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AMENDED IN RED

By: Tiana Hill

Date: 12 December 2025



**PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL**

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Transport Engineering Report

Russian Orthodox Church

Vulture Street, Woolloongabba





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1. Introduction

1.1. Purpose

Colliers International Engineering and Design (TTMC) Pty Ltd has been engaged by the Russian Orthodox Church Care of Urbis to prepare a Traffic Report investigating a proposed Reconfiguration of Lot (ROL) and Multi-Unit Development at Vulture Street, Woolloongabba. It is understood this report will accompany a Development Application to be lodged with Brisbane City Council ('Council'), and with referral to Economic Development Queensland (EDQ), and the Department of Transport and Main Roads (DTMR).

1.2. Background

The subject site is located within the Woolloongabba Priority Development Area (PDA), which was declared by the Queensland Government on 22 September 2023 to support the delivery of the Cross River Rail project and facilitate the urban renewal of the Woolloongabba precinct.

The Woolloongabba PDA is intended to enable the development of a high-density, mixed-use urban environment, centred around the new Cross River Rail station and integrated public transport infrastructure. The PDA promotes a transit-oriented development (TOD) model, which prioritises public and active transport accessibility, reduces reliance on private vehicles, and encourages walkability through a highly connected and legible street network.

The Woolloongabba PDA Development Scheme, which became effective on 20 September 2024, sets out the planning and design framework for the precinct, including specific requirements relating to transport, access, and movement. Development within the PDA is expected to align with the following transport planning principles:

- Support for active transport and pedestrian priority within and around the precinct;
- Integration with existing and future public transport infrastructure, including the Cross River Rail station, the South-East Busway, and local bus services;
- Efficient management of servicing and access requirements for vehicles without compromising pedestrian and cyclist safety;
- Delivery of a transport network that accommodates expected future growth while minimising impacts on the external road network.

This development proposal has been prepared with consideration of the Woolloongabba PDA objectives and transport outcomes, ensuring that the proposed access, parking, servicing, and traffic generation are consistent with the intent of the PDA Development Scheme and broader planning policies.

1.3. Scope

The scope of the transport aspects investigated includes:

- Reviewing the prevailing traffic and transport conditions surrounding the site.
- Identifying parking supply required to cater for development demands.
- Assessing the parking layout to provide efficient and safe internal circulation and manoeuvring.
- Assessing the access configuration to provide efficient and safe manoeuvring between the site and the public road network for cars, service vehicles, cyclists and pedestrians.
- Identifying the service vehicle needs for the site
- Assessing the internal service vehicle layouts to provide efficiency and safety for on-site service vehicle operation
- Reviewing access to a suitable level of public and active transport provisions.
- Identification of likely traffic volumes and traffic distribution from the development.
- Identification of likely traffic impacts of development on the surrounding road network.

The development plans have been assessed against the following guidelines and planning documents:

- EDQ Woolloongabba Priority Development Area (PDA)
- Brisbane City Council Planning Scheme (City Plan 2014),
- Australian Standards for Parking Facilities, specifically:
 - Part 1: Off-street car parking (AS2890.1:2004)
 - Part 2: Off-street commercial vehicle facilities (AS2890.2:2018)
 - Part 3: Bicycle parking (AS2890.3:2015)
 - Part 6: Off-street parking for people with disabilities (AS2890.6:2009).
- Council Standard Drawings (BSD Series)
- Department of Transport and Main Roads 'Road Planning and Design Manual' (RPDM)
- Department of Transport and Main Roads 'Guide to Traffic Impact Assessment' (GTIA)

2. Site Location

The subject site is located at 344 Vulture Street, Woolloongabba QLD 4102, near the intersections with Leopard Street and Mai Street, as illustrated in Figure 2.1 and Figure 2.2. The site has road frontages to both Vulture Street and Mark Lane, providing convenient access to the surrounding local and district road network.

The property is formally described as Lot 2 on RP166128.

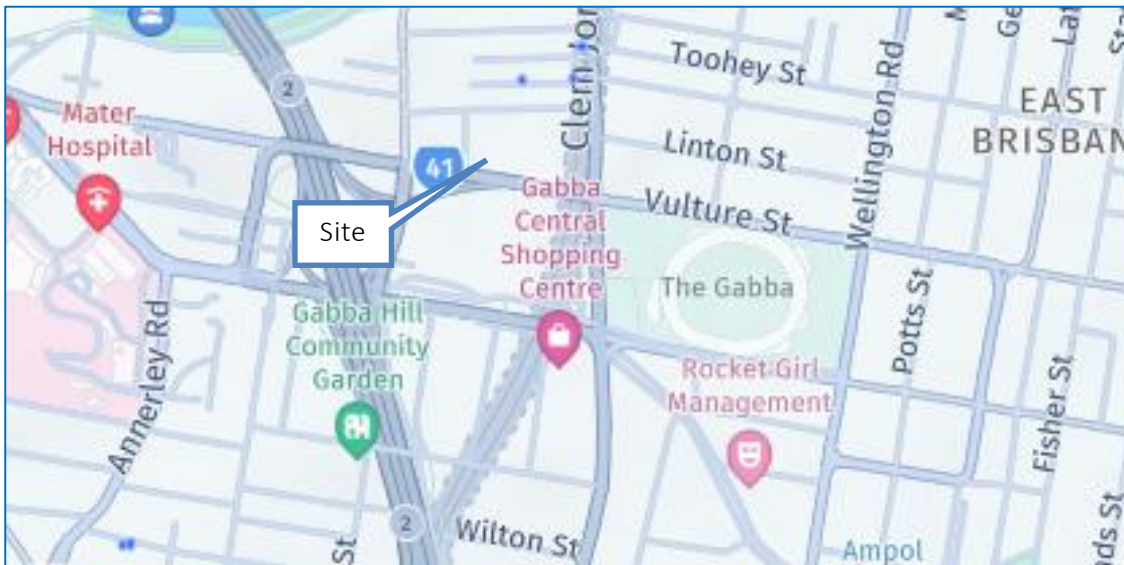


Figure 2.1: Site location (Surrounding Context)



Figure 2.2: Site Location (Immediate Context)

3. The Proposed Development

3.1. Development Profile

The development proposal comprises 15 residential units and an exclusive community centre, as part of a Reconfiguration of Lot (RoL) application in association with the existing Russian Orthodox Church ('Church'). The development proposal considers the Woolloongabba PDA transport objectives - the layout and access arrangements support safe and efficient vehicle movement while encouraging active transport connectivity.

The proposed development promotes integration with the broader transport network and aligns with the PDA's intended outcomes for sustainable and accessible urban growth. The proposed land uses for this development are summarised in Table 3.1.

Table 3.1: Proposed land uses

Land Use	Area / Qty
Multiple Dwellings:	
• 1 Bedroom	6
• 2 Bedroom	9
Community Use	367m ² GFA

A copy of the proposed development plans, prepared by Cavill Architects, is included in Appendix A.

3.2. Parking

The development proposal plan includes the following parking supply:

- 34 spaces (incl. 1 PWD spaces) located in a Basement parking area
- 10 spaces located on the existing Ground Level

3.3. Access

The proposed development plans include the following access arrangements:

- Existing access to the Church via Vulture Street retained and modified. Proposed 5.8m wide Type B2 crossover with modified flares. Left-in / Left-out access arrangement.
- The existing crossover located on Leahy Lane was retained and modified. Proposed 7.0m wide Type B2 crossover, all movements access.
- Pedestrian access to the Vulture Street and Leahy Lane frontages via footpath linkages.
- Cyclist access to the Vulture Street and Leahy Lane frontage via footpath and vehicular driveway.

3.4. Servicing

The development plan allows occasional access for vehicles up to the size of a Hearse / SRV and regular access for vehicles up to the size of a Refuse Collection Vehicle (RCV).

4. Site Travel Environment

4.1. Public Transport Facilities and Services

4.1.1. Train Services

The current closest train station to the subject site is South Bank Train Station, which is approximately 1.1 kilometres (~15 minutes) walk to the west. This station services the Cleveland Line and the Beenleigh Line. It is noted that once the Cross River Rail (CCR) is completed (currently under construction), the Woolloongabba Station will be within 400m (5 minutes) walk of the subject site.

The Cleveland Line runs between Shorncliffe and Cleveland, servicing suburbs in between including Buranda, Morningside, Manly, and Lota. This service operates on all days, with weekday peak hour frequencies of approximately 15 minutes and off-peak frequencies of 30 minutes.

The Beenleigh Line runs between Beenleigh and Bowen Hills, servicing suburbs in between including Loganlea, Sunnybank, Buranda, and South Bank. This service operates on all days, with weekday peak hour frequencies of approximately 15 minutes and off-peak frequencies of 30 minutes.

4.1.2. Bus Services

The site is located in close proximity to local bus stops on Vulture Street, less than 100m walk from the site to the west. These bus stops service Translink Routes 192, 196 and 198.

Route 192 runs between UQ St Lucia and City (King George Square), servicing suburbs in between including Dutton Park, Highgate Hill, South Brisbane, and the CBD. This service operates on weekdays only, with weekday peak hour frequencies of approximately 10–15 minutes and off-peak frequencies of 30 minutes.

Route 196 runs between Fairfield Gardens and New Farm (Merthyr Road), servicing suburbs in between including Woolloongabba, West End, South Brisbane, Fortitude Valley, and New Farm. This service operates on all days, with weekday peak hour frequencies of approximately 10 minutes and off-peak frequencies of 20–30 minutes.

