 spaces over minimum requirements.
- I.4. The proposed child care centre is located on the south western corner of Lot 2 (adjacent to the intersection of Rooty Hill Road South and Cable Place). The size of the proposed child care centre has increased from 50 places to 110 places.
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1.5. A detailed traffic and parking assessment of the approved retail centre was undertaken by CBRK through the following reports:

- Eastern Creek Business Hub Stage I DA – Proposed Retail Centre, Lot 2, Traffic Report (September 2017); and
- Response to traffic matters (8 February 2018); and
- SIDRA modelling report (27 March 2018).

1.7 The findings of the traffic assessment of the proposed child care centre on Lot 2 are set down in Chapter 2.

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## 2. TRAFFIC ASSESSMENT

2.1. The traffic assessment of the proposed 110 place child care centre on Lot 2 is set down through the following sections:

- ❑ site location and road network;
- ❑ public transport;
- ❑ proposed development;
- ❑ parking provision;
- ❑ access, internal circulation and service arrangements;
- ❑ traffic effects; and
- ❑ summary.

### Site Location and Road Network

2.2. Eastern Creek Business Hub is located north of the Great Western Highway at Eastern Creek as shown in Figure 1. It is bounded by Church Street to the north, Great Western Highway to the south, the M7 Motorway to the east and Rooty Hill Road South to the west. Beggs Road is an unformed road connecting from Rooty Hill Road South eastward into the site. Belmore Road is another unformed road connecting north into the site from Great Western Highway. The site is currently generally undeveloped. Lot 2 is the central lot and is located on the north eastern corner of the intersection of Rooty Hill Road South, Cable Place and the internal access road.

2.3. The M7 Motorway is a major road in Sydney's arterial road network. It has north-facing ramps with the Great Western Highway, adjacent to the site. The intersections of the M7 ramps with Great Western Highway are controlled by traffic signals

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- 2.4. Great Western Highway is another major road in Sydney's Road network, connecting Sydney with areas to the west. It has a signalised intersection with Rooty Hill Road South, adjacent to the site.
- 2.5. Rooty Hill Road South connects Rooty Hill in the north with Great Western Highway. It provides a four lane undivided carriageway with two traffic lanes in each direction. As noted above, it has a signalised intersection with Great Western Highway. Wallgrove Road forms a fourth (southern) approach to the intersection
- 2.6. North of the site, Rooty Hill Road South connects to Francis Road and Eastern Road at a signalised intersection. Opposite the site, on the western side of Rooty Hill Road South, there are a number of residential streets, including Minchinbury Street, Penfold Street, Cawarra Street and Cable Place which intersect Rooty Hill Road South at unsignalised intersections.
- 2.7. As part of the approved concept plan the intersection of Rooty Hill Road South and Cable Place will be upgraded to traffic signals with a fourth (eastern) leg that will provide access to the Eastern Creek Hub site. This intersection upgrade will be completed prior to the opening of the retail centre on Lot 2. Access to Lot 2 is provided off the new internal access road that connects to Rooty Hill Road South.

#### Proposed Development

- 2.8. The proposed child care centre is located on the south western corner of Lot 2 (adjacent to the intersection of Rooty Hill Road South and Cable Place) and would provide for 110 places. The proposed child care centre has no impact on the approved access arrangements to Lot 2 and only minor changes to the layout and circulation within the car park.
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### Public Transport

