

Proposed Multiple Dwelling Units, 50 Kates Street, Morningside

Traffic Report

Revision A
1 September 2026

Our Ref: 2309_DKT01

Prepared for: D Treacy

Prepared by: Richard Quinn
Director, Q Traffic
BE Civil, MIEAust, RPEQ



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Q Traffic has prepared this report solely for the benefit and use of our Client for the sole purpose of lodging a development application. This report takes into account the particular instructions and requirements of the client. In preparing this report we assume that all information and documents provided to us by the client or their consultants were complete, accurate and current. Q Traffic will not be liable for any conclusion drawn resulting from omission or lack of full disclosure by the client or their consultants.

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1.0 Introduction

Q Traffic was engaged to undertake a Traffic Impact Assessment of a proposed multi-unit dwelling development comprising nine (9) townhouses, to be located on the site at 50 Kates Street, Morningside.

The site is located in the Brisbane City Local Government Area, and the proposal has been assessed considering the relevant Council controls.

This report provides relevant background information regarding the proposal, and documents the findings of our investigations addressing the following key traffic design issues:

- Vehicular site access arrangements;
- On-site car parking provision;
- On-site car parking design;
- Service vehicle / refuse collection arrangements;
- Bicycle provisions;
- Pedestrian connectivity; and
- The traffic impacts anticipated as a result of the development.

2.0 Context

2.1 Subject Site and Existing Use

The subject site is located at 50 Kates Street, Morningside, on the northern side of the road approximately midway between Coates Street and Olive Street. Formally described as Lot 2 RP82062, the site has an area of 1386m².

Figure 2.1a and **Figure 2.1b** below show the location of the subject site, as well as the local road network in the vicinity of the site.