Route 198 runs a loop service between Fairfield Gardens and West End, servicing suburbs including Woolloongabba, Dutton Park, Highgate Hill, and South Brisbane. This service operates on all days, with weekday peak hour frequencies of approximately 15 minutes and off-peak frequencies of 30 minutes.

4.1.3. Ferry Services

The site is located in close proximity to the Mowbray Park Ferry Terminal, which is less than 900m walk from the site to the north-east. This terminal services CityCat services operating between UQ St Lucia and Northshore Hamilton.

The CityCat service runs on all days, with weekday peak hour frequencies of approximately 15 minutes and off-peak frequencies of 30 minutes.

4.2. Active Transport Facilities

4.2.1. Bicycles

The site is located close to the Veloway 1 (V1), which is identified as a 'Primary Cycle Route' under Brisbane City Council's Bicycle Network Overlay Code. The V1 is an extensive dedicated cycle corridor running between Brisbane CBD and Eight Mile Plains, providing a high-quality, off-road route for cyclists commuting between the inner city, Woolloongabba, and Brisbane's southern suburbs.

Access to the V1 from the site is possible via Potter Street and Stanley Street, with safe connections available to both the Woolloongabba Bikeway network and the V1 entry points along O'Keefe Street.

In the more immediate surrounds, Vulture Street and Potter Street provide cycle provisions in the form of shared on-road treatments and access to nearby off-road paths. Stanley Street also offers dedicated on-street cycle lanes linking the site to South Brisbane, Kangaroo Point, and the wider inner-city cycle network.

The site is also located in close proximity to former CityCycle docking stations (note: CityCycle ceased operation in 2021), with new e-mobility hire schemes (Beam, Neuron, Lime) now offering shared e-scooter and e-bike parking hubs nearby, including one at Woolloongabba Busway Station (approx. 300m walk) and another near Mowbray Park Ferry Terminal (approx. 900m walk).

4.2.2. Pedestrians

Formal pedestrian footpaths are located on both sides of Vulture Street, providing safe and continuous pedestrian access to surrounding residential areas, nearby bus stops, and key local destinations.

The nearest formal pedestrian crossing of Vulture Street is located at the signalised intersection with Potts Street, approximately 100 metres west of the site, which facilitates safe pedestrian movement across this arterial route.

An informal pedestrian refuge is also provided across Vulture Street, near the Potter Street intersection, enhancing crossing opportunities for pedestrians in the immediate vicinity of the site.

Walkability Summary

The site is located within an established urban environment that benefits from good pedestrian infrastructure, with formal footpaths, signalised crossings, and pedestrian refuges supporting safe and convenient walking routes.

Key local destinations — including Woolloongabba's commercial precinct, the Woolloongabba Busway Station, Buranda Train Station, and the future Cross River Rail Woolloongabba Station — are all within comfortable walking distance of the site.

The combination of formal pedestrian infrastructure, short walking distances to public transport, nearby services, and active transport links contributes to a highly walkable environment.

The existing infrastructure is considered sufficient to encourage and support walking for both daily trips and last-mile connections to external transport options, reducing dependence on private vehicles for short-distance travel.

4.3. The Road Network

4.3.1. Road Hierarchy

The hierarchy and characteristics of roads in the immediate vicinity of the site are shown in Table 4.1.

Table 4.1: Surrounding Road Hierarchy

Road	Speed Limit	Road Configuration			Classification	Authority
		Reserve Width	Carriageway Width	Lane Configuration		
Vulture Street	60km/h	20–25	11–12	Four (4) traffic lanes plus turn lanes. No standing on north side of road, road shoulder / parking lane on south side. One direction only – eastbound	District Road	DTMR
Mark Lane	50km/h ¹	10m	6m	Two (2) traffic lanes plus informal kerbside parking.	Local Road	Council
Leahy Lane	50km/h ¹	20m	5–6	Two (2) traffic lanes plus informal kerbside parking.	Local Road	Council
Main Street	60 km/h	30 metres	20–22 metres	Four (4) traffic lanes (two in each direction) with a central median and dedicated turning lanes at major intersections. Parking generally restricted / prohibited	Arterial Road	DTMR
Leopard Street	50 km/h	20 metres	12 metres	Two (2) traffic lanes and kerbside parking along both sides, with restrictions near signalised intersections.	District Road	Council

¹Default speed limit on unsigned roads in built-up areas in Queensland.

The following is noted in regard to surrounding road network intersections:

- Vulture Street and Main Street is a signalised intersection, providing controlled movements for both vehicular and pedestrian traffic.
- Vulture Street and Leopard Street is a signalised intersection, facilitating safe access between the local road network and the arterial route.
- Vulture Street and Mark Lane is a priority-controlled (Give Way) intersection, with Mark Lane required to give way to traffic on Vulture Street.
- Vulture Street and Leahy Lane is a priority-controlled (Give Way) intersection, with Leahy Lane giving way to all movements along Vulture Street.

4.4. Transport Planning

The subject site is located within the Woolloongabba Priority Development Area (PDA), which is undergoing significant transformation as part of Brisbane's broader urban growth strategy, supported by major transport infrastructure investment, including the Cross River Rail project.

As part of the PDA planning framework, Economic Development Queensland (EDQ), in collaboration with Brisbane City Council (Council) and the Department of Transport and Main Roads (DTMR), has identified a coordinated approach to transport planning in the area. This integrated strategy aims to improve multimodal access, reduce dependency on private vehicles, and promote sustainable urban development outcomes.

The transport planning initiatives relevant to the subject site include:

- Delivery of the Woolloongabba Station, a new high-capacity underground rail station positioned within walking distance of the site, which will provide residents, employees, and visitors with improved access to the South-East Queensland rail network, significantly reducing travel times to key employment, education, and recreational destinations across the city.
- Planned upgrades to the pedestrian and cycling network, including new connections, wider footpaths, and safe crossing points that will link the site to nearby public transport nodes, public open space, and surrounding urban precincts.
- Proposed improvements to local road corridors and intersection layouts to support changes in traffic circulation patterns, especially in response to altered travel behaviour following the opening of the Woolloongabba Station and ongoing PDA redevelopment.
- A focus on the creation of a connected, safe, and efficient transport environment that prioritises walking, cycling, and public transport use, while managing private vehicle movements and parking supply to align with EDQ's and Council's strategic objectives for inner-city living and active transport.

Overall, the transport planning vision for the Woolloongabba PDA seeks to ensure future developments, including the proposed reconfiguration and multi-unit development at the subject site, are supported by a well-integrated and future-proofed transport network. These planned improvements are expected to encourage sustainable travel behaviours and contribute positively to the function, safety, and liveability of the surrounding precinct.

5. Reconfiguration of Lot Overview

The subject Development Application seeks approval for a Reconfiguration of Lot (RoL) involving the realignment of the property boundaries associated with the Russian Orthodox Church located at 324 Vulture Street, Woolloongabba, the adjoining lot at 344 Vulture Street, and Lot 11 Lahey Lane, Woolloongabba, (Figure 5.1).



Figure 5.1: Existing Site Arrangement

The proposed boundary realignment (see Figure 5.2 overleaf) has been designed to “square off” the existing lot configurations, creating more regular-shaped allotments. This adjustment will enable a more efficient and flexible use of the land, both in terms of vehicle access and future development opportunities, while also facilitating the delivery of community infrastructure as part of the Church's long-term vision for the site.

Specifically, the overall reconfiguration will support the development of a new Community Service Centre for the Russian Orthodox Church at the Ground Level, with residential units proposed on upper building levels as part of a future mixed-use development. The reconfigured layout will provide improved site functionality and a more logical separation between community, residential, and future land-uses as part of the over-arching Master Plan.