- 2.9. Busways operates the 723 and 738 services along Rooty Hill Road South past the site. Bus stops are located on Rooty Hill Road along the frontage of the site, just north of Cable Place. The 723 and 728 services connect Mount Druitt Station with Blacktown Station and operate at 30 minute intervals in the weekday AM/PM peak periods and 60 minute intervals at other times. The 723 service operates on weekdays only while the 728 service operates seven days a week.
- 2.10. Access to the bus stops from Lot 2 will be provided via a pedestrian path that connects to Rooty Hill Road South adjacent to the bus stop on Rooty Hill Road South (eastern side). Access to the bus stop on the western side of Rooty Hill Road South will be provided at the traffic signals at Cable Place.
- 2.11. The site will be accessible by active transport (walking and cycling) with a pedestrian/cyclist connection to/from Lot 2 to the existing infrastructure on Rooty Hill Road South located north of Cable Place. Within the site, bicycle parking will be provided for visitors (in racks) and staff (secure location). As part of staff induction it is suggested that information be provided on how the site is accessible by means other than car (bus, walk and cycle).
- 2.12. The site provides opportunities to for people to travel to the site by means other than car. Thus the proposed development is consistent with government objectives and the planning principles of:
- (a) improving accessibility to employment and services by walking, cycling, and public transport;
  - (b) improving the choice of transport and reducing dependence solely on cars for travel purposes;
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- (c) moderating growth in the demand for travel and the distances travelled, especially by car; and
- (d) supporting the efficient and viable operation of public transport services.

### Parking

- 2.13. The traffic report for approved retail centre on Lot 2 identified a minimum requirement for 389 parking spaces with 432 spaces provided (a surplus of 43 spaces). The approved retail uses on Lot 2 required 370 spaces with the balance of 19 spaces required by the 50 place child care centre. The Eastern Creek Business Hub Design Guidelines do not include parking rates for a child care centre. For the proposed childcare centre the parking rates in Blacktown DCP 2015 have been adopted (one space per employee, plus one space per six children or part thereof). Applying these rates, the 110 place child care (based on 18 employees for the child care centre) would require 37 spaces (18 for employees and 19 for set down/pick up). Thus total parking requirements for Lot 2 (including the proposed 110 place child centre) would be 407 spaces.
- 2.14. With the proposed child care centre on Lot 2, 431 parking spaces will be provided (plus a service bay for the child care centre). This provision satisfies the minimum requirement of 407 spaces. Parking for the proposed child care centre will be located in the south western section of the car park, adjacent to the child care centre. As the child care centre will only operate on weekdays and the majority of set down/pick up occurs during the morning and afternoon peak periods, the 37 child care parking spaces will be designated as set out below.
- 19 set down/pick up spaces – ‘childcare parking only 7.00am to 9.00 am and 4.00pm to 6.00pm’ Monday to Friday; and
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- 18 staff parking spaces – ‘child care staff parking only 6.30am to 6.30 pm Monday to Friday.

#### Access, Internal Circulation and Servicing

- 2.15. Access to the site is proposed largely as approved for the retail centre on Lot 2. As previously noted, a new signalised intersection is approved on Rooty Hill Road South at Cable Place. This intersection will be upgraded as per the approved concept plan, prior to completion of development on Lot 2. Also prior to the completion of the development of Lot 2, the internal access road will be constructed from Rooty Hill Road South to the northern boundary of Lot 2.
- 2.16. Within Lot 2, parking is located within an at-grade car park on the southern part of site with two connections to the access road. Parking spaces will be a minimum of 5.4 metres long by 2.6 metres wide with 6.6 metre wide circulation aisles. Spaces with adjacent obstructions will be 0.3 metres wider. Small car spaces will be 2.3 metres wide and disabled spaces will be 2.4 metres wide, with a 2.4 metre wide adjacent area. Motor cycle spaces will be 1.2 metres wide by 2.5 metres long. These dimensions are considered appropriate, being in accordance with AS 2890.1:2004 and AS2890.6-2009. Access ramps connecting the car park to the access road will be designed to comply with the requirements of AS2890.1-2004 with respect to width and grade. Each ramp will provide for separate entry and exit lanes with a maximum grade of 1:8, with flatter grades (1:20) for at least the first six metres from the access road.
- 2.17. Within the car park separate pedestrian paths are provided connecting the shopping centre with Rooty Hill Road South and the child care centre with the shopping centre. Child care centre parking is located in the southern part of the car park (adjacent to the child care centre).