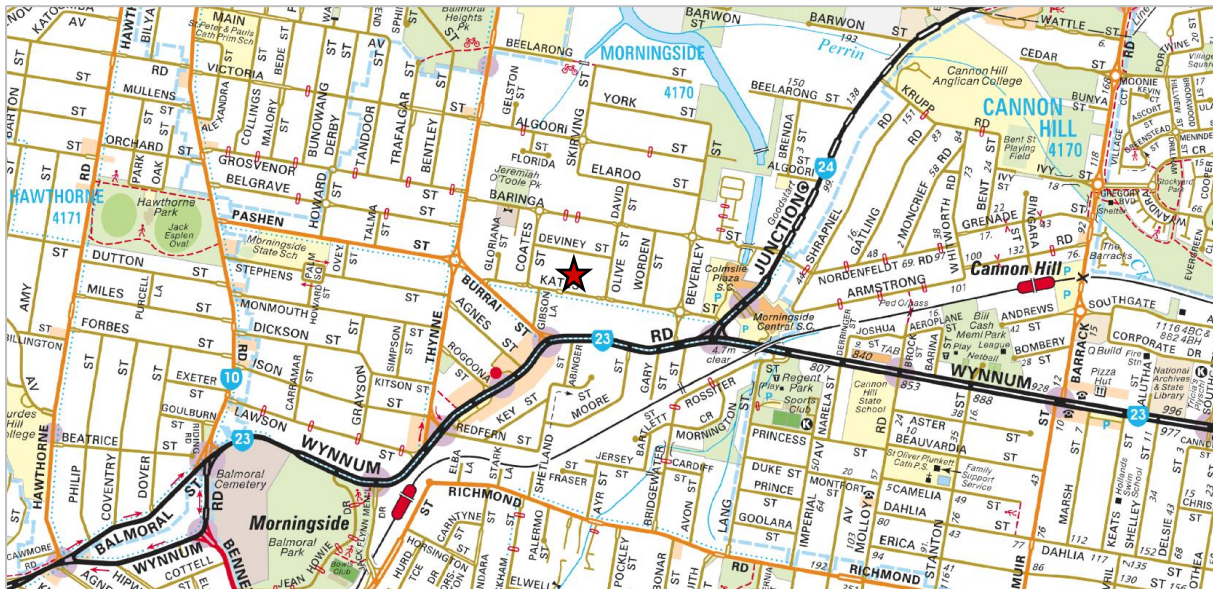


Figure 2.1a: Site Location

Source: <https://www.street-directory.com.au/qld/brisbane>



Figure 2.1b: Subject Site

Source: Queensland Globe

The subject site currently accommodates a single dwelling which is accessed via an all-movements vehicular crossover onto Kates Street adjacent to the eastern site boundary. As shown in **Figure 2.1c** below, the existing crossover providing vehicular access to the site is a grid crossing, with a ramped section constructed within the kerb channel generally in accordance with the detail as shown in Council's Standard Drawing BSD-2023.

The existing driveway is approximately 2.7m wide plus splays, which is adequate to accommodate a single passenger vehicle.



Figure 2.1c: Existing Site Access Driveway

Source: Google Maps

2.2 Planning Context

The subject site is within the LMR2 Low-medium density residential (2 or 3 storey mix) zone under the Brisbane City Plan 2014, as shown in **Figure 2.2** below. It is within 400m walk of land fronting Wynnum Road which is within the DC1 District centre (District) zone. As such, the subject site is in a 'key location' as defined in Council's Transport, Access, Parking and Servicing (TAPS) Planning Scheme Policy, which is land within the Principal centre zone, Major centre zone, District centre zone or Mixed use zone; **or land within 400m walking distance of:**

- a dedicated public pedestrian access point of a major public transport interchange; or
- a public transport stop that is serviced with a maximum headway of 20 minutes between 7am and 7pm on weekdays, and a maximum headway of 30 minutes between 7am and 7pm on weekends; or
- **land within the** Principal centre zone, Major centre zone, **District centre zone** or Mixed use zone.



Figure 2.2: Zoning

Source: Brisbane City Plan 2014

2.3 Local Road Network

The subject site has frontage to Kates Street to the south. Kates Street is designated as a Neighbourhood (minor) road under Council's Road Hierarchy overlay in the Brisbane City Plan 2014. It extends in a generally east-west direction, connecting from Burrai Street at its western end to Junction Road at its eastern end.

Kates Street is a two-way road as shown in **Figure 2.3a** and **Figure 2.3b** below, with a pavement width of approximately 12m in proximity to the subject site. There are traffic calming devices (landscaped kerb build-outs and a centre raised island) fronting the site, which control through traffic speeds on Kates Street.

Kerbside parking is generally permitted clear of intersections and property access driveways, in accordance with Queensland Road Rules.

As a local street in a built-up area, a speed limit of 50km/hr applies on Kates Street.



Figure 2.3a: Looking east along Kates Street

Source: Google Maps



Figure 2.3b: Looking west along Kates Street

Source: Google Maps

3.0 Proposal

The proposed development is a multi-unit dwelling development comprising nine (9) x three-bedroom townhouses, as shown in the architectural plans included as **Appendix A**.

Vehicular access to the development is proposed via a driveway adjacent to the eastern site boundary, and the proposed development provides car parking on the ground level within a double garage (either tandem or side-by-side arrangement) for each unit, as shown in the extract from the site plan provided as **Figure 3** below. Three (3) visitor parking spaces are proposed at the northern end of the development.

The traffic elements of the design scheme have been developed based upon the requirements of Council's Transport, Access, Parking and Servicing (TAPS) Planning Scheme Policy and/or the relevant Australian Standards, as discussed in the following sections.