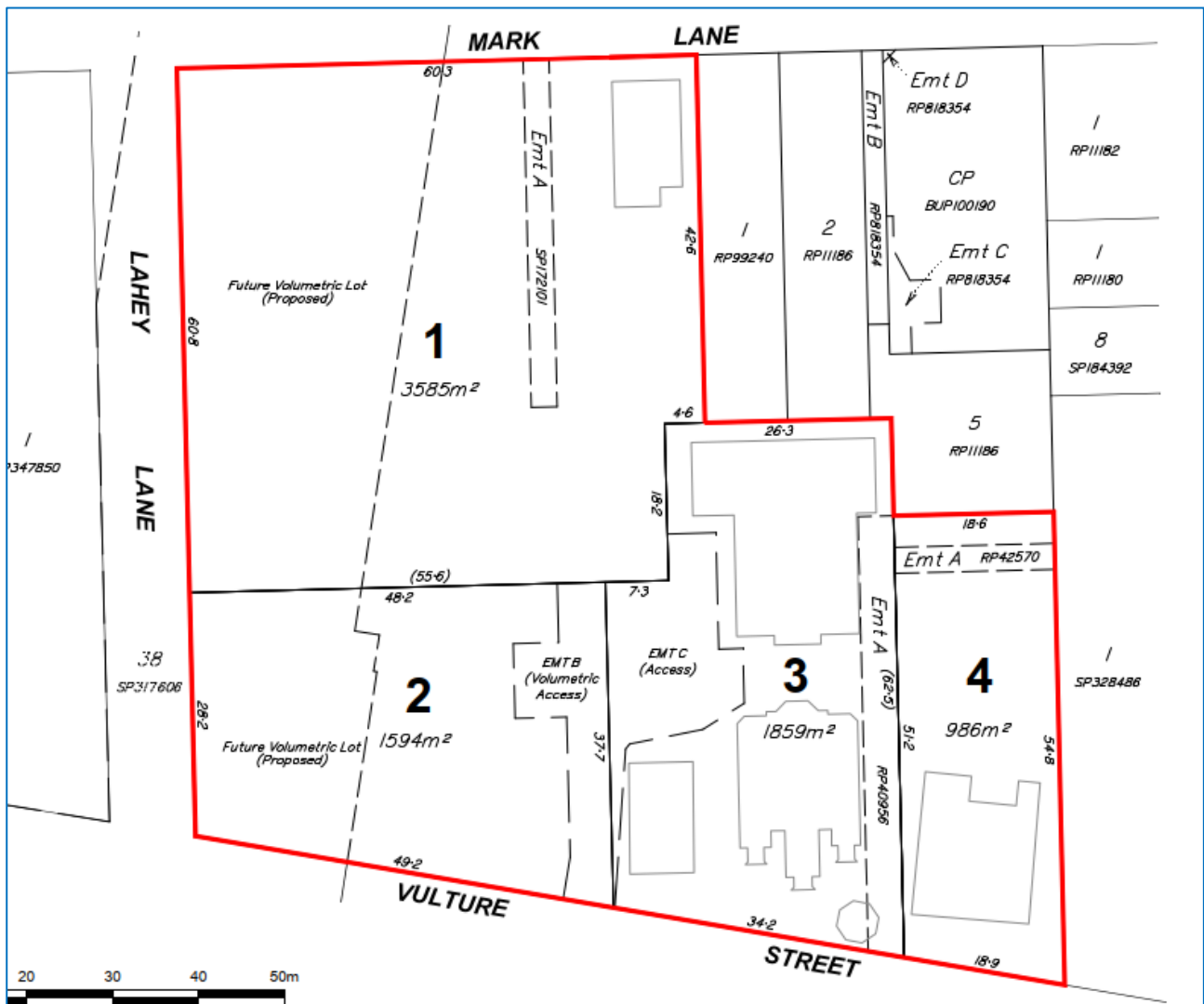


Figure 5.2: Proposed Reconfiguration of Lot

From a traffic and access perspective, the proposed RoL:

- Maintains existing vehicle accesses to both Vulture Street and the local road network including Lahey Lane;
- Enables improved internal circulation and manoeuvrability for service vehicles, private vehicles, and emergency vehicle access;
- Aligns with the broader urban renewal objectives of the Woolloongabba Priority Development Area (PDA), enabling future land use intensification, enhanced pedestrian access, and improved connectivity to surrounding public transport services and active transport links.

The proposed boundary realignment is considered a logical and insignificant adjustment from a traffic engineering perspective and is not anticipated to generate any adverse subsequent impacts on the external road network or transport operations.

5.1. Access Arrangements

Access to the subject site is proposed to retain the existing crossovers fronting Vulture Street and Lahey Lane. The retained crossovers will continue to provide safe and functional access for both the Russian Orthodox Church and the future proposed mixed-use development. Separation of service vehicle access and general vehicular movements will be provided where possible.

As part of the proposed reconfiguration, the eastern crossover on Vulture Street is to be closed and the kerb and channel, and verge reinstated to Council standards.

Further details on the proposed crossover arrangements, geometry, and compliance with relevant design standards are provided in Section 7 of this report.

5.2. Servicing Arrangements

No changes are proposed to the existing or approved service vehicle access arrangements as part of this RoL application. Access to the Russian Orthodox Church site will continue to be provided via the existing western crossover on Vulture Street.

Servicing operations, including waste collection, deliveries and loading / unloading activities, will be managed in accordance with the arrangements to be detailed under the future Material Change of Use (MCU) application associated with the overall mixed-use development. This application will address servicing frequency, bin storage and collection strategy, and dedicated loading areas to ensure compliance with EDQ's PDA and Council's Refuse Planning Scheme Policy.

The proposed boundary realignment under this RoL application does not adversely impact the ability for the site to accommodate service vehicles or maintain safe and efficient access for all users.

No changes are proposed to the current / approved service vehicle arrangements. Access to the Church is via the existing Vulture Street crossover. Servicing frequency, bin collection method and loading areas will be covered as part of the MCU component within the MUD application.

6. Parking Arrangements

The existing parking supply within the subject site comprises a total of 42 marked parking bays. This parking supply is provided for the Russian Orthodox Church and its associated activities, including regular services, community gatherings, and administrative functions. The current parking supply supports the day-to-day operations of the Church, ensuring that parishioners, staff, and visitors have adequate on-site parking to meet typical usage requirements. It is very much an essential component of the Church's viability and must be preserved to encourage parishioners to attend.

6.1. Parking Supply

6.1.1. Car parking

In accordance with the requirements of the Woolloongabba Priority Development Area (PDA) Development Scheme, the parking supply for the proposed development is to be provided in line with the rates set out in Schedule 3: Car Parking Rates.

Table 6.1 provides a summary of the parking supply, noted as maximum rates and the proposed provisions, for the development scheme.

Table 6.1: TAPS PSP Car Parking Supply Requirement

Land Use / Component	PDA Requirement	Extent	Requirement	Provision
Church (existing use)	1 space / 300 m ² GFA (max)	902 m ² GFA	4 spaces (max)	44 spaces (42 existing)
Multiple Dwelling (Residents):				
• 1 Bedroom	0.5 space / unit (max)	6 units	3 spaces (max)	
• 2 Bedrooms	1.0 spaces / unit (max)	9 units	9 spaces (max)	
Multiple Dwelling (Visitors)	Maximum 1 visitor space for every 20 dwelling units	15 units	1 space	44 spaces (42 existing)
Other uses	1 space / 300m ² GFA (max)	374 m ² GFA	2 spaces (max)	
Total			19 spaces (max)	44 spaces

As seen in Table 6.1, the development scheme proposes a total of 44 car parking spaces, comprising of 10 spaces located on the Ground Level and 34 in the Basement parking area. While the proposed parking supply will exceed the rates outlined in EDQ's Woolloongabba PDA Schedule 3, however, it replicates the existing parking supply for the subject site. As the proposed parking supply is not an increase for the subject site / development, noting the expansion of uses (primarily the residential units), the proposed parking supply is considered acceptable as it caters for existing demand and mitigates overflow to local on street parking.

Within the overall parking supply, it is noted that there are 12 tandem parking spaces within the Basement parking area. As per BCC's TAPS PSP these tandem parking spaces are required to be provided with both spaces assigned to one (1) dwelling – i.e. three (3) one-bedroom units (50%) will not have a dedicated parking space. Noting that residential use parking is a maximum, this is acceptable. Therefore, the remaining 22 spaces (including the one PWD space) can be assigned to the residential visitor and community use components of the proposed Church development.

Overall, while the subject site is within the Woolloongabba PDA which identifies maximum parking supply rates (Schedule 3) the proposed parking supply for the Church development is considered appropriate.

6.1.2. PWD Parking

The TAPS PSP indicates the following requirements for PWD parking:

- A provision rate of 1 PWD space for every 50 'ordinary' spaces (with a minimum of 1 space)
- A minimum of 1 visitor PWD space is required for multiple dwellings.
- PWD spaces are provided as close as possible to the main building entrance.

For the proposed development, the number of 'ordinary' parking spaces is calculated to be 37 spaces, which accounts for all visitor parking provisions on-site.

In accordance with the Building Code of Australia (BCA), accessible parking (designated as Persons with Disabilities — PWD spaces) requirements do not apply to residential spaces within Class 2 buildings; therefore, the resident parking spaces are not included in this calculation.

Based on the supply of 37 visitor parking spaces, and as per the BCA requirements, a minimum of 1 PWD-compliant space is required to service the site. The proposed development accommodates this requirement, with dedicated PWD parking spaces located in the Basement parking area, positioned immediately adjacent to the main building entry and lift lobby for convenient and safe access.

6.2. Bicycle Parking Supply

Council's TAPS includes parking provisions based on land use and GFA. For multi-unit dwellings (MUD), the bicycle parking rate per Table 21 of the TAPS PSP is 1 space per unit plus 1 visitor space per 4 units. However, in this case, the MUD component will not function as a typical residential use. Instead, the units will accommodate guests and speakers associated with the Church, who are unlikely to travel by bicycle or require one space per unit.

As such, the development seeks a performance outcome in relation to the residential bicycle parking rate. Colliers has assessed the servicing needs based on practical demand, referencing the Cycling Aspects of Austroads Guide, specifically Appendix I – Bicycle Parking Provision Rates. The proposed supply rates for each land use are outlined in Table 6.2.

Table 6.2: Bicycle Facilities

Land Use / Component	Extent	TAPS PSP Rates	TAPS PSP Requirement	Austroads Rates	Austroads Requirement	Provision
Multiple Dwelling (Residents)	15 units 24 bedrooms	1 space per unit	15 spaces	1 space per 4 bedrooms	6 spaces	4 spaces
Multiple Dwelling (Visitors)	15 units 24 bedrooms	1 space per 4 units	4 spaces	1 space per 16 bedrooms	2 spaces	4 spaces

Visitors are expected to be the primary users of the bicycle parking – resident parking demand is expected to be negligible given the nature of the use of the residential units. As shown in Table 6.2, the development meets the visitor bicycle parking provisions outlined in both the TAPS and the Austroads requirements. The resident bicycle parking provision is considered appropriate for the expected (negligible) demands.

Bicycle parking will be provided throughout the development, generally in accordance with the recommendations outlined above. Spaces are distributed evenly across the site, taking into account practical and feasible placement. Further details can be found in the site plans included in Appendix A.

6.3. Parking Layout

Table 6.3 identifies the characteristics of the proposed parking layouts with respect to the EDQ PDA and TAPS PSP design provisions.

