

**LINQ APARTMENTS SECTION 45
BELCONNEN EASTERN VALLEY WAY
DRIVEWAY**

DESIGN ROAD SAFETY AUDIT

EVRI GROUP

FINAL

RG 25002 2 / 1

19 FEBRUARY 2025



Consulting Engineers

LINQ APARTMENTS SECTION 45 BELCONNEN EASTERN VALLEY WAY DRIVEWAY DESIGN ROAD SAFETY AUDIT

Prepared for evri group

Document Register

Revision	Date	Details	Author	Approved
0	14/02/25	Draft Road Safety Audit Report	RD	MG
1	19/02/25	Final Road Safety Audit Report	RD	MG

R D Gossip Pty Ltd
Unit 120, 12 Provan Street
Campbell ACT 2612
Australia
Telephone: +61 2 6251 6313
Email: robert@rdgossip.com.au

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1. SUMMARY

Project Name:	LINQ Apartments Section 45 Belconnen Eastern Valley Way Driveway
Audit for:	Evri Group
Telephone:	(02) 6162 9800
Project Officer	Rob Speight
Auditors:	Robert Dunn Lead Level 3 Road Safety Auditor, Senior Traffic Engineer Martin Gordon Level 2 Road Safety Auditor, Senior Designer
Audit Type:	Design Road Safety Audit
Commencement meeting:	Held Wednesday 15 January 2025. Discussed the role of the Road Safety Auditor, scope of the audit and the required information
Audit date:	Monday 10 February 2025
Site Inspection:	Monday 10 February 2025
Completion meeting:	Wednesday 19 February 2025
Previous audits:	N/A

This Road Safety Audit has been commissioned by Evri Group to assess the safety risks associated with the provision of an exit only driveway for waste collection vehicles only from the development site to Eastern Valley Way.

The audit identified a number of safety issues ranked as follows:

Extreme	0
High	1
Medium	1
Low	1
Negligible	0

5 Note Only items have been raised. Although there is no risk identified with these items, a response and appropriate action are still required.

2. INTRODUCTION

2.1 Audit Scope

This audit was requested to support the development application for LINQ Apartments Development Application regarding the provision of a driveway from Section 45 Belconnen connecting to Eastern Valley Way. The scope of the audit is to assess only the design of the driveway across the verge and excludes the internal functioning of the site.

The purpose of this audit is to identify road safety deficiencies associated with the design and the existing road environment.

The procedures used are described in Austroads 2022 Guide to Road Safety Part 6: Road Safety Audit.

2.2 Audited Documentation

The Road Safety Audit is based on a site inspection and the following design drawings:

Drawing No	Drawing Title	Date	Revision
SK.104	Eastern Valley Way Intersection Study Option 4 General Arrangement	29/01/25	7
SK.104a	Eastern Valley Way Intersection Study Option 4 Swept Paths 1.0m clearance	29/01/25	7
SK.104b	Eastern Valley Way Intersection Study Option 4 Wholistic GA Plan	29/01/25	7
SK.104c	Eastern Valley Way Intersection Study Queuing Demonstration	29/01/25	7
SK.104d	Eastern Valley Way Intersection Study Sight Distance Check	29/01/25	7
SK.104e	Eastern Valley Way Intersection Study Safe Intersection Sight Distance Check	29/01/25	7

2.3 Procedures, Reference Material and Information

Other specific guidelines referenced during this audit were:

- Austroads Guide to Road Design Part 3: Geometric Design
- Austroads Guide to Road Safety Part 6: Road Safety Audit
- Australian Standard AS 1742.2 Manual of Uniform Traffic Control Devices Part 2: Traffic control devices for general use
- Australian Standard AS 2890.2 Parking Facilities Part 2 Off-street commercial vehicle facilities
- ACT Design Standard.

2.4 Audit Team

The R D Gossip Pty Ltd audit team is:

- Robert Dunn Lead Level 3 Road Safety Auditor, Project Manager and Traffic Engineer
- Martin Gordon Level 2 Road Safety Auditor and Senior Designer

2.5 Responding to the Audit

An audit provides an opportunity for an independent team to highlight potential road safety problems and have them formally considered by the client Project Officer. The responsibility of responding to the findings of a road safety audit rests with the client Project Officer, not with the Auditor. The client Project Officer is under no obligation to accept the audit findings. It is also noted that it is not the role of the Auditor to agree too or approve the client Project Officer's responses to the audit.

3. ROAD SAFETY AUDIT PROGRAM

3.1 Commencement Meeting

The role and procedure of a design Road Safety Audit were discussed during the inception meeting between Robert Dunn, Lead Level 3 Road Safety Auditor (RDG) and Rob Speight (Evri Group) prior to the inspection. This included a discussion of the data and information required to undertake the audit.

