



LOKA CONSULTING ENGINEERS

OFFICE : SUITE 2, 55-59 PARRAMATTA ROAD, LIDCOMBE NSW 2141

PHONE: 02 8065 9689

FAX: 02 8065 9690

MOBILE: 0404 142 063

EMAIL: info@lceng.com.au

Web: www.lceng.com.au

Job Number: 23NL216-T3

Date: 8th May, 2024

Traffic Management Report for 24 Thurrallilly Street, Queanbeyan East, NSW

Prepared for: DA Stage

Report No.	Issue No.	Issue Date	Details
23NL216-T1	1	11/12/2023	Issued for Coordination
23NL216-T2	2	12/12/2023	Issued for D.A. Approval
23NL216-T3	3	08/05/2024	Issued for D.A. Approval

Prepared by

LOKA CONSULTING ENGINEERS PTY LTD

Nermein Loka

BSC, ME, MIE(AUST), CPEng, NPER, RPEQ, APEC, IPEA

Senior Civil Engineer

Director

Table of Contents

1. Introduction	3
2. Proposed Development	4
2.1. Public Transportations	5
3. Off Street Parking Provision.....	7
3.1. Car parking	7
4. Car Park and Driveway Layout	8
4.1. Driveway, Ramp Design and Dimensions of Parking Spaces	8
5. Traffic Generation	10
6. Swept Path Analysis	10
Appendix A Architectural Plan	11
Appendix B Swept Path Analysis	13

1. Introduction

Loka Consulting Engineers Pty Ltd has been engaged by Kennedy Associates Architects to provide a Traffic Management Report for the site at 24 Thurrallilly Street, Queanbeyan East, NSW (refer to Figure 1-1 and Figure 1-2) for Development Application Approval.

A Traffic Management Plan and Report is required for the proposed development to identify the impacts of the proposal on the local street network and mitigation measures required to ameliorate any impacts. This includes:

- A description of the site and details of the development proposal;
- A review of the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards; and
- An assessment of the adequacy and suitability of the quantum of off-street car parking provided on site.



Figure 1-1 Subject site (Source: Google Maps)



Figure 1-2 Site location (Source: SIX Maps)

2. Proposed Development

The proposed development will facilitate the construction of manor house development consisting of 3 dwellings within a site area of 689 m².

The proposed development is bounded by

- Pound Street on the East,
- No. 22 Thurralilly Street on the West,
- Thurralilly Street on the North, and
- No. 31 Pound Street on the South.

The proposed development consists of single garage for each dwelling with driveway entry for dwelling A & C from Thurralilly Street and driveway entry for dwelling B from Pound Street.

2.1.Public Transportations

The area is connected to public transport, with bus stations located in close proximity to the site.

1. It takes 1 minute walking (12m) from the site to Thurrallilly St opp Carrington St bus stop (refer to Figure 2-1).
2. It takes 14 minutes walking (1.1km) from the site to Queanbeyan Interchange, Stand 1 bus stop (refer to Figure 2-2).

Table 2-1 shows the bus line name; routes and the time between two successive trips. Refer to Transport NSW for accurate details.

Bus stop	Line Name	Route	Weekday hours	Weekday interval	Weekend hours	Weekend interval
1	832	Queanbeyan to East Queanbeyan (Loop Service)	07:29 - 18:29	2 hrs	08:28 - 18:28	2 hrs
2	830	Googong to Canberra CBD via Queanbeyan & Karabar	05:49 - 20:32	30 min	07:54 - 20:54	60 min
	831	Karabar to Woden via Queanbeyan & Fyshwick	06:19 - 18:54	30 min	07:54 - 17:54	60 min
	834	Queanbeyan to Brindabella Business Park, Majura Park and Canberra Airport	06:50 - 17:10	60 min	08:58 - 16:58	2 hrs
	835	Tralee to Queanbeyan via South Jerrabomberra & Queanbeyan West (Loop Service)	07:36 - 19:25	2 hrs	09:02 - 17:02	2 hrs
	836	Jerrambomberra to Queanbeyan (Loop Service)	07:51 - 19:24	2 hrs	08:04 - 18:04	2 hrs
	838	Queanbeyan to Queanbeyan West via Oaks Estate & Queanbeyan Station (Loop Service)	06:51 - 18:02	2 hrs	08:01 - 18:01	2 hrs
	844	Bungendore to Queanbeyan	09:15 - 17:00	3 hrs ~ 4 hrs	No Service	
	844X	Bungendore to Canberra CBD via Queanbeyan & Russell (Express Service)	07:09 - 08:29	30 min	No Service	