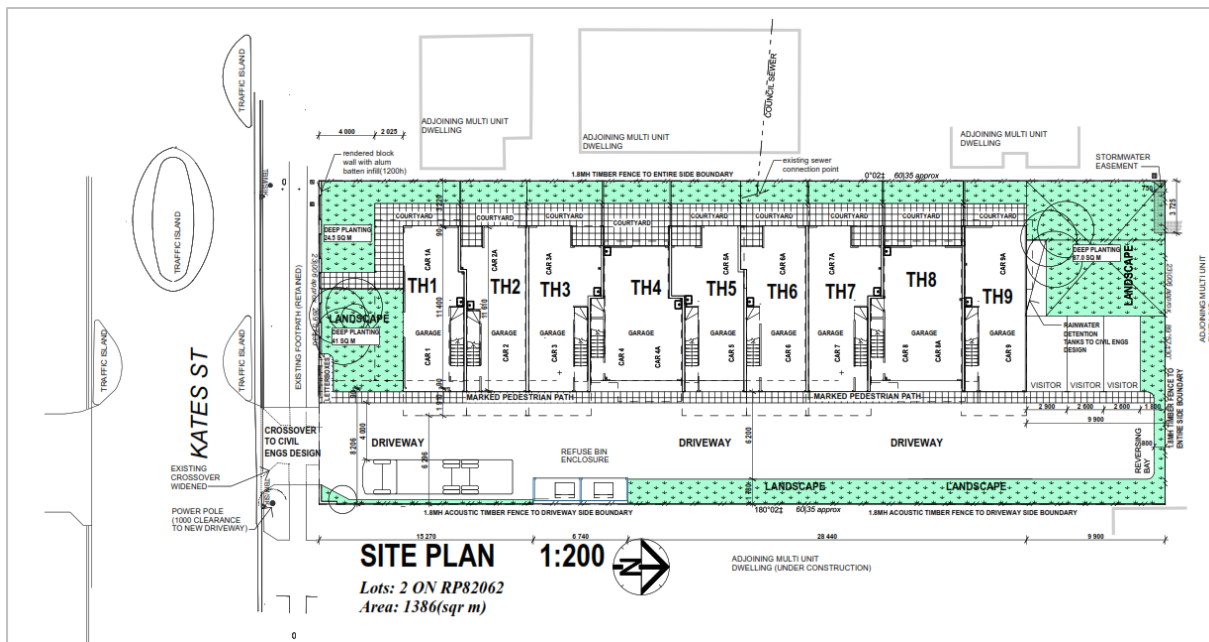


Figure 3: Extract from Site Plan

3.1 Vehicular Access

Vehicular access to the development is proposed via a driveway adjacent to the eastern site boundary, consistent with the existing site access location. It is proposed however that the existing driveway be upgraded and widened to achieve 5.5m width (excluding splays). This is the maximum driveway width able to be achieved with the existing constraints within the roadway, which include a kerb build-out to the west and a power pole and property access driveway to the east.

The 5.5m driveway width proposed is adequate to accommodate two-way passenger vehicle flow, and is also adequate to accommodate the largest vehicle expected to require access to the site, which is a 10.24m long rear-loading refuse collection vehicle. The vehicle tracking diagram included as **Appendix B** shows a vehicle of this size reversing onto the site from Kates Street for collection, which is acceptable under the provisions of Council's TAPS Planning Scheme Policy given Kates Street is a minor road. Vehicle servicing arrangements are discussed in further detail in Section 3.4 of this report.

In light of the existing road conditions and constraints, it is considered that modified driveway splays would be appropriate in this instance. It is recommended that the 600mm x 900mm splay detail as shown Council's Standard Drawing BSD-2022 be implemented on the eastern (exit) side of the driveway. This splay configuration would enable the required 1m separation from the existing power pole to the east to be maintained, but would also facilitate

comfortable site access and egress (given the generous width of Kates Street and the fact that vehicles can swing wide to enter/exit the site), as shown in the vehicle tracking diagram included as **Appendix C**.

No splay is considered to be required on the western (entry) side of the driveway given it will align with the existing kerb build-out on Kates Street. This is consistent with the arrangement recently constructed at the development opposite at 37 Kates Street, as shown in **Figure 3.1** below.

The gradient of the crossover is to be generally in accordance with the existing grading profile across the verge, with this detail to be refined by the civil engineer. The existing gradient across and along the verge is essentially flat however, so a compliant grading profile should be comfortably achieved.