3.2 Site Inspection

A daytime site inspection was undertaken on Monday 10 February 2025 between 12:00 pm and 1:00 pm. A nighttime inspection was undertaken on Monday 10 February 2025 between 10:00 pm and 10:30 pm.

3.3 Completion Meeting

A completion meeting was held on Wednesday 19 February 2025. The findings were discussed and possible options to address the identified risks during the meeting.

3.4 Corrective action response

It is the responsibility of the client and design team to respond to each of the audit findings. This should include treatment to mitigate the risks.

4. ROAD SAFETY AUDIT FINDINGS

4.1 Risk Level

The Austroads system of risk assessment has been applied to issues identified in the audit with the relative characteristics as follows:

Table 4-1 Risk Frequency

Crash Likelihood	Description
Almost certain	Occurrence once per quarter
Likely	Occurrence once per quarter to once per year
Possible	Occurrence once per year to once every three years
Unlikely	Occurrence once every three years to once every seven years
Rare	Occurrence less than once every seven years

Table 4-2 Risk Severity

Severity	Description
Insignificant	Property damage
Minor	Minor first aid
Moderate	Major first aid and/or presents to hospital (not admitted)
Serious	Admitted to hospital
Fatal	At scene or within 30 days of the crash

The resultant level of risk for each of these frequencies and outcomes from the Austroads guidelines is shown in Table 4-3.

Table 4-3 Level of Risk

Likelihood	Severity				
	Insignificant	Minor	Moderate	Serious	Fatal
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	Extreme	Extreme
Possible	Low	Medium	High	High	Extreme
Unlikely	Negligible	Low	Medium	High	Extreme
Rare	Negligible	Negligible	Low	Medium	High

The treatment that Austroads recommend for the above levels of risk is shown in Table 4-4.

Table 4-4 Treatment Approach

Risk	Treatment
Negligible	No action required
Low	Should be corrected or the risk reduced if the treatment cost is low
Medium	Should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high
High	Should be corrected or the risk significantly reduced, even if the treatment cost is high
Extreme	Must be corrected regardless of cost

The risk matrix is aligned with Safe System principles and was designed to be used with consideration of the severity guidance.

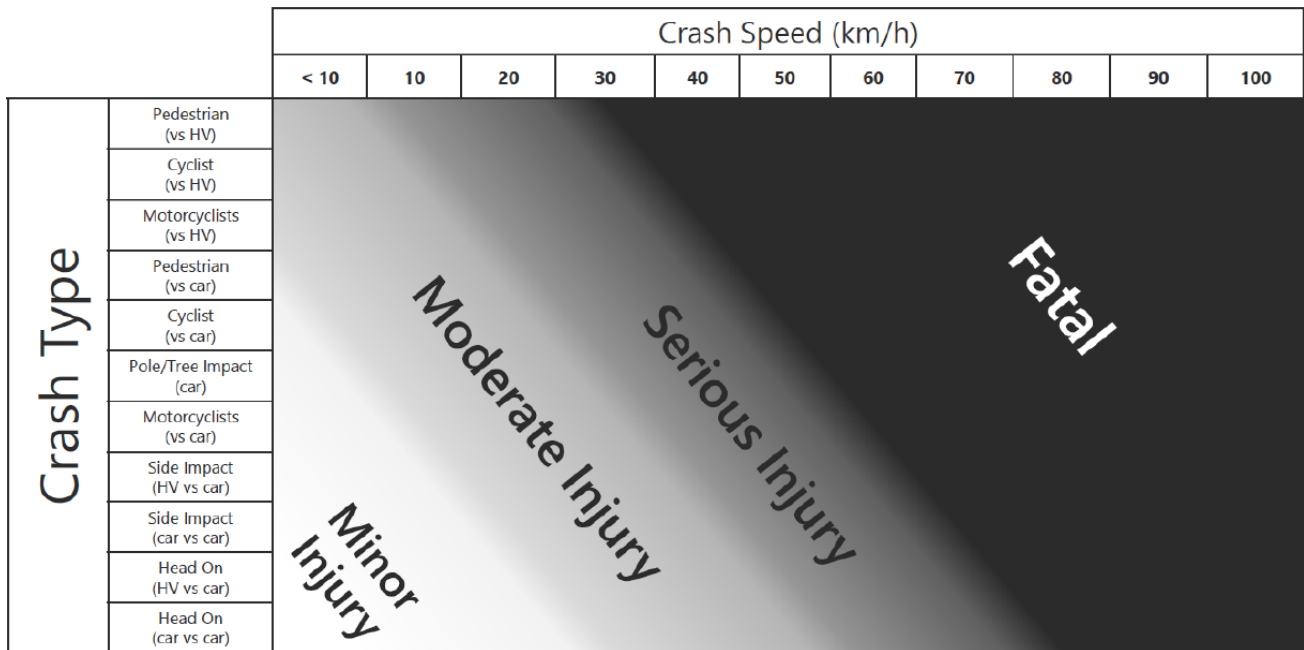


Figure 4-1 Severity guidance sheet – to be used with the risk matrix (Table 4-3)