- 2.18. A service bay for the proposed child care centre is provided within the car park adjacent to the northwest corner of the child care centre building. This service bay is suitable for vans to use with a path provided along the western side of the building for service access. If required the service bay and adjacent space could be used by a small truck for deliveries to the child care centre without unduly impacting on the operation of the car park. Swept paths of service vehicles accessing the service bay are attached to this report.
- 2.19. Overall, subject to detailed design, the proposed access arrangements, internal circulation and service arrangements are appropriate and will be designed to comply with the requirements of AS2890.1-2004, AS2890.2-2002 and AS2890.6-2009.

#### Traffic Effects

- 2.20. As previously discussed, a detailed traffic assessment of the approved retail development on Lot 2 has been undertaken in the initial traffic report and supplementary reports. The traffic assessments included consideration of the traffic generated by a 50 place child care centre and found that:
- the road works required in association with the approved concept plan are based on a development which includes 9,500m<sup>2</sup> retail on Lot 2 (including a supermarket of 3,500m<sup>2</sup> to 4,000m<sup>2</sup>). The approved scale of development on Lot 2 is similar to the approved concept plan. The agreed road works (traffic signal controlled intersection at Cable Place and an upgrade to the intersection of Great Western Highway/Rooty Hill Road South/Wallgrove Road) are therefore appropriate to cater for the proposed amended retail development; and

- the SIDRA analysis found that with the identified intersection upgrades (as required by the concept plan approval), the intersections of Rooty Hill Road South with Cable Place and Great Western Highway will perform at acceptable levels of service and can satisfactorily accommodate Stage I DA traffic;

- 2.21. RMS guidelines indicate that child care centres generate 0.35 to 0.4 vehicles per hour per child two-way during weekday morning and afternoon peak hours. An increase in 60 places at the proposed child care centre (above that assessed in previous reports) would result in increase in traffic generation of some 15 to 20 vehicles per hour (two-way).
- 2.22. A proportion of trips generated by the child care centre would be linked trips with the approved retail centre, thus reducing overall traffic generation to some 10 to 15 vehicles per hour two-way.
- 2.23. This is low generation, equivalent to less than one vehicle every four to six minutes at peak times. Such a low generation would not have noticeable effects on the operation of the surrounding road network, compared to the approved development.
- 2.24. Thus in summary the traffic effects of the proposed 110 place child care centre would be similar to the approved retail development on Lot 2 (which included consideration of a 50 place child care centre).