Figure 3.1: Driveway to Development Opposite at 37 Kates Street

Source: Google Maps

In order to provide visibility between vehicles exiting the site and pedestrians approaching the driveway along the Kates Street footpath, a 2.0m (wide) x 2.5m (deep) pedestrian sight triangle is required adjacent to the exit side of the driveway in accordance with AS2890.1 requirements. It is therefore recommended that the fence along the eastern site boundary be constructed as palisade fence or similar for a distance of 2.5m from the front boundary, with no obstructions more than 500mm above pavement level between the driveway and the eastern boundary in this area. This refinement could reasonably be made at detailed design stage, in response to a condition of the approval.

In summary, the proposed access arrangements are considered to be acceptable and supportable from a traffic engineering perspective taking into consideration the scale and nature of the development proposed, the site constraints, and the form and function of the (minor) frontage road, subject to design refinement.

3.2 Car Parking Provision

As previously noted, the subject site is in a 'key location' as defined in Council's Transport, Access, Parking and Servicing (TAPS) Planning Scheme Policy. Accordingly, the applicable car parking requirements stipulated in Table 13 of the TAPS Planning Scheme Policy are as follows:

- Minimum 1.6 spaces per 3 bedroom dwelling
- Minimum 0.25 spaces per dwelling for visitor parking
- Parking may be provided in tandem spaces where 2 spaces are provided for 1 dwelling.
- At least 50% of visitor parking is provided in communal areas, and not in tandem with resident parking.

The application of the above parking rates to the proposed development (which comprises nine (9) x three-bedroom townhouses) leads to the following car parking requirements:

- Resident parking: 15 spaces
- Visitor parking: 3 spaces

As shown in the plans included as **Appendix A**, the proposed development provides car parking on the ground level within a double garage (either tandem or side-by-side arrangement) for each unit, i.e. 18 resident parking spaces, or two (2) spaces per unit.

In addition, the proposed development provides three (3) visitor car parking space at the northern end of the site.

The proposed resident and visitor car parking provisions therefore exceed Council's minimum requirements, and are expected to be more than adequate to cater for the demand generated by the development.

3.3 Parking Layout and Geometric Design

The car parking layout has been designed generally in accordance with the requirements of Council's TAPS Planning Scheme Policy and/or the relevant Australian Standards, as described following:

- Tandem garages are 11.4m long in accordance with the requirement in Section 7.8.3(7) of Council's TAPS Planning Scheme Policy;
- Tandem garages have a minimum internal width of approximately 3.2m with 3.0m wide door openings, in accordance with the requirement in Section 7.8.3(2) of Council's TAPS Planning Scheme Policy;
- The parking aisle providing access to the garages and parking spaces is generally 6.2m wide (minimum), in accordance with the requirement in Section 7.8.3(2) of Council's TAPS Planning Scheme Policy;
- Double garages have a minimum internal width of approximately 5.5m, which exceeds the minimum requirement stipulated in Council's TAPS Planning Scheme Policy (i.e. 5.3m) as well as the requirement under AS2890.1 (i.e. 5.4m);
- Double garages have a minimum internal length of approximately 5.7m, which exceeds the minimum requirement stipulated in AS2890.1 (i.e. 5.4m);
- The visitor parking spaces are 2.6m wide x 5.4m long in accordance with Council's requirements, with a 1m terminated aisle extension proposed as required under AS2890.1; and
- 300mm clearance is provided from the visitor parking space adjacent to townhouse 9 to the wall of the townhouse, in accordance with Council's TAPS Planning Scheme Policy and AS2890.1 requirements.

Vehicle manoeuvring to/from critical garage positions and parking spaces has been assessed, with the results (included as **Appendix D**) demonstrating satisfactory manoeuvring for a B85 design vehicle. Furthermore, a B85 passenger vehicle would be able to turn around to exit the site in a forward direction in the unlikely event that all visitor parking spaces are occupied.

In summary, the design of the car parking areas generally meets the requirements stipulated in Council's TAPS Planning Scheme Policy and/or the relevant Australian Standards.