4.2 Road Safety Audit Findings

The audit reviewed the key issues associated with the proposed driveway, including:

- Layout
- Visibility
- New/existing road interface
- Access
- Landscaping/Environmental
- Climatic conditions
- Drainage
- Adjoining/adjacent development
- Basic design principles

- Specific/Vulnerable Road Users

The audit findings are documented in **Table 4-5** which provides:

- Specific details of each of the audit findings identified during the audit.
- A risk level rating for each of the audit findings.

Table 4-5 provides road safety findings based on individual locations ranked according to the level of risk.

In keeping with NSW TfNSW practices, no recommendations have been prepared.

Table 4-5 Road Safety Audit Findings



No.	Description of findings/ Safety comments	Risk rating (Likelihood/ Severity)
1	The driveway design shows the minimum sight distance triangles at the driveway for the sight distance to pedestrians at the property boundary (Refer to No. 8 for additional comment) with additional pavement with chevron markings on the north side of the driveway. There is circa 2.5 m clearance between the end of the boom gate and the adjacent structure over the chevron area. This would provide clearance for a vehicle, including a motorcycle/ scooter, to manoeuvre through the gap and access Eastern Valley Way. The sight distance to pedestrian requirements would not be achieved should a vehicle perform this movement increasing the risk of a collision between a path user and a vehicle that could result in moderate injuries.	Possible/ Moderate High
2	Sight distance checks were provided with the design to indicate the sight distance required for the 40 km/h speed limit on Eastern Valley Way. The design indicated that four trees will be removed along Eastern Valley Way, including one for the driveway, however, there are additional trees to the south of the site not included on the drawing that would impact the site distance. It is noted that due to the eye height of the driver of a commercial vehicle (up to 2.5 m), the canopy of the trees can impact sight distance. Due to the reduced sight distance, there is a possibility of a side impact collision that could result in moderate to serious injuries.	Unlikely/ Moderate Medium
3	There is a possibility of a vehicle exiting the driveway using the median opening to travel south on Eastern Valley Way. It is anticipated that the driver of the vehicle would undertake this manoeuvre when there is no opposing traffic, however, could result in property damage due to the size of the vehicle.	Possible/ Insignificant Low
4	AS 2890.2 states that Access driveways leading to or from major roads and servicing major service areas should be designed as intersections. Being identified for the use of waste collection vehicle movements only under controlled conditions precludes major services. A driveway arrangement is considered appropriate in this intersection.	Note Only
5	There would be minimal visibility of the “No Entry” signs due to the location signage. Repositioning the signs at or near the property boundary would improve the conspicuity of the signs. Additionally, the installation of a “Left Turn” pavement arrow on the driveway would assist with reinforcing the “Left Only” sign.	Note Only
6	Confirmation of the driveway gradient is required. Incorrect gradients can impact the vertical clearance for a commercial vehicle.	Note Only

Table 4-5 Road Safety Audit Findings

No.	Description of findings/ Safety comments	Risk rating (Likelihood/ Severity)
7	The design notes that the existing streetlight is to be relocated less than 5m from the existing location. This is acceptable based on Section 2.7.14 for MITS 14 Public Lighting. However, a new column will be required due to the age and type of the existing streetlight column.	Note Only
8	Vegetation associated with the adjoining development encroaches over the path and has some impact on the sight distance to pedestrians. A maintenance program would be required to retain the vegetation at this location within the property boundary.	Note Only

5. FORMAL STATEMENT

The findings and opinions in the report are based on the existing road conditions and the provided design for the LINQ Apartments Section 45 Belconnen Eastern Valley Way Driveway and might not address all concerns existing at the time of the audit. The Auditors have endeavoured to identify features of the proposed conditions that could be modified or removed to improve safety. It should be noted that although every effort has been made to identify potential safety hazards, no guarantee can be made that every deficiency has been identified. While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.

Robert Dunn	Lead Auditor level 3 ID RSA-02-0788		19 February 2025
Martin Gordon	Auditor level 2 ID RSA-02-0506		19 February 2025