Table 2-1 Bus line, route, and time

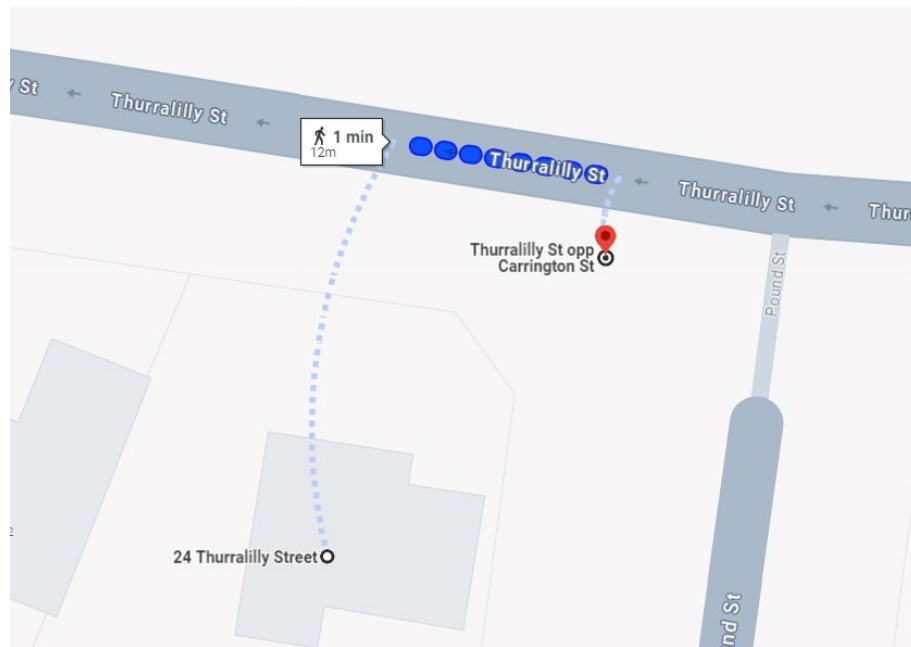


Figure 2-1 Subject Site to Thurrallilly St opp Carrington St bus stop (Source: Google Maps)