3.4 Vehicle Servicing Arrangements

Given the proposed development is a small residential development, the demand for service vehicles would be limited. With the exception of the occasional furniture removal truck, delivery vehicle, or tradesman / courier, the only servicing requirement would be regular refuse collection.

It is proposed that on-site refuse collection be undertaken. As shown in the vehicle tracking diagram included as **Appendix B**, a 10.24m long refuse collection vehicle would be able to reverse onto the site, stand in the driveway area during collection, and exit the site in a forward direction after collection. The vehicle used to undertake this tracking assessment has a lock to-lock time of 6.00s and kerb-to-kerb turning radius of 9.757m in accordance with the vehicle

specifications in Council's Refuse Planning Scheme Policy and standard drawings, as shown in the vehicle tracking diagram included as **Appendix B**.

6m aisle width is available in this area from the edge of the landscape strip to the level 1 balconies. Whilst this is marginally narrower than the 6.5m recommended in Council's Refuse Planning Scheme Policy, it is supportable on the following grounds:

- As shown in the vehicle tracking diagram included as **Appendix B**, there is substantial clearance from the vehicle manoeuvring envelope to the level 1 balconies (i.e. approximately 2.5m clearance at the critical point);
- Whilst undertaking the reverse manoeuvre, the level 1 balconies would be on the driver side of the vehicle, therefore clearly visible to the driver;
- There would be adequate remaining aisle width available while a vehicle is servicing the site for a passenger vehicle to enter or exit the site (i.e. in excess of 4m); and
- There would be adequate clearances around the RCV for the driver to enter/exit the vehicle and manoeuvre bins to the rear of the vehicle for emptying.

Accordingly, the 6m aisle width available for a RCV from the edge of the landscape strip to the level 1 balconies is supportable from a traffic engineering perspective.

In regards to occasional service and delivery vehicles, it is proposed that these vehicles stand in the driveway area or kerbside on the frontage road in a location convenient to the subject site. This is consistent with the arrangements commonly relied upon at developments of the nature and scale of that proposed, where provision for on-site servicing is not feasible, and is not considered warranted given the limited frequency with which these larger vehicles will service the site.

Overall, the proposed servicing / refuse collection arrangements are considered to be appropriate given the nature and scale of the development, and generally consistent with those relied upon at similar developments.

3.5 Pedestrian Connectivity

There is a pedestrian footpath along the Kates Street frontage of the site which will be retained under the proposal.

As shown in the plans of the proposed development included as **Appendix A** and the extract provided as **Figure 3.5** below, a marked pedestrian pathway is proposed along the length of the site adjacent to the building, connecting from the Kates Street frontage to the visitor car parking at the rear of the site via the pedestrian entrance for each unit.

The proposed pedestrian provisions are supportable from a traffic engineering perspective, and generally consistent with or superior to those commonly implemented at similar smaller scale residential developments.