Table 6.3: Parking Design Requirements

Design Aspect	TAPS PSP Requirements	Proposed Provision	Compliance
Parking space length: - Resident space (Class 1/1A) - Visitor space (Class 3) - Tandem Space - PWD space (Class 5)	5.4m (min) 5.4m (min) 10.8 (min) 5.4m (min)	5.4m (min) 5.4m (min) 10.8m (min) 5.4m (min)	Compliant Compliant Performance Solution Compliant
Parking space width: - Resident space (Class 1/1A) - Visitor space (Class 3) - Tandem Space - PWD space (Class 5)	2.6m (min) 2.6m (min) 2.6m (min) 2.4m + 2.4m 'Shared Area'	2.6m (min) 2.6m (min) 2.6m (min) 2.4m + 2.4m 'Shared Area'	Compliant Compliant Compliant Compliant
Aisle Width: - Parking aisle - Circulation road / ramp (two-way, 25-100vph)	6.2m (min) 6.2m (min) + clearance to walls	6.0m / 6.2m 6.4m (min) + clearance to walls	Performance Solution Compliant
Parking envelope clearance	Located as per Figure f of TAPS PSP	Noted	Compliant
Maximum Gradient: - PWD parking - Parking aisle - Ramp	1:40 (2.5%) 1:16 (6.25%) 1:6 (16.7%)	1:40 (2.5%) 1:16 (6.25%) 1:6 (16.7%)	Compliant Compliant Compliant
Blind Aisle Extension	2.0m or 8.0m extension to aisle width beyond final space	1m blind aisle	Performance Solution
Height Clearance: - General Minimum - Over PWD space	2.3m 2.5m	2.3m 2.5m	Compliant Compliant
Security Line Provisions	Visitor parking freely accessible No formal requirement for resident / staff parking	Visitor parking freely accessible No formal requirement for resident / staff parking	Compliant Further commentary

¹ TAPS PSP is silent with regards to this matter, so revert to AS2890.1 as per Section 1.2 of the TAPS PSP.



The development parking layouts are generally consistent with the provisions of the PDA and TAPS PSP. Further details in relation to deemed compliance of required provisions, or justification for design aspects resolved with performance solutions, is provided following.

Parking Aisle

The BCC TAPS PSP requires a parking aisle of 6.2m wide. The proposed development scheme provides a minimum 6.0m wide parking aisle in some parts of the Basement parking area, up to a compliant 6.2m wide parking aisle. The 6.0m wide parking aisle meets the requirements detailed in AS2890.1:2004 (particularly for low turn-over parking spaces within small parking supply area) and is considered satisfactory.

Blind Aisle Extension

The BCC TAPS PSP identifies aisle extensions of 2m at the end of blind parking aisles. The development provides a minimum 1m wide aisle extension at the end of the parking aisle. The 1.0m aisle extension meets the requirements detailed in AS2890.1:2004 and is considered satisfactory.

Overall, the proposed car parking layout is designed generally in accordance with the design guides, apart from some design performance solutions which are deemed fit-for-purpose.

7. Access Arrangements

The development plan includes the following access arrangements:

- Existing modified B1 (5.8m) - access from Vulture Street on the southern frontage of the subject site. This access will provide access to Ground Level parking (11 spaces) and access for service vehicles. This access will provide left-in / left-out movements to / from Vulture Street (eastbound traffic direction).
- Existing modified to B1 (6.7m) access from Lahey Lane on the western frontage of the subject site. This access will provide access to 37 car parking spaces within the Basement parking area. This access provides all movements to / from Lahey Lane.

Planning guidelines, such as Council's TAPS PSP, seek for a single vehicle crossover for developments, and for this crossover to be to the lower order road frontage. The proposed two vehicle crossovers for the development scheme generally serve two separate functions, with the retained existing Vulture Street access maintaining existing circulation and service vehicle functionality for the Church, and the existing (reconfigured) Lahey Lane access providing access to the main parking supply within the Basement Level.

Further details in relation to the design provisions of each access are provided as follows.

7.1. Vulture Street Access

Assessment of the design provisions of the Vulture Street access against the respective provisions of the BCC TAPS PSP are provided in Table 7.1.

Table 7.1: Vulture Street Access Arrangements

Design Aspect	TAPS PSP Provision	Proposed Provision	Compliance
Width / Crossover Type to accommodate: - Cars¹² - Service vehicles¹³	Type B1 (6m) Type B2 (6.5m)	Type B1 (5.8m)	Performance Solution – see Design Aspect 1
Distance from: - minor intersection¹ - major intersection¹ - adjacent driveway¹ - median break - traffic signals	20m (min) 30m (min) 15m (min) 15m (min) Clear of queuing	40m 140m 30m 0m n/a	TAPS PSP Compliant TAPS PSP Compliant TAPS PSP Compliant See Notes below: – Design Aspect 2
Sight Distance ¹²	110m (desirable) 85m (minimum)	140m (to adjacent signalised intersections west and east)	TAPS PSP Compliant
Driveway Sight Splays	2.0m wide x 5.0m deep (on each side)	2.0m wide x 5.0m deep (on each side)	TAPS PSP Compliant
Minimum Queuing Provisions ¹	1 vehicle length / 6m	2 car lengths (12m)	TAPS PSP Compliant
Maximum Driveway grade	1:20 (5%) maximum within first 6m	1:20 (5%) maximum within first 6m	TAPS PSP Compliant

¹ Based on Vulture Street being classed as a 'major road' and speed limit of 60 km/h.

² Based on the access servicing 11 low/moderate turnover car parking spaces.

³ Based on the access servicing service vehicles up to the size of a 10.24m RCV.

Further details in relation to deemed compliance of required provisions, or justification for design aspects resolved with performance solutions, are provided in the following.

Access Design Aspect 1

The crossover configuration of the existing Vulture Street access is a Type B1 (5.8m), which is less than the identified Type B2 (6.5m) crossover identified in Council's TAPS PSP for the RCV design service vehicle. Retention of the existing crossover configuration is considered acceptable given that the size of service vehicle is not increasing and the overall number of parking spaces accessed is significantly reduced. Swept path diagrams for the 10.24m RCV and for cars passing (entry and exit) through the Vulture Street access are also provided in Appendix B, which demonstrates the functional suitability of the crossover.

Access Design Aspect 2

It is noted that the location of the existing crossover is opposite a median island within Vulture Street which separates local and arterial traffic movements heading eastbound. Additionally, it is expected that during peak periods, queuing from the Main Street signalised intersection would extend past the crossover location. Retention of the existing crossover configuration is considered acceptable given the one-way operation (eastbound) of Vulture Street and the Left-in / Left-out crossover arrangements.

Overall, the proposed Vulture Street access is designed generally in accordance with the TAPS PSP, noting the design performance solutions identified, which are deemed fit-for-purpose.

7.2. Lahey Lane Access

Assessment of the design provisions of the Lahey Lane access against the respective provisions of the BCC TAPS PSP are provided in Table 7.2.

Table 7.2: Lahey Lane Access Arrangements

Design Aspect	TAPS PSP Provision	Proposed Provision	Compliance
Width / Crossover Type to accommodate: Cars^{1 2}	Type B2 (6m)	Type B1 (6.7m)	Performance Solution – see Design Aspect 1
Distance from: - minor intersection¹ - major intersection¹ - adjacent driveway¹	10m (min) 20m (min) 3m (min)	60m 25m 3m	TAPS PSP Compliant TAPS PSP Compliant TAPS PSP Compliant
Sight Distance ^{1 2}	90m (desirable) 50m (minimum)	30m (towards Vulture Street) 60m (towards Mark Lane)	Performance Solution – see Design Aspect 2
Driveway Sight Splays	2.0m wide x 5.0m deep (on each side)	2.0m wide x 5.0m deep (on each side)	TAPS PSP Compliant
Minimum Queuing Provisions ¹	2 vehicle lengths / 12m	1 vehicle lengths / 6m	Performance Solution – see Design Aspect 3
Maximum Driveway grade	1:20 (5%) maximum within first 6m	1:20 (5%) maximum within first 6m	TAPS PSP Compliant

¹ Based on Lahey Lane being classed as a 'minor road' and speed limit of 50 km/h.

² Based on the access servicing 37 low/moderate turnover car parking spaces.



Further details in relation to deemed compliance of required provisions, or justification for design aspects resolved with performance solutions, are provided in the following.

Access Design Aspect 1

The crossover configuration of the Lahey Lane access is a Type B1 (6.7m), which differs from the Type B2 (6.2m) crossover identified in Council's TAPS PSP for the size of carpark 37 spaces accessing a minor road. The proposed B1 configuration of the crossover as opposed to B2 is considered acceptable given the size of parking supply is only marginally greater than the 25-space threshold for B1 (BCC TAPS PSP Table 8).

Further, the additional width of the crossover / driveway (6.7m) compared to the 6.2m identified from BCC TAPS PSP will provide additional manoeuvring space for car movements to / from Lahey Lane mitigating the reduced crossover flare width of the B1 configuration.

Access Design Aspect 2

The proposed crossover location for the development scheme is in the same general location of an existing crossover to the subject site and has clear sight lines to the Vulture Street and Mark Lane intersections. While the sight line to the Vulture Street intersection is less than the desirable (or absolute minimum) distances outlined in BCC's TAPS PSP, this distance is maximised, and it meets the requirements for separation from a major intersection (on a minor road).

The provided sight clearance is considered acceptable given that vehicles travelling up Lahey Lane from Vulture Street will be travelling at reduced speed and therefore adequate reaction time will be provided.