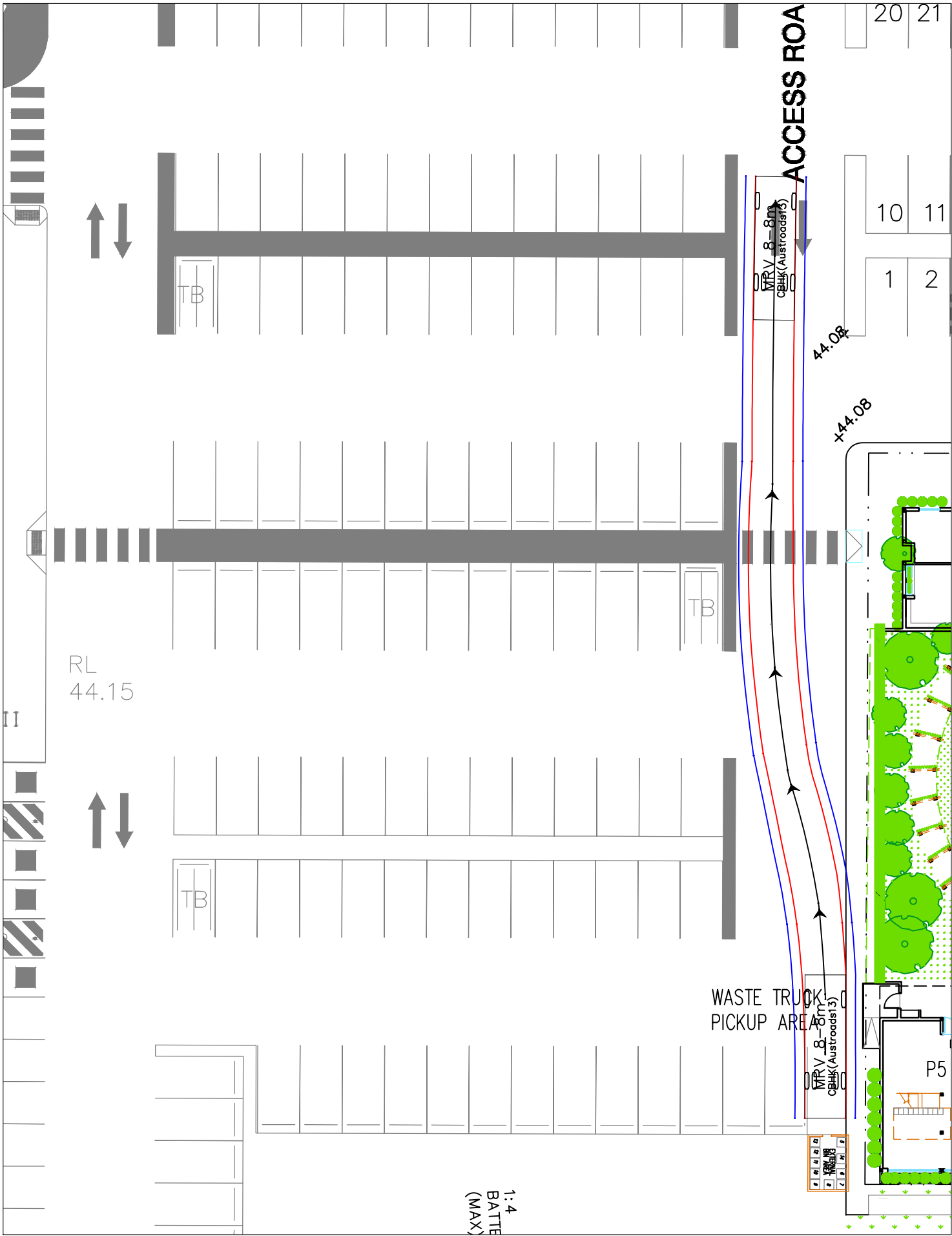
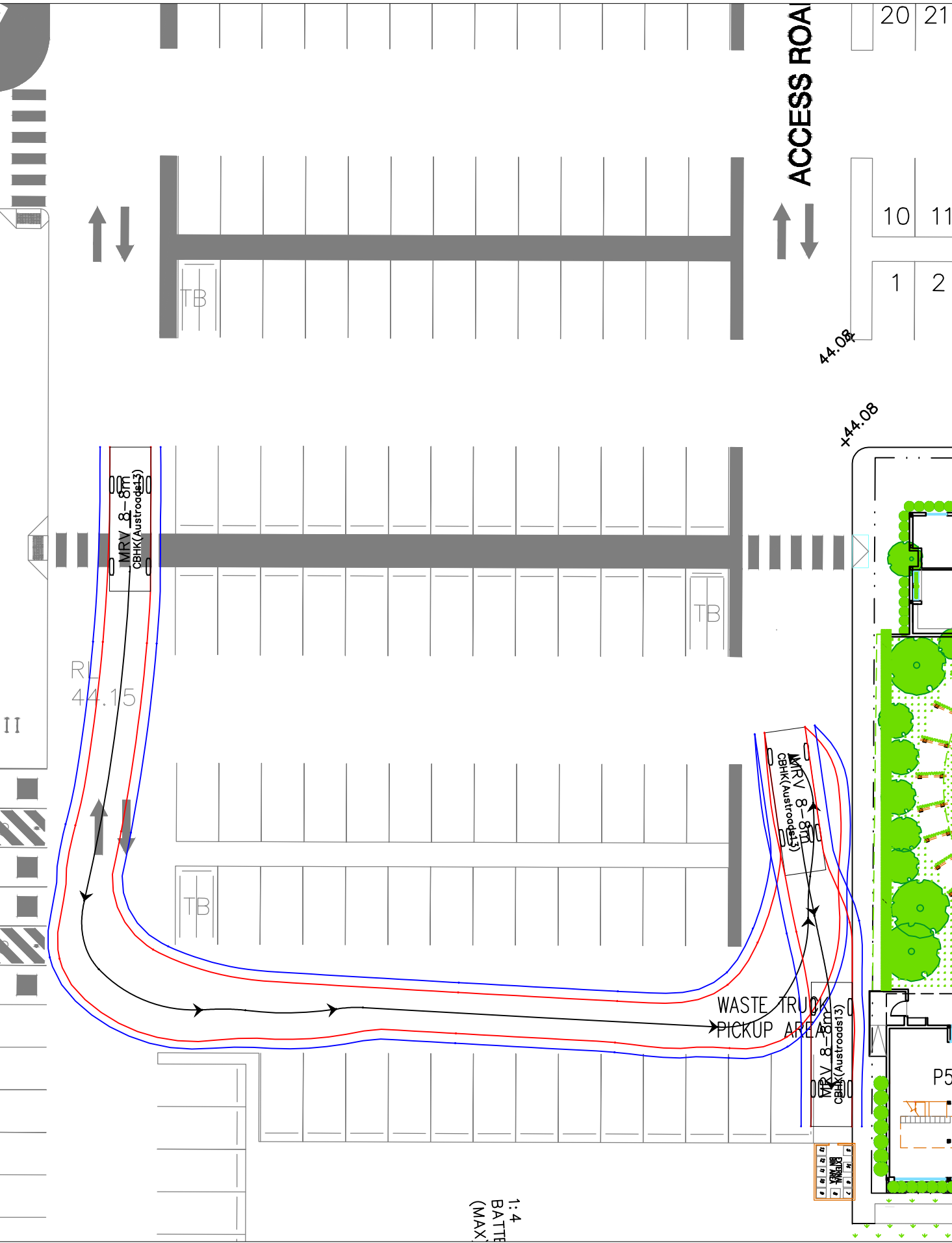
### Summary