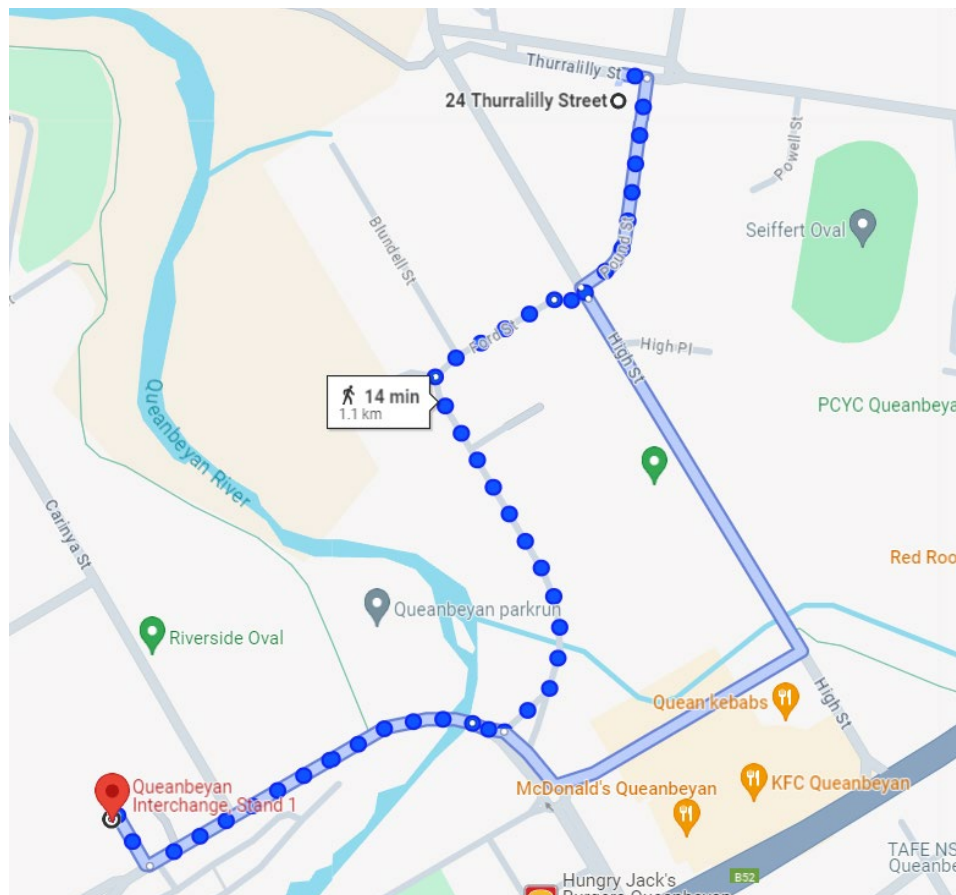


Figure 2-2 Subject Site to Queanbeyan Interchange, Stand 1 St bus stop (Source: Google Maps)

3. Off Street Parking Provision

3.1. Car parking

The subject development is proposed to be under Affordable Rental Housing SEPP 2021. Since the development is not proposed by a social housing provider, the car parking requirement and summary are shown in Table 3-1 to 3-3.

Land use	Minimum number of car parking spaces
Dwelling Houses	(i) for each dwelling containing 1 bedroom—at least 0.5 parking spaces, or (ii) for each dwelling containing 2 bedrooms—at least 1 parking space, or (iii) for each dwelling containing at least 3 bedrooms—at least 1.5 parking spaces.

Table 3-1 Off-street car parking space provision rate

Units and bedrooms provided are summarized in Table 3-2.

Bedroom	Number of units
1-bed	2
2-bed	1
3-bed	0
Total	3

Table 3-2 Bedroom summary

Required minimum parking spaces for the proposed development is shown in Table 3-3.

Parking type	Unit type	Amount	Parking rate	Required spaces	Required	Proposed
Dwelling Houses	1-bed	2	0.5	1	2	3
	2-bed	1	1	1		
	3-bed	0	1.5	0		

Table 3-3 Required minimum car parking spaces

The proposed development provides a single garage for each dwelling. There is a total of 3 off-street car parking spaces in the whole development.

The design complies with the requirement from SEPP (2021).

The architectural plan of the proposed development has been prepared by Kennedy Associates Architects and is attached in Appendix A.

3.2. Bicycle parking

There is no Bicycle parking requirement for dwelling houses according to council DCP.

4. Car Park and Driveway Layout

4.1. Driveway, Ramp Design and Dimensions of Parking Spaces

The design of the driveway, internal roadways & ramps, and car parking spaces must comply with Australian Standards; details are shown in the ground floor architectural plan. Table 4-1 assesses the compliance of the site to Australian Standards and Queanbeyan Comprehensive Development Control Plan 2012 (DCP).