Access Design Aspect 3

The queuing distance at the Lahey Lane crossover of 1 car length (6m), which is less than the 2-car length (12m) requirement identified in Council's TAPS PSP for the size of carpark 37 spaces. The proposed 1-car (6m) length is considered adequate given the relatively low car turn-over rate of the residential uses – also noting that the size of parking supply is only marginally greater than the 25-space threshold in BCC TAPS PSP Table 10.

Overall, the proposed Lahey Lane access is designed generally in accordance with the TAPS PSP, noting the design performance solutions identified, which are deemed fit-for-purpose.

8. Service Vehicle Arrangements

No changes are proposed to the existing service vehicle access arrangements for the Russian Orthodox Church, with the current access via the western crossover on Vulture Street to be retained. However, the proposed site reconfiguration and future development — including the Community Service Centre and residential units — will integrate with and utilise the same access arrangements, ensuring cohesive and efficient site operations.

To determine the appropriate type and number of service bays for the development, Colliers has referenced both the Brisbane City Council's Transport, Access, Parking and Servicing Planning Scheme Policy (TAPS PSP) and the relevant provisions of AS2890.2:2018 - Off-Street Commercial Vehicle Facilities.

In line with Table 1 of the TAPS PSP, the following service vehicle requirements are anticipated for a development of this nature:

- Regular access for a Refuse Collection Vehicle (RCV); and
- Occasional access for a Large Rigid Vehicle (LRV).

Given the nature of the development — a combination of church functions, a community service centre, and church residential uses — the demand for service vehicles is expected to be relatively low. Aside from routine refuse collection and periodic deliveries (couriers, trades, or maintenance vehicles), service vehicle activity on-site will be infrequent. Based on this, the primary design allowance has been made for Small Rigid Vehicles (SRVs) and Refuse Collection Vehicles (RCVs), which are considered appropriate for the scale and nature of the subject site. Swept path figures are illustrated in Colliers Drawings, provided in Appendix B.

It is also noted that the peak operational period for the church typically occurs on weekends, while servicing (including waste collection and deliveries) can be scheduled during off-peak periods, such as weekdays or non-service times. This approach is consistent with Note 1 under Table 1 of BCC's TAPS PSP, which allows shared manoeuvring spaces (including parking areas) provided the spaces are unoccupied during servicing:

"Areas provided for manoeuvring may include areas nominated as car parking spaces provided it can reasonably be expected that car parking spaces will not be in use at the time of the service vehicle visit."

Under this arrangement, service vehicles such as an RCV or SRV can enter the site in a forward gear, utilise the width of the existing driveway and some ground level car parking areas for internal manoeuvring, complete loading / unloading on-site, and exit in a forward gear — ensuring safety and operational efficiency.

Given the low-frequency nature of servicing and the ability to coordinate vehicle access outside of peak congregation times, the proposed servicing strategy is considered practical, efficient, and consistent with both Council's and industry best practices.

9. Traffic Impact Assessment

9.1. Development Traffic Demands

9.1.1. Traffic Generation

It is understood that the existing Church (community) uses will continue following the RoL and additional residential uses incorporated into the overall development scheme. Therefore, for the purposes of this assessment, only the relative change in traffic generation (i.e. the additional residential uses) will be assessed in regard to traffic impacts on the surrounding road network.

To estimate the traffic generation expectations of the proposed land use, reference is made to the Roads and Maritime Services (RMS) *Guide to Traffic Generating Developments – Updated Traffic Surveys* (2013) document, which identifies a rate of 0.29 vehicles per hour (vph) / unit. This is considered very conservative given the location of the subject site and maximum parking rates for residential uses applied.

The traffic generation rate adopted for the proposed residential land use, where 0.3 vph “per unit” rate has been conservatively adopted as follows:

- Weekday AM Peak Hour: 0.30 vph per unit.
- Weekday PM Peak Hour: 0.30 vph per unit.

Regarding directional splits, in line with generally accepted traffic engineering practice, these are estimated to be:

- Weekday AM Peak Hour: 25% inbound / 75% outbound.
- Weekday PM Peak Hour: 61% inbound / 39% outbound.

Application of the above generation rates and directional splits would result in proposed development traffic demand estimates as shown in Table 9-1.

Table 9-1: Traffic Generation Estimate – Proposed Development

Land Use	Yield	Peak Hour Generation Rate	AM Peak Hour (vph)			PM Peak Hour (vph)		
			In	Out	Total	In	Out	Total
Multiple Dwelling	15 units	(AM) 0.30 vph per unit (PM) 0.30 vph per unit	1	4	5	3	2	5

9.1.2. Warrants for Further Assessment

Acceptable Solution AO2 of the Road Hierarchy Overlay Code identifies that development traffic impacts be quantified and mitigated for an 'assessable development for material change of use' which meets any of the following triggers:

- is classified as a major development – *Council's TAPS PSP defines a 'major development' as one with a total peak hour traffic generation exceeding 25 vph; or*
- involves an access driveway to a major road; or
- involves an access driveway within 100m of a signalised intersection.

The proposed development's only access driveway is provided to Lahey Lane (a minor road) and is not within 100m of a signalised intersection. The proposed development's traffic generation is expected to be up to five (5) vph in both weekday peak hours, which indicates that it will not be a 'major development'.

Based on the above information, Colliers does not consider a detailed traffic impact assessment to be necessary and it is expected the proposed development will have no adverse impacts on the operation or safety of the surrounding road network.

10. Summary and Conclusions

10.1. Proposed Development

The development proposal comprises 15 residential units and an exclusive community centre, as part of a Reconfiguration of Lot (RoL) application in association with the existing Russian Orthodox Church ('Church').

10.2. Parking Arrangements

Given the nature of the development, the parking supply is considered acceptable as it replicates the existing parking supply for the Church use and therefore maintains an appropriate supply for the particular demands of the land use, mitigating overflow to the local on-street parking.

10.3. Access Arrangements

Overall, the proposed Vulture Street and Lahey Lane accesses are designed generally in accordance with BCC's TAPS PSP, noting the design performance solutions identified, and are deemed acceptable / fit-for-purpose.

10.4. Service Vehicle Arrangements

All servicing arrangements are in accordance with EDQ's PDA and BCC's TAPS Code. With the exception of the occasional delivery or tradesman / couriers, regular servicing requirement would be for refuse collection.

Overall, the proposed service vehicle arrangements are considered adequate to meet the servicing needs of the proposed development.

10.5. Traffic Impact Assessment

A review of the proposed development indicates that the development will not have a significant impact on the future road network, based on the minor relative additional traffic generation of the additional residential uses. As such, no further mitigating road works are required

10.6. Conclusion

Based on the assessment contained within this report, Colliers see no traffic engineering reason why the relevant approvals should not be granted.

Appendix A Development Plans

CATHEDRAL CAMPUS

DEVELOPMENT APPLICATION DRAWING SET

SHEET LIST

A-100	COVER SHEET & LOCALITY PLAN	3	26.05.25
A-111	EXISTING & DEMOLITION - FLOOR PLAN	3	26.05.25
A-112	EXISTING & DEMOLITION - LOT 1	1	26.05.25
A-120	BASEMENT 1 FLOOR PLAN	3	26.05.25
A-121	GROUND FLOOR PLAN	3	26.05.25
A-122	TYPICAL APARTMENT LEVELS	3	26.05.25
A-124	ROOF PLAN	3	26.05.25
A-201	ELEVATIONS	3	26.05.25
A-202	ELEVATIONS	3	26.05.25
A-301	SECTIONS	3	26.05.25
A-302	SECTIONS	3	26.05.25
A-701	SHADOW DIAGRAMS	3	26.05.25
A-901	AREA PLANS - GFA	3	26.05.25
A-902	AREA PLANS - LANDSCAPE	3	26.05.25

REAL PROPERTY DESCRIPTION	DEVELOPMENT SUMMARY PROPOSED SITE	
340 VULTURE ST, WOOLLOONGABBA	IMPERVIOUS AREA (Within New development)	1759m ² (92%)
PROJECT SITE AREA 1910m ²	IMPERVIOUS AREA (Whole Site)	3302m ²
TOTAL PARISH SITE AREA 3454m ²	TOTAL SITE COVER	1675m ² 48.5%

DEVELOPMENT SUMMARY PROPOSED BUILDING

GFA SCHEDULE:		UNIT SCHEDULE:			
		LEVEL	1B APARTMENT	2B APARTMENT	APARTMENTS PER LEVEL
GF	361m ²	LEVEL 3	2	3	5
1F	370m ²	LEVEL 2	2	3	5
2F	370m ²	LEVEL 1	2	3	5
3F	370m ²	GROUND			
TOTAL	1471m ²	BASEMENT			
No. OF STOREYS:		TOTAL 15			
4 STOREYS					
No. OF CARPARKS:					
BASEMENT	34 (incl. PWD)				
GROUND	10				

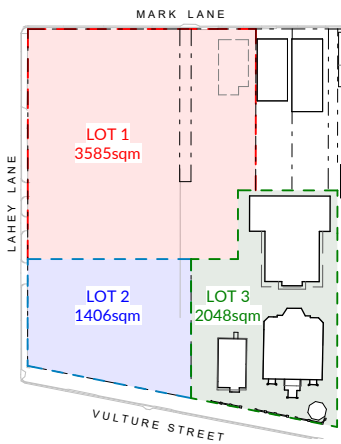
NOTE:

THIS DRAWING HAS BEEN CONSTRUCTED FROM THIRD PARTY INFORMATION.