- 2.25. In summary, the key findings of the traffic assessment for the proposed 110 place child care centre on Lot 2 in the Eastern Creek Business Hub are:
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- i) Lot 2 has approval for a retail centre. The traffic and parking assessment for the approved retail centre included consideration of a 50 place child care centre;
- ii) the proposed parking provision is appropriate;
- iii) access arrangements, internal circulation and servicing, subject to detailed design, are appropriate; and
- iv) the traffic effects of the proposed 110 place child care centre would be similar to the approved retail development on Lot 2 (which included consideration of a 50 place child care centre);

ATTACHMENT A

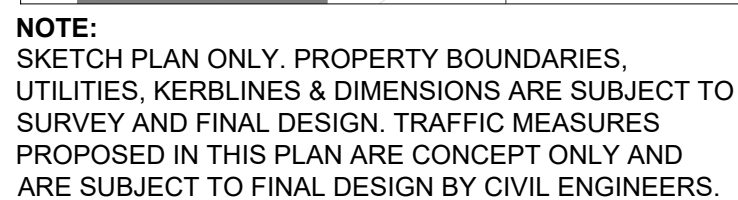
VEHICLE TURNING PATHS



**NOTE:**  
SKETCH PLAN ONLY. PROPERTY BOUNDARIES,  
UTILITIES, KERBLINES & DIMENSIONS ARE SUBJECT TO  
SURVEY AND FINAL DESIGN. TRAFFIC MEASURES  
PROPOSED IN THIS PLAN ARE CONCEPT ONLY AND  
ARE SUBJECT TO FINAL DESIGN BY CIVIL ENGINEERS.

— Swept Path of Vehicle Body  
— Swept Path of Clearance to Vehicle Body

8.8m MEDIUM RIGID VEHICLE  
SWEPT PATHS



— Swept Path of Vehicle Body  
— Swept Path of Clearance to Vehicle Body