

# INDEPENDENT TRAFFIC ADVICE -DEVELOPMENT APPLICATION DA24/0327

## Lot 11 (No. 30) Valcan Road, Wattle Grove

## TECHNICAL NOTE 1 17.03.2025

## 1. INTRODUCTION

The City of Kalamunda has requested Donald Veal Consultants (DVC) to provide our independent traffic advice on the development proposal for Lot 11 (No. 30) Valcan Road, Wattle Grove.

We understand the City of Kalamunda is currently assessing a Development Application (DA24/0327) for the commercial vehicle parking of two rigid trucks measuring 11m and 9m in length at the property. Concerns have been raised by some nearby residents, specifically regarding the Main Roads WA (MRWA) classification of Valcan Road as an Access Road, and whether this classification restricts the use of the proposed commercial vehicles on this road. These residents have challenged the proposal to approve the Development Application on the basis they do not believe Valcan Road is capable of accommodating any heavy vehicle traffic on technical, and physical grounds.

The City has requested the following points be addressed:

- 1. "Qualification: Please confirm that you are suitably qualified to provide independent advice to the City on traffic-related matters.
- 2. Road Hierarchy: Confirm the Main Roads WA road hierarchy status of Valcan Road, Wattle Grove.
- 3. Vehicle Permits: Confirm whether the proposed commercial vehicles are permitted to use Valcan Road under the current road classification.
- 4. Impact Assessment: Provide comments on the likely impact of the proposed vehicles using Valcan Road.
- 5. Recommendation: Based on your analysis, provide a recommendation on whether, from a traffic perspective, the application is capable of support."

This peer review has been carried out by Donald Veal with research assistance from Yaqoob Siddiqui.



## 2. QUALIFICATIONS OF ADVISORS

#### 2.1 Donald Veal, Director

Donald has vast post-graduate experience in transport planning and traffic engineering gained over more than 45 years. He has been based in Perth since 1997 and is well respected by his peers for his knowledge and application of these disciplines. Donald has undertaken many development application reviews both in the UK and Australia and provided evidence at DAP and SAT hearings on many occasions over the past 20 years.

Donald is a current member of the MRWA/IPWEA Road Safety Panel on which he has served since 2002, a member of the MRWA Works on Roads Advisory Panel and MRWA RTM Accreditation Panel. He is a Fellow and past WA Branch President of the AITPM and served on its committee for over 25 years from the formation of the branch until 2024.

#### **Qualifications / Professional Associations**

BSc Transportation Planning and Operations / Architectural Studies, University of Aston in Birmingham, UK, 1978 MSc Transport Planning and Engineering, University of Leeds, UK, 1979 Member, Chartered Institution of Highways and Transportation, UK, 1994 Member, Chartered Institute of Logistics and Transport Australia, 1997 Fellow, Australian Institute of Traffic Planning and Management, 1999 Fellow, Institute of Public Works Engineering Australasia, 2000 Associate Fellow, Australasian College of Road Safety, 2005 Accredited Senior Road Safety Auditor (2000 SRSA No. 0073) Registered Roadwork Traffic Manager (2003 RTM No. 009)

#### 2.2 Yaqoob Siddiqui, Senior Civil Engineer

Yaqoob has some 18 years of experience in civil design, road safety engineering, transport engineering and traffic management. His areas of expertise include Transport Impact Assessments/Statements, local area traffic management, RAV assessments, ROSMA safety assessments, pedestrian and cyclist studies, parking management plans and waste management plans in support of Development Applications.

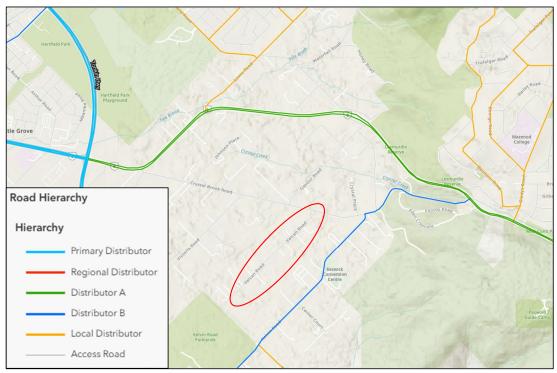
#### **Qualifications / Professional Associations**

BEng (Hons) in Civil Engineering, University of Western Australia, 2007 BSc (IT/Computer Science), University of Western Australia, 2007 Master of Business Administration (MBA), University of Western Australia, 2012 Diploma Management, Australian Institute of Management, 2009 Member, Institute of Engineers Australia Chartered Professional Engineer (CPEng), Engineers Australia Accredited Roadworks Traffic Manager (RTM 072) Accredited Senior Road Safety Auditor (SRSA No. 905) Advanced Worksite Traffic Manager (KTS-AWTM-18-1212-01)



## 3. ROAD HIERARCHY

Valcan Road is classified as 'Access Road' in MRWA's functional road hierarchy as shown in Figure 1.





Source: MRWA Road Information Mapping System

MRWA describes an Access Road as providing 'access to abutting properties with safety aspects having priority over the vehicle movement function. In urban areas, these roads are bicycle and pedestrian friendly, with aesthetics and amenity also important. Access Roads are managed by local government.' (Reference Western Australian Road Hierarchy, MRWA document D10#156630).

There are no posted speed signs on Valcan Road. The speed limit is set at a default 110km/h for a non builtup area as shown in **Figure 2**, however, anecdotally road users treat it more akin to an urban speed limit of 50km/h.