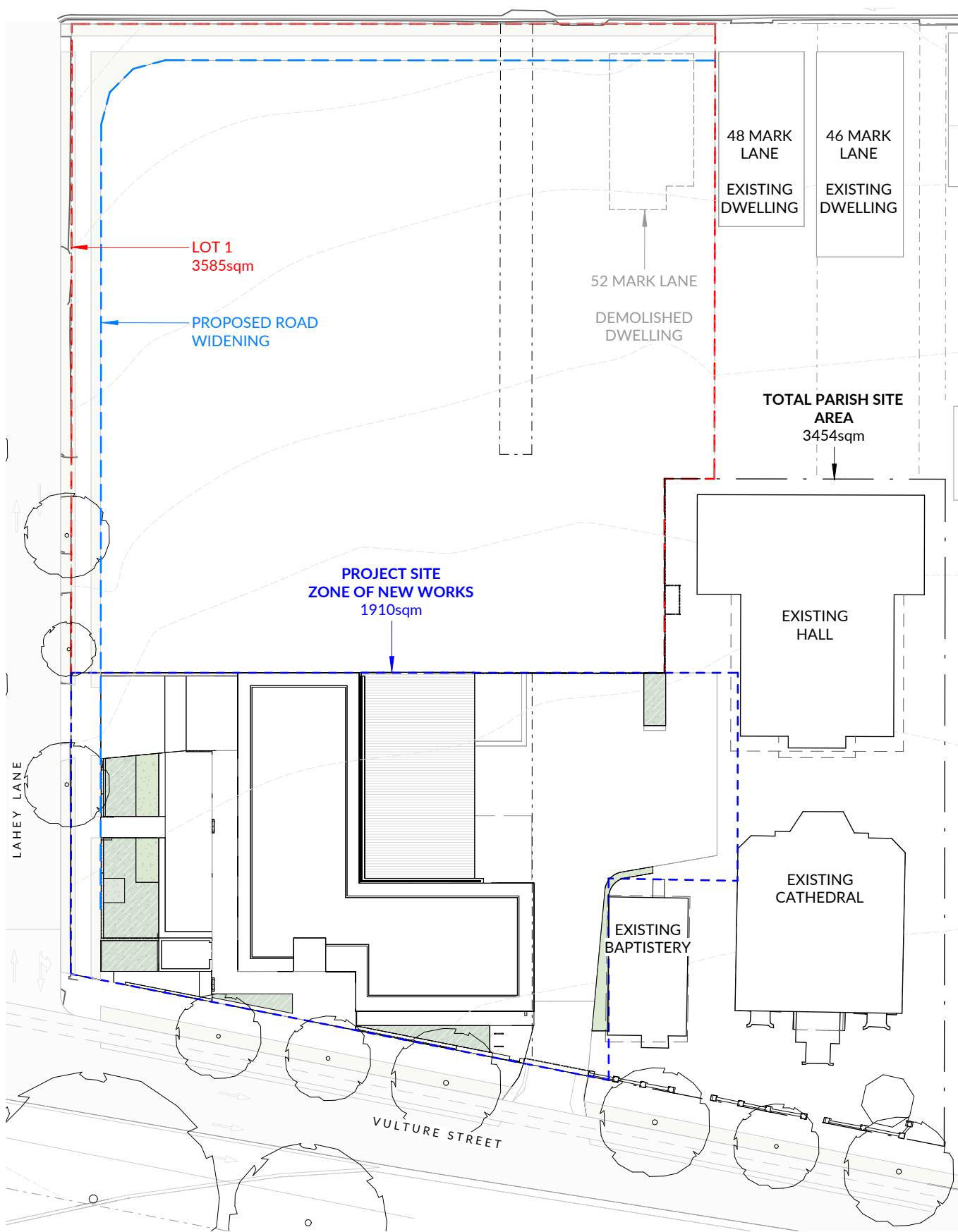
ALL SITE PLAN LAYOUTS, AREAS, CONTOURS AND LEVEL INFORMATION ACCESSED FROM SURVEY DRAWING #21-0542S-01 PREPARED BY WOLTER CONSULTING GROUP.

ACTUAL DIMENSIONS AND LAYOUTS MAY VARY SLIGHTLY FROM THOSE INDICATED. CHECK ALL DIMENSIONS ON SITE FOR ACCURACY PRIOR TO FABRICATION AND CONSTRUCTION.

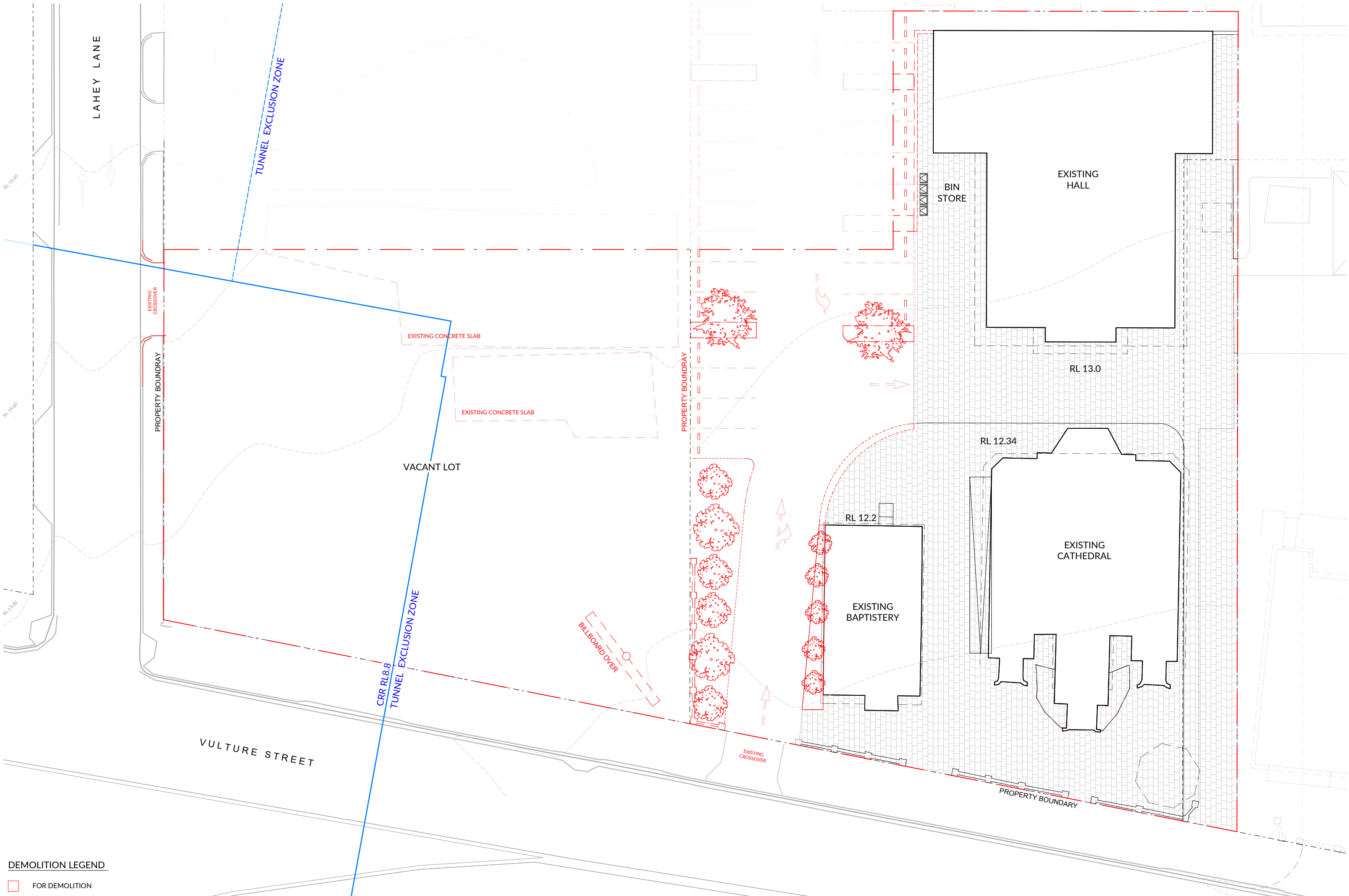
THESE DESIGN DRAWINGS HAVE BEEN PREPARED FOR APPROVAL PURPOSES ONLY AND WILL NEED TO BE SUPPLEMENTED WITH FURTHER DETAILED DESIGN AND DOCUMENTATION FOR CONSTRUCTION.