Table 4-1 Driveway, ramp design and Dimensions of parking spaces

FEATURE	AS/NZS 2890.1&2, 2890.6	Queanbeyan Comprehensive DCP	Architectural Plan	Compliance
Driveway width	3.0 to 5.5 for Category 1.	Min. 3m	<u>Thurralilly Street:</u> 3.88m <u>Pound Street:</u> 3m	The design is complied with AS 2890.1 & Council DCP.
Single garage parking	5.4m x 3.0m	To comply with AS 2890.1	Dwelling A (LHA Gold): 5.5m x 3.25m Dwelling B & C: 5.5m x 3.12m	The design is complied with AS 2890.1 & Council DCP.
Garage door dimension	Width: minimum 2.4m Garage door height: 2.2m	Max. 2.7m wide To comply with AS2890.1	Garage door width: 2.57m Garage door height: 2.4m	The design is complied with AS 2890.1 & Council DCP.
Headroom	2.2m min between the floor and an overhead obstruction.	To comply with AS2890.1	2.7m Ensure min. 2.2m clear headroom at CC stage	The design is complied with AS 2890.1& Council DCP.
Ramp grade	Longer than 20m – 1:5 maximum. Up to 20m long – 1:4 maximum. Transition grade no more than 1:8. First 6m no more than 1:20. Changes of grade no more than 1:8.	To comply with AS2890.1	<u>Thurralilly Street:</u> 2.66%@ 9.26m <u>Pound Street:</u> 2%@ 3.817m 1.3%@ 2.362m	The design is complied with AS 2890.1 & Council DCP.

As required in AS 2890.1:2004, a triangular area with 2.5m (face to driveway) by 2.0m (face to street) will be kept clear of obstructions to visibility (Refer to Figure 4-1).

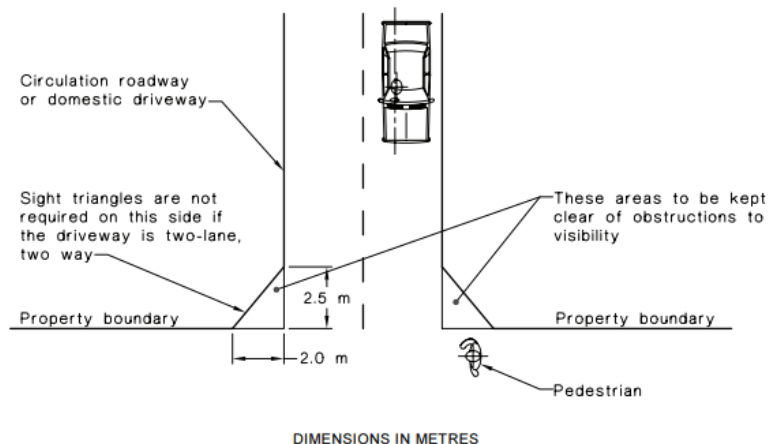


Figure 4-1 AS 2890.1:2004 requirement

In accordance with AS 2890.1:2004, sight triangle is hatched in red and shown in the following Figure 4-2.