Valcan Road is a single carriageway no through road with the northern portion in the City of Kalamunda and the southern portion in the City of Gosnells. It is approximately 1.13kms in length, unkerbed with a nominal seal width of 5.5m to 6m within a 20m wide road reserve. A standard T-intersection connects Valcan Road to Crystal Brook Road at its northern end. Crystal Brook Road is also classified as an '*Access Road*'. Sight distance for drivers at the T-intersection appear adequate.



#### Client: City of Kalamunda

Project: Lot 11 Valcan Rd Wattle Grove Review Advice



### 4. VEHICLE PERMITS

Valcan Road is not listed in Main Roads Western Australia's (MRWA) Restricted Access Vehicle (RAV) database. As a result, vehicles or vehicle combinations, meeting the criteria set out in **Figure 3** are permitted to travel on the road without requiring a permit or order.

/ehicle Size:	Vehicle Mass:
<ul> <li>2.5m in width</li> <li>4.3m in height</li> <li>12.5m in length for a rigid vehicle</li> <li>19m in length for a combination</li> </ul>	<ul> <li>42.5t gross mass</li> <li>6t on a single steer axle</li> <li>10t on a twin steer axle group (non-load sharing suspension)</li> <li>11t on a twin steer axle group (load sharing suspension)</li> <li>9t on a single axle</li> <li>16.5t on a tandem axle group</li> <li>20t on a tri or quad axle group</li> </ul>

Figure 3: MRWA 'As of Right' Vehicles

Source: MRWA Website

There are no restrictions placed by MRWA on the use of Valcan Road by rigid vehicles up to 12.5m. We understand the City of Kalamunda has its own requirements set out in Local Planning Policy 1 -Commercial Vehicle Parking (LPP1), which are all met by the development application.



## 5. IMPACT ASSESSMENT

#### 5.1 Development Application Proposal

The Development Application is to request parking for two commercial trucks being 9m and 11m in length. The applicant notes the two trucks would be parked at the rear of the house and no cleaning, washing or maintenance works would be undertaken on the site. The trucks would occasionally be used on an irregular basis, possibly 3 times per week. Furthermore, we understand vehicle movements would take place between 8am and 5pm on weekdays only.

#### 5.2 Traffic Volumes

According to the MRWA Road Hierarchy for WA, the maximum desirable traffic volume for Access Roads is 3,000 vehicles per day (vpd) based on Annual Average Daily Traffic (AADT). A review of MRWA's TrafficMap database found no available traffic data for Valcan Road. However, traffic volumes on Valcan Road are expected to be low, as it primarily serves local residential traffic accessing properties along its length. Valcan Road is a cul-de-sac servicing some 30 residential properties and therefore likely to carry in the region of some 300 vehicles per day (150 per direction) at its northern end.

The development proposal therefore poses no road capacity concerns.

#### 5.3 Road Classification and Geometry

Valcan Road is classified by MRWA as an Access Road and permitted to be used by rigid vehicles up to 12.5m in length. It is a relatively straight road, with only minor localised curves typically to accommodate existing trees within the road reserve. As noted in section 3, the road has a nominal seal width of 5.5m to 6m. Austroads Guide to Road Design Part 3: Geometric Design advises the minimum road width for roads carrying low traffic volumes, is 5.5 m.

The sightlines from the driveways to No. 30 Valcan Road in both directions are good and raise no safety concerns. The nominated driveway to be used by the commercial trucks if the development application is approved is located on Valcan Road some 385m south of its intersection with Crystal Brook Road.

Valcan Road is suitably classified for use by commercial trucks up to 12.5 in length. Road geometry does not present any issues with the use of Valcan Road by 9m and 11m commercial trucks.

#### 5.4 Parking

The development application advises the two trucks in question will be parked off street behind the residential building and out of sight from the street. There is ample space on the lot for the trucks to enter and exit the property in a forward gear. Hence there are no parking concerns with the proposal.

#### 5.5 Road Users

It was evident from the site visit, undertaken on Sunday 16<sup>th</sup> March 2025, that the road is used by residential traffic and also by horse riders as several properties along the road stable horses with some operating agistment businesses such as Valcan Park Agistment. Vehicles were seen towing horse boxes and other residents seen



towing boats. A tractor was also seen parked on the verge. Two people on horseback were encountered and one or two local residents enjoying a stroll. The frequency of movement by the two trucks being the subject of the development application are not expected to have any material impact on the current usage of Valcan Road.

#### 5.6 Crash History

MRWA's Crashmap database was interrogated to establish whether any crashes have been reported on Valcan Road or its intersection with Crystal Brook Road. Over the past 5-years 2019 to 2023. (Note 2024 data has not yet been released by MRWA.) No crashes were reported in this timeframe.

#### 6. **RECOMMENDATION**

DVC has assessed the road hierarchy and vehicle permit aspects relevant to development application DA24/0327 to permit two commercial vehicles to be parked on No. 30 Valcan Road, Wattle Grove. The transport impact of the proposal has also been assessed.

Based on this assessment as detailed above, DVC finds no operational or road safety issues with the development application. We therefore find the application is capable of support and recommend its approval from a traffic and road safety perspective.

Reviewer: Donald Veal, Director

Research Assistant: Yaqoob Siddiqui, Senior Consultant

Date: 17/03/2025