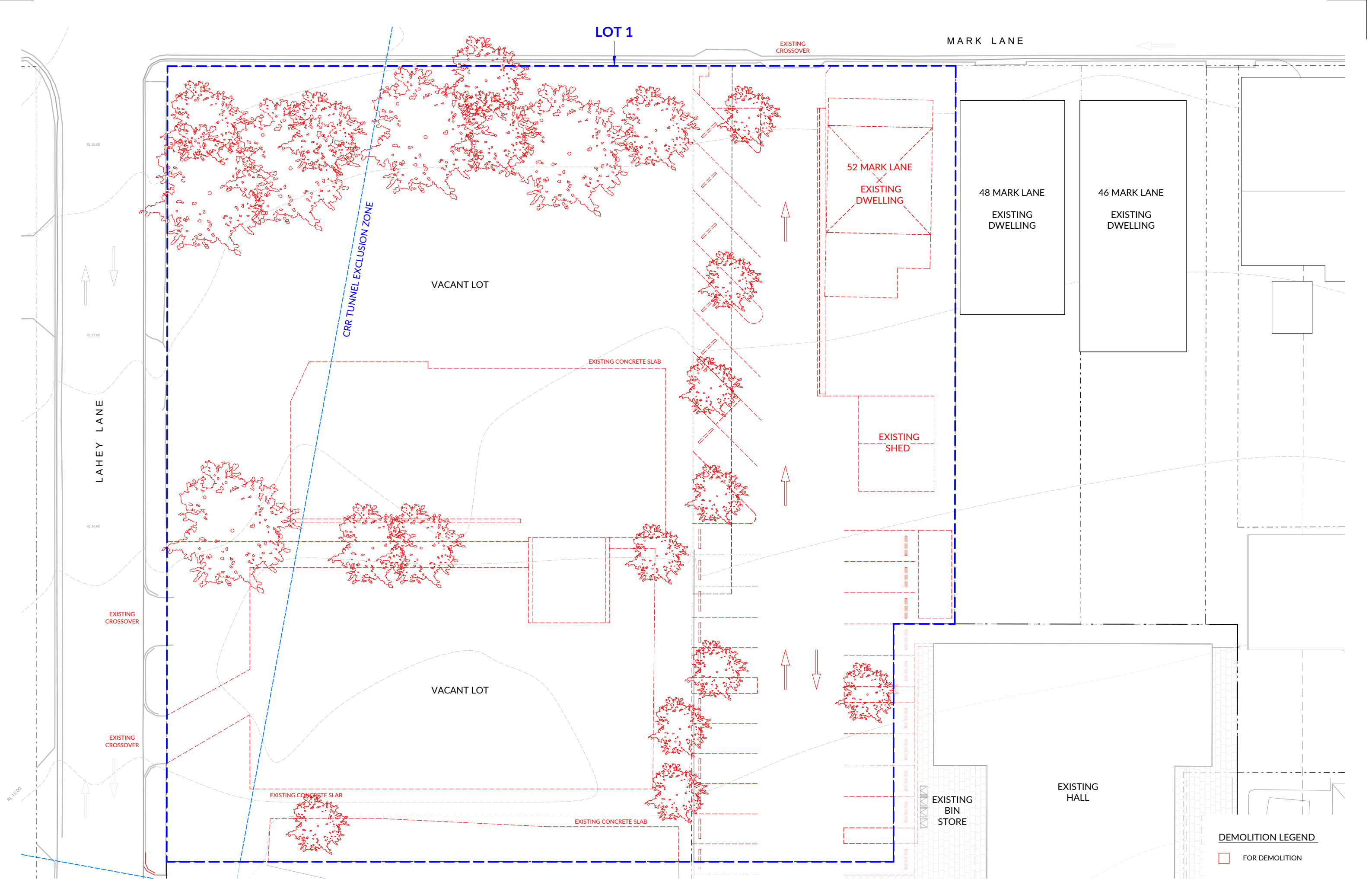


SITE KEY PLAN



PROPOSED SITE PLAN 1 : 500

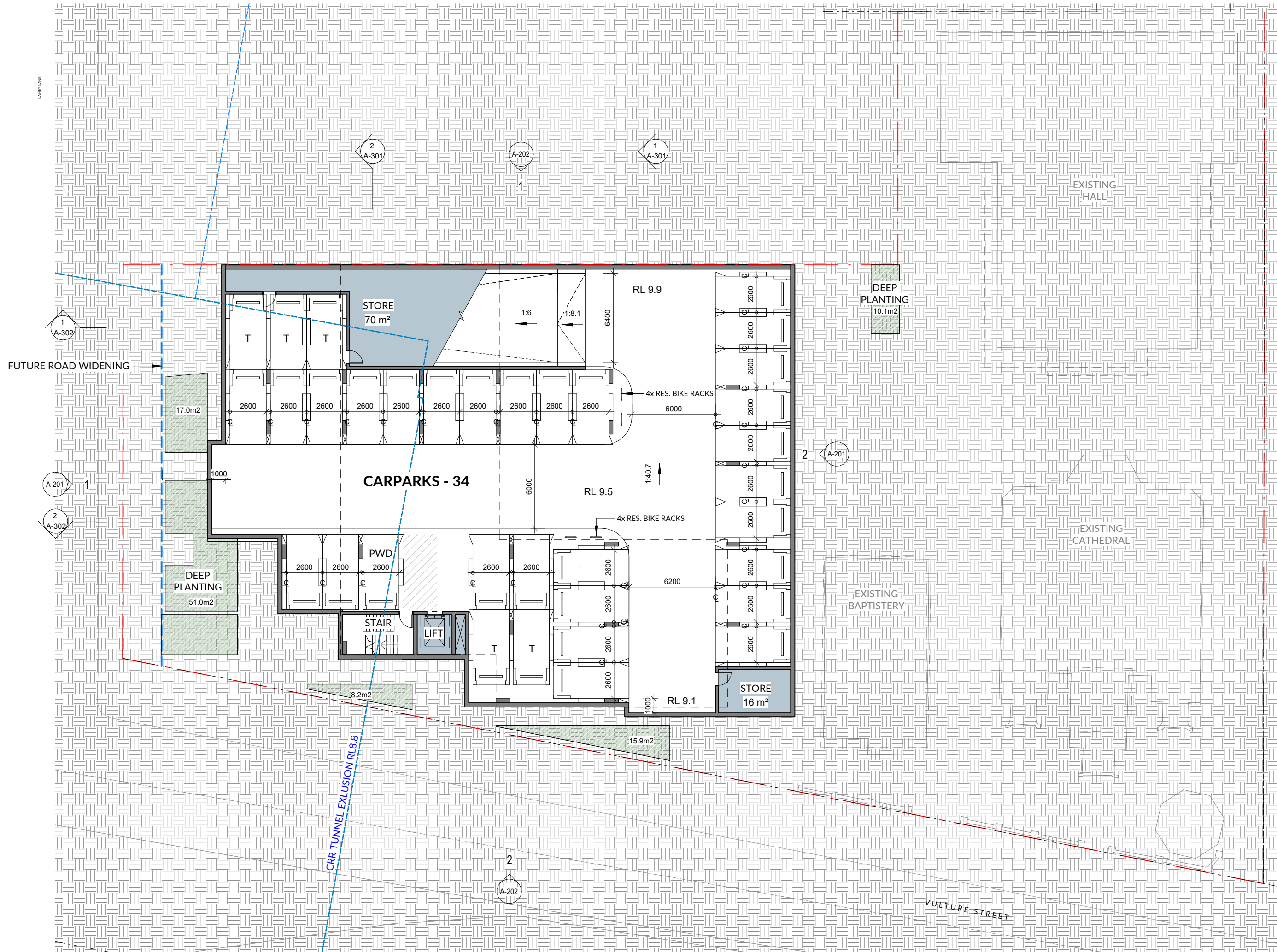




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DWG NO.A-112 REV.1

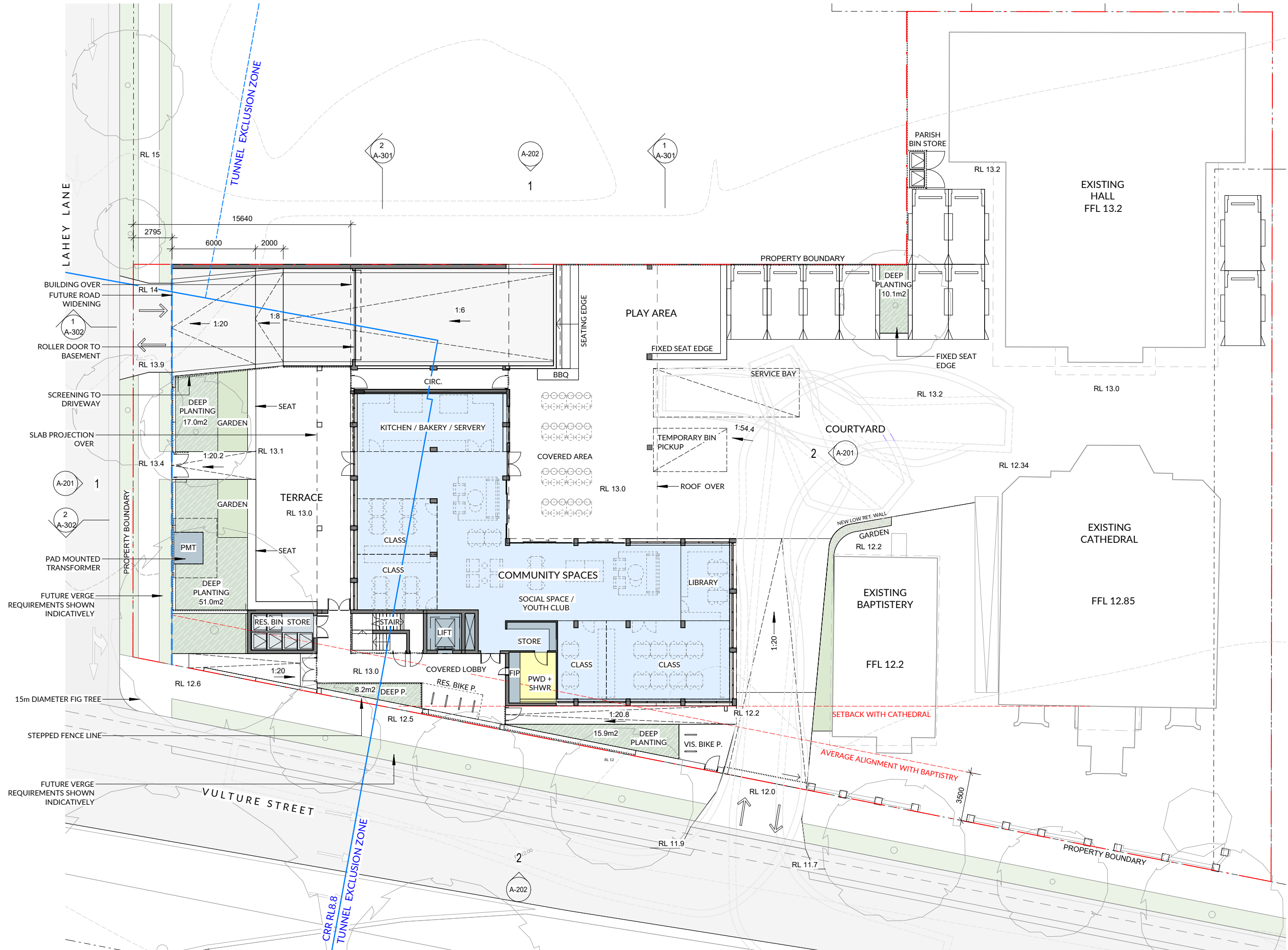
EXISTING & DEMOLITION - LOT 1



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DWG NO.A-120 REV.3

BASEMENT 1 FLOOR PLAN



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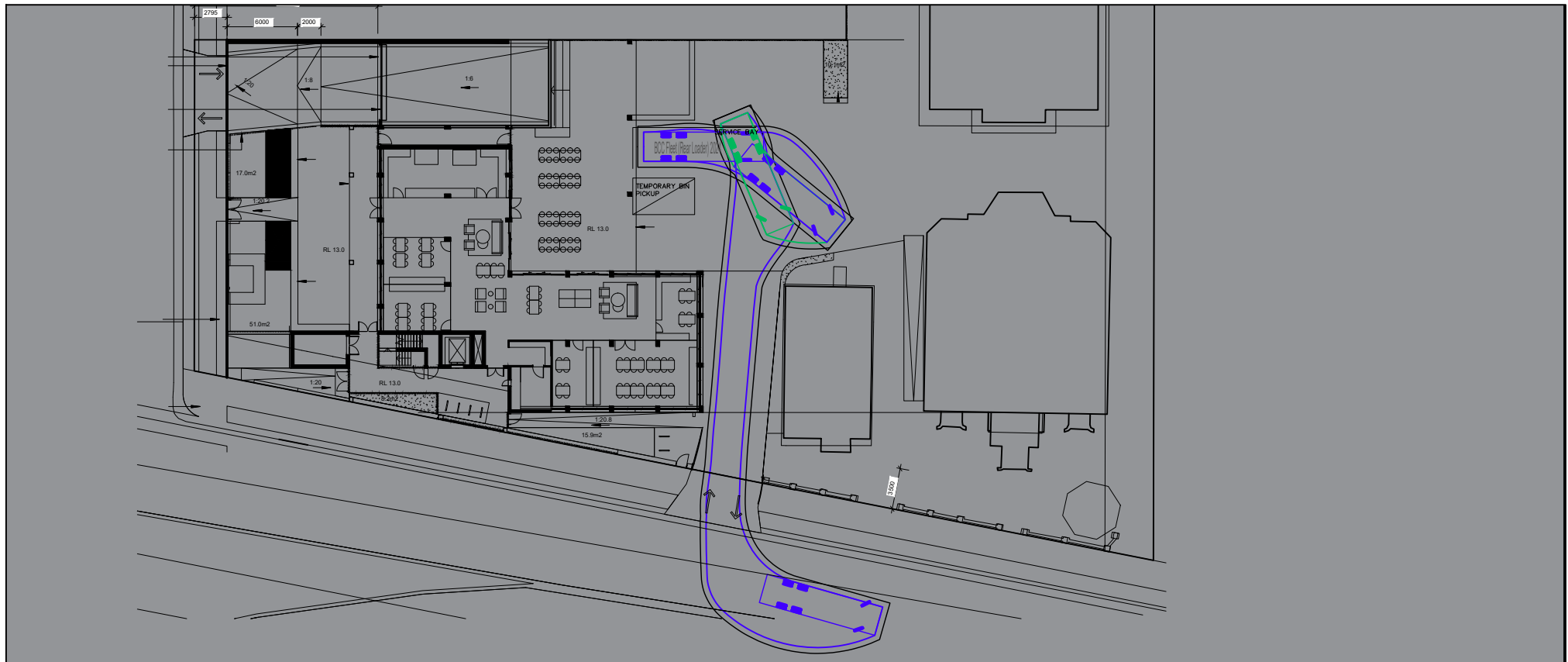
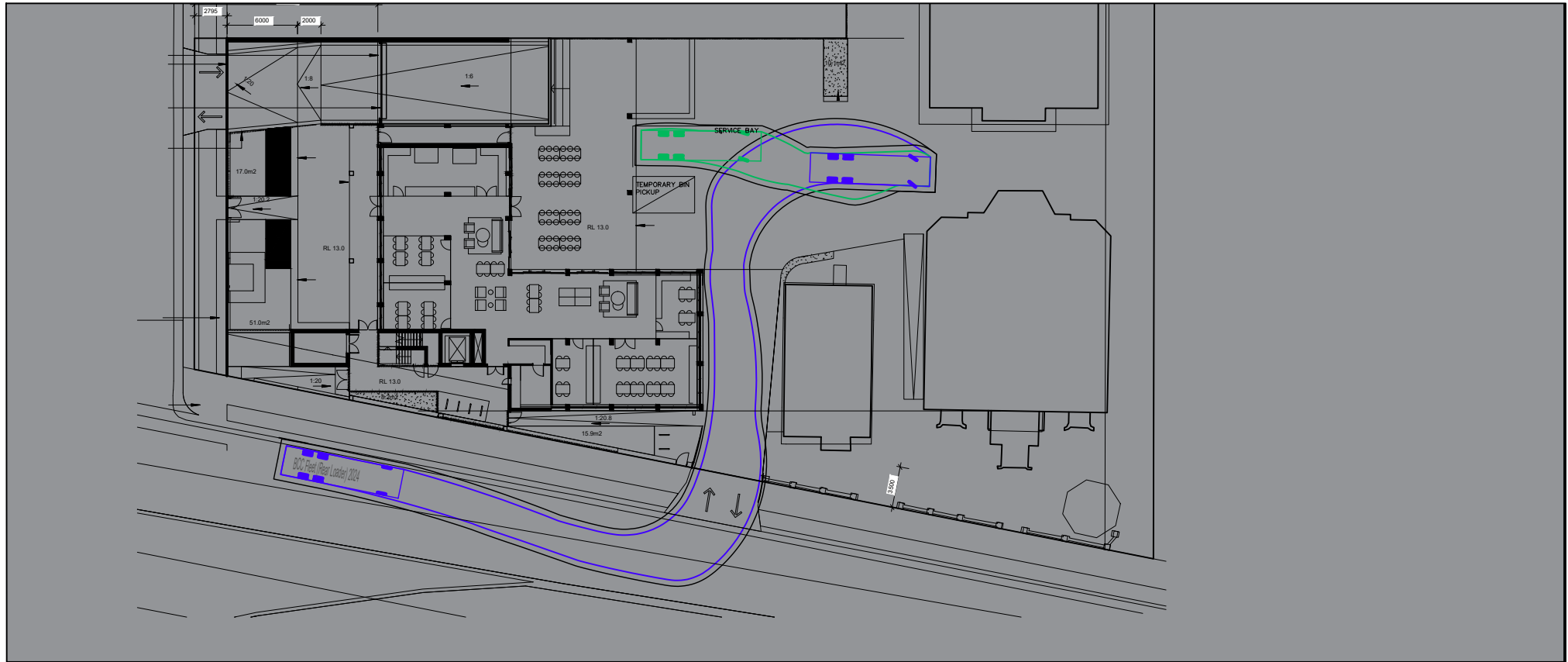
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GROUND FLOOR PLAN

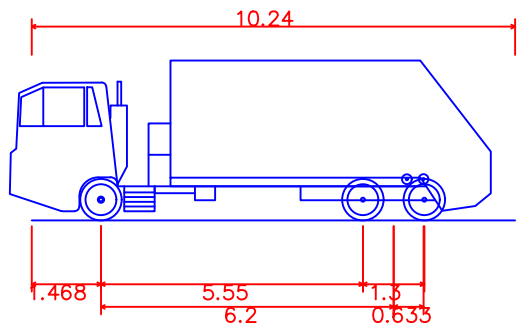
Appendix B Colliers Drawings

PRELIMINARY
ADVICE ONLY

23 May 2025

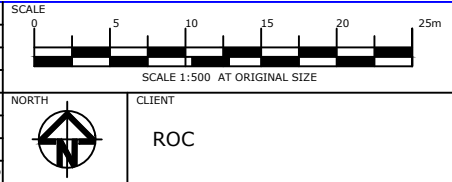


VEHICLE PROFILES



BCC Fleet (Rear Loader) 2024	
Overall Length	10.240m
Overall Width	2.500m
Overall Body Height	3.387m
Min Body Ground Clearance	0.195m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	9.500m

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
A	10-02-23	ORIGINAL ISSUE	JK	JK	DW





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PROJECT VULTURE STREET - ROC	PROJECT NUMBER 23BRT0331	ORIGINAL SIZE A3
DRAWING TITLE SWEPT PATH ANALYSIS BCC REAR LOADER RCV	DRAWING NUMBER 23BRT0331-1	REVISION A
	DATE 23 May 2025	SHEET 1 OF 1