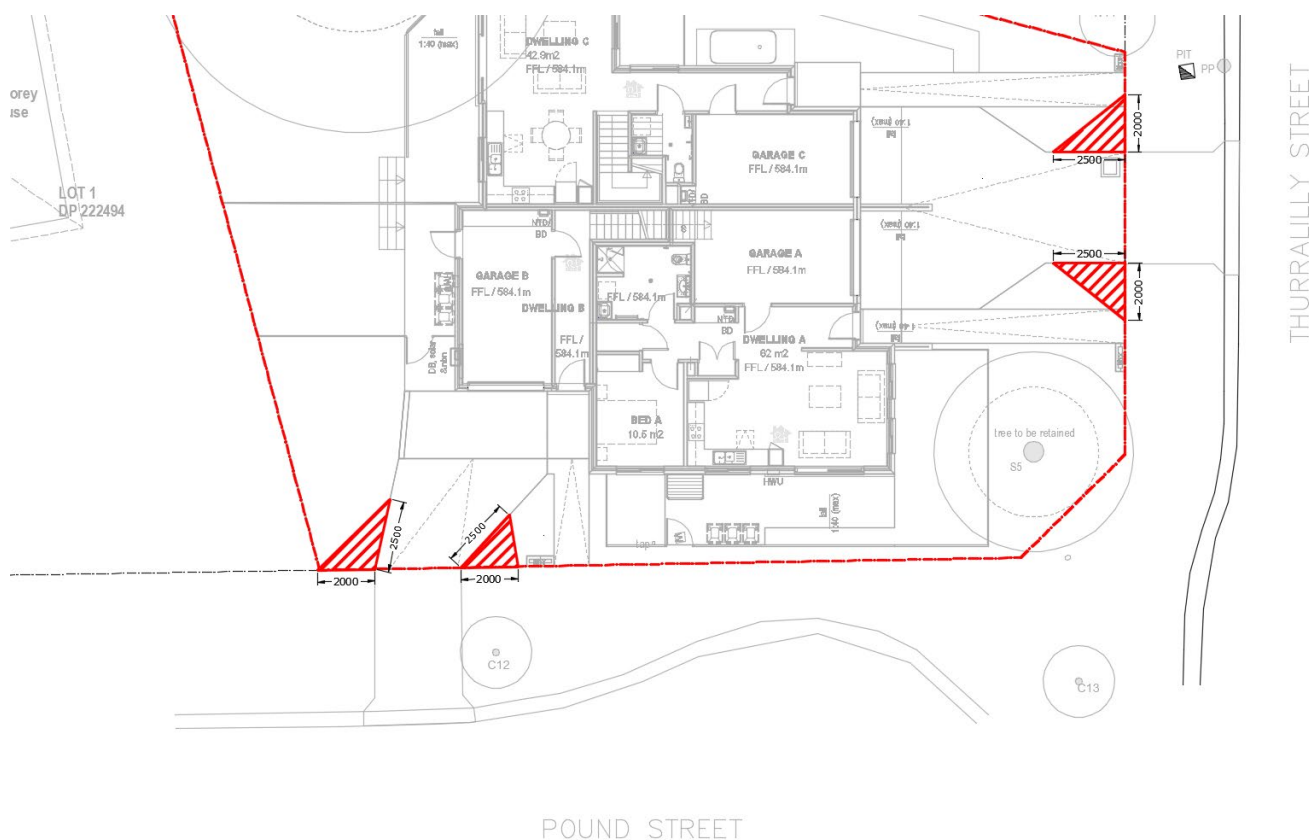


Figure 4-2 Sight triangle

Ensure any object within the sight triangle is max. 1.15m high or 50% transparent above 0.9m if higher than 1.15m.

5. Traffic Generation

An indication of the traffic generation potential of the development proposal is provided in accordance with Roads and Maritime Services (RMS) publication 'Guide to Traffic Generating Developments 2002'. The RMS guidelines are based on extensive survey of a wide range of land uses.

The existing site consists of single dwelling.

The subject site will involve construction of manor house development consisting of 3 dwellings.

Dwelling houses

Daily vehicle trips = 9.0 per dwelling

Weekday peak hour vehicle trips = 0.85 per dwelling. This is shown in Table 5-1.

Time	Land use	Rate	Unit	Weekday peak hour vehicle trips
Future	Dwelling houses	0.85 per dwelling	3 proposed	2.55
Existing	Single dwelling	0.85 per dwelling	1 existing	0.85

Table 5-1 Traffic generation for future and existing development

Traffic generation potential	Weekday peak hour vehicle trips
Future	2.55
Existing	0.85
Net	+2

Table 5-2 Project net Increase in peak hour traffic generation potential

According to the Table above, it is likely that the proposed development will result in a change in the traffic generation by approximately 2 additional vehicle trips/hr during weekday peak hour from Monday to Friday.

6. Swept Path Analysis

To ensure all vehicles enter and exit the site in a forward direction, swept path analysis has been conducted in the Appendix B.

It is our opinion that the proposed car parking and driveway comply with Australia Standards.

APPENDIX A

Architectural Plan



- LEGEND**
- Site boundary
 - Setback
 - grid lines
 - denotes structural dimension
 - driveway / carparking
 - private / common paved area
 - common landscaped area
 - 1 Bed dwelling
 - 2 Bed dwelling

- ABBREVIATION LEGEND**
- PP power pole
 - LTBX letter box
 - PIT comms pit
 - W water meter

- TREE LEGEND**
- S1 arborist report tree number
 - existing tree to be retained
 - tree protection zone
 - structural root zone

- LEVELS LEGEND**
- FFL / 1000 finished floor level (mm)

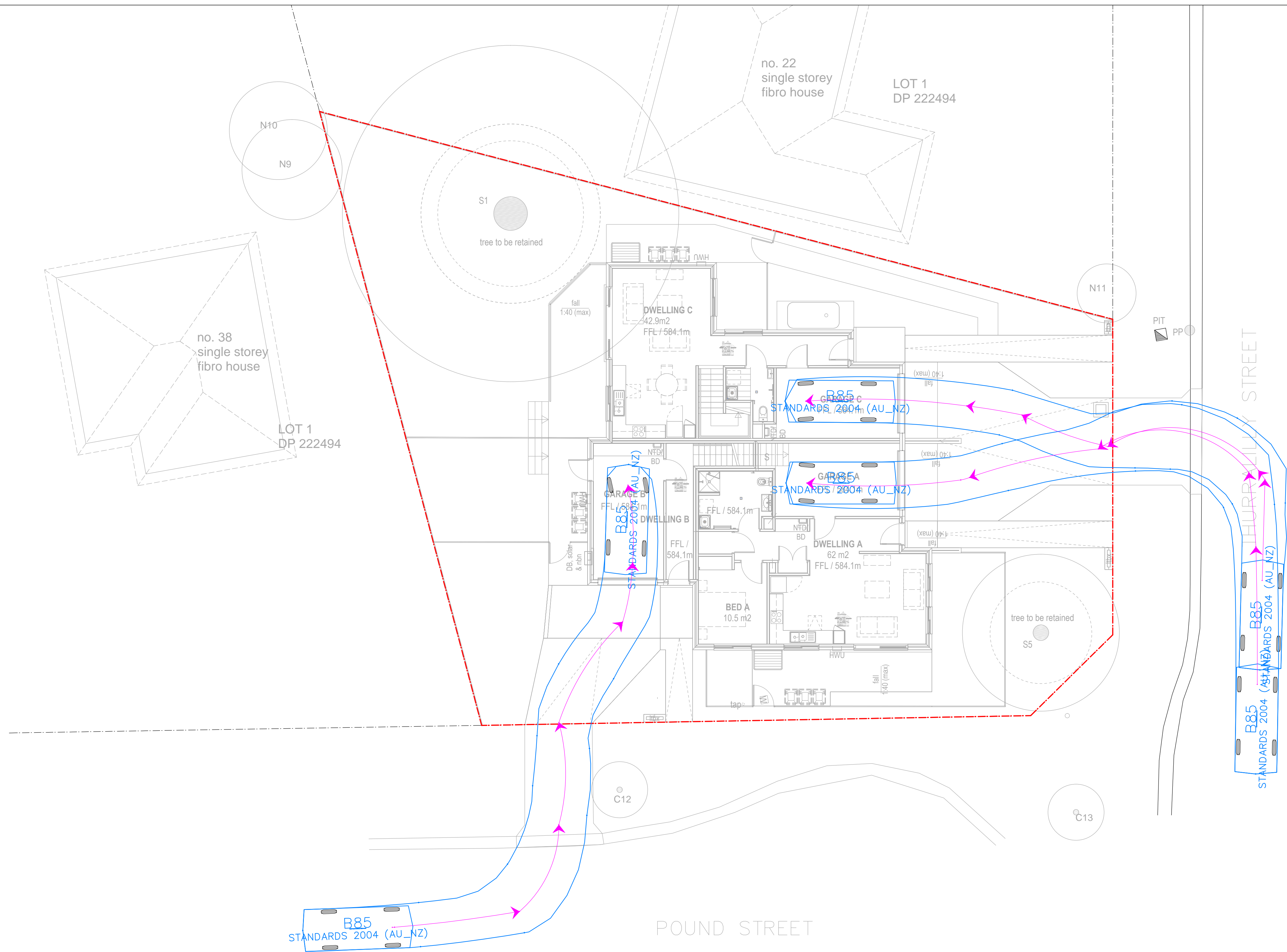
- LHA LEGEND**
- LHA GOLD

- NOTES**
- do not scale off drawings.
 - these drawings are to be read in conjunction with specifications, schedules and other consultants' documentation.
 - refer to landscape architect's documentation for all external works details including planting, hard paving, fences, screens + gates.
 - refer to civil engineer's drawings for all levels to be provided. any discrepancies to be referred to the architect for clarification.

 		NOMINATED ARCHITECT: anthony nolan 6773		PROJECT ARCHITECT KENNEDY ASSOCIATES ARCHITECTS PH (02) 9557 6466		ACCESS CONSULTANT VISTA ACCESS ARCHITECTS		BASIX CONSULTANT 10 STAR BUILDING ASSESSMENTS 0481 010 999		PROJECT: MANOR HOUSE at 24 Thurralilly Street QUEANBEYAN EAST 689m2 171-/DP222494		TITLE: GENERAL ARRANGEMENT - LEVEL 00		STATUS: PART 5 APPLICATION											
		A REV		24/4/2024 DATE		PART 5 APPLICATION NOTATION/AMENDMENT		PROJECT MANAGER HOMES NSW		ARBORIST TREE WORKS 1800 873 343		SERVICES CONSULTANTS MARLINE BUILDING SERVICES ENGINEERS 02 4625 9300		FILE: 2071 - DA 01 PLANS MASTER.vwx		SCALE: 1:100 @A1		PROJECT No. 2071		DRAWN: LP		CHECKED: AN		APPROVED: AN	
																TYPE: DA-202		SHEET: A							

APPENDIX B

Swept Path Analysis



SWEPT PATH ANALYSIS ENTRY

SCALE 1: 100

A1 1 2 3 4 5 6 7 8 9 10

NOT FOR CONSTRUCTION

THIS DRAWING IS THE PROPERTY OF LOKA CONSULTING ENGINEERS AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE WRITTEN CONSENT OF THE COMPANY										ARCHITECT KENNEDY ASSOCIATES ARCHITECTS PH (02) 9557 6466				PROJECT PROPOSED MANOR HOUSE AT 24 THURRALILLY STREET, QUEANBEYAN EAST, NSW CONSISTENT AUTHORITY: QUEANBEYAN-PALERANG REGIONAL COUNCIL				SHEET SUBJECT SWEPT PATH ANALYSIS ENTRY				PROJECT 24 THURRALILLY STREET, QUEANBEYAN EAST, NSW			
Copyright Loka Consulting Engineers as date of issue										DATE DEC 23				DRAWN B.V.				DESIGNED N.L.				CHECKED N.L.			
C FOR D.A. APPROVAL B.V. B.V. 08-05-24										SCALE @ A1 1 : 100 U.N.O				JOB No 23NL216				AUTHORISED NERMEIN LOKA				DWG No T01			
B FOR D.A. APPROVAL R.E. R.E. 12-12-23										REV C															
A FOR COORDINATION B.V. B.V. 11-12-23																									
No AMENDMENT ENG DRAFT DATE No AMENDMENT ENG DRAFT DATE																									