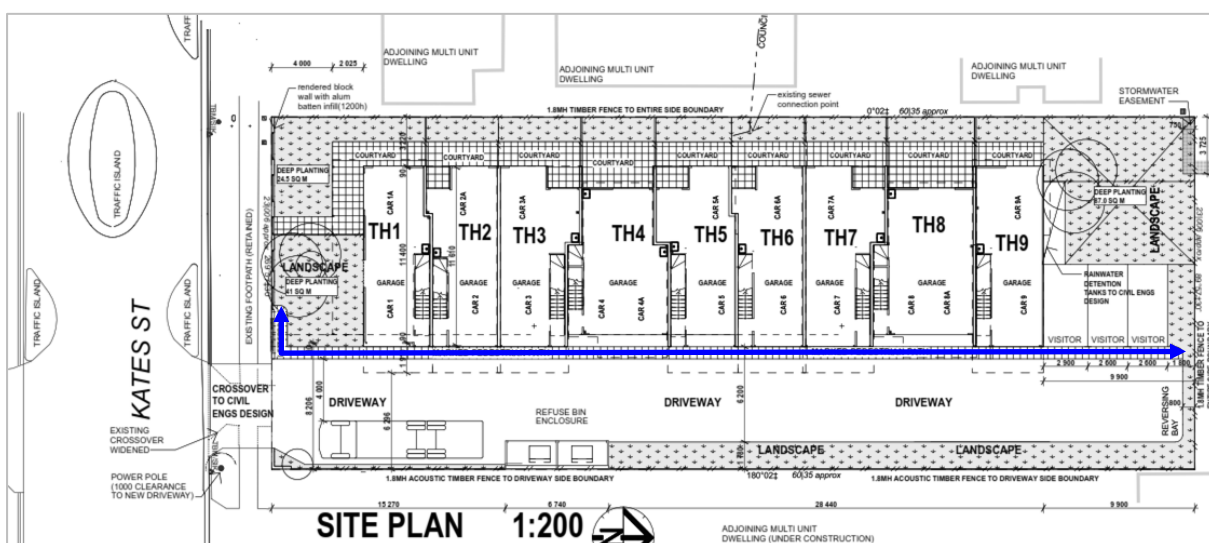


Figure 3.5: Pedestrian Connectivity

3.6 Bicycle Parking

Under Table 21 of Council's TAPS Planning Scheme Policy, the bicycle parking requirements are as follows:

1 lockable, covered, bicycle parking space per unit (in either the garage or separate on-site facility)

1 visitor bicycle parking space per 4 units or part thereof

It is assumed that provision would be made for resident bicycle parking within the enclosed garages, consistent with common practice.

Three (3) visitor bicycle parking spaces could be provided within the landscaped area along the northern, eastern, or southern site boundaries.

In accordance with Council's advice, it is assumed that the pavement of the visitor bicycle parking area could be a permeable pavement to create improved growing conditions for the adjacent landscaping and address glare, heat island, and impervious area impacts. The detail of the visitor bicycle parking arrangements would be refined at detailed design stage, in response to a condition of the approval.

4.0 Traffic Impact Assessment

The NSW Government's Guide to Transport Impact Assessment (TS 00085 | Version 1.1) provides traffic generation rates for various land uses. The rate suggested for medium density residential dwellings in metropolitan areas is 0.39 trips per dwelling in the critical AM peak hour.

The application of this trip generation rate to the proposed development (which comprises nine (9) dwellings) results in an estimated traffic generation of 3 - 4 vehicle trips (entry and exit) during the critical AM peak hour. This equates to one vehicle trip every 15 - 20 minutes on average, during the peak hour. This level of traffic generation is clearly very low, and likely to be well within the range of typical fluctuations in traffic volumes on the road network, therefore negligible from a practical perspective.

Furthermore, given the subject site currently accommodates a dwelling house, the net increase in traffic generation as a result of the development is expected to be even lower than described above.

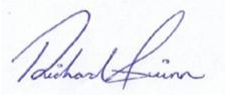
In light of the above, no external roadworks are considered to be required to support the proposed development, from a capacity perspective. Any impacts (however minor) would be mitigated by way of infrastructure charges levied against the development.

5.0 Recommendation

In light of the information contained within this report, we consider that the proposal is satisfactory from a traffic operations perspective and recommend that the development application be approved.

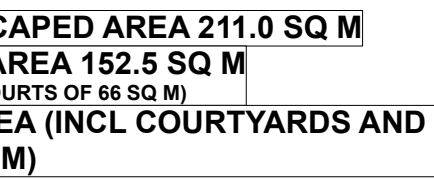
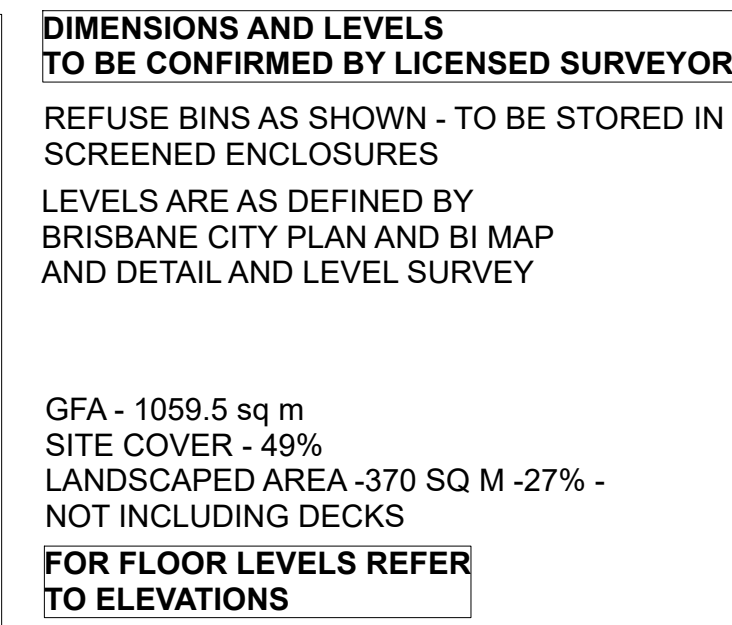
5.1 Qualifications

This report has been approved by Richard Quinn | Director | RPEQ 08565



APPENDIX A

Proposed Development Plans



LIC 15107188		
General Notes The Builder shall check all dimensions and levels on site prior to construction. Notably any errors, discrepancies or omissions to the architect. Drawings shall not be used for construction purposes until issued for construction. Do not scale drawings. All boundaries and contours subject to survey		
Client	BREENE	
Project	MULTIUNIT DWELLING DEVELOPMENT AT 50 KATES ST MORNINGSIDES (9 DWELLINGS)	
Title	SITE PLAN / SURVEY	
Scale:	Date:	Drawn:
SHOWN	17/08/2026	..
Job No:	Drawing No:	Revision No:
BRE01	TP01	

APPENDIX B

Vehicle Tracking Diagram – Refuse Collection
Vehicle

Edit Vehicle Details

Displayed Data

Plan/Profile View Data

Roofline View Data

Creation Units: meters

Note: Profile for representation purposes only

Profile

Plan

Overall Vehicle Length: 10.24 m

General Data

Name: BCC Rear-loading RCV 10.24m

Library: Custom

Region: Australia & Oceania

Country: Australia

Profile Type: <None>

Vehicle Profile: <None>

Class: Commercial Truck

Lock to Lock Time: 6.0 sec.

Steering Lock Angle: 38.9 deg.

Current Part Data

Part Profile: <None>

Tractor: Full

Width: 2.50

Steering: Front Only

Front Axle Group

Axes: 1

Track: 2.50 m

Rear Axle Group

Axes: 2

Track: 2.50 m

10.24

1.51

5.50

3.22

Calculate Steering Lock

Width: 2.50

Wheelbase: 5.50

Track: 2.50

Body Front: 1.51

Minimum Turning Radius:

Centerline

Curb to Curb

Wall to Wall

Inner Turn

Radius: 9.76

meters

Steering Lock Angle: 38.9 deg.

Apply

Close

Help

The site plan illustrates the layout of 50 Kates Street, Morningside, with a focus on vehicle tracking analysis. The property is bounded by a rendered block wall with aluminum batten infill (1200h) and a 1.8mH timber fence to the east. The plan shows a driveway leading to a parking area with four car spaces (CAR 1A, CAR 2A, CAR 3A, CAR 4A) and four truck spaces (TH1, TH2, TH3, TH4). A marked pedestrian path runs along the driveway. The vehicle model, a BCC Rear-loading RCV 10.24m, is shown with its swept path and 300mm clearance envelope. The plan also includes a traffic island, a power pole, and a crossover to civil engineering design. The overall dimensions of the site are 15,270m by 6,740m. The scale is 1:200.

I, Richard Quinn (RPEQ 08565), certify that the swept paths have been carried out in accordance with AS2890.1 and/or AS2890.2

Richard Quinn

LEGEND

- Vehicle Wheelpath
- Body of Vehicle
- 300mm Clearance Envelope from Body of Vehicle

drawing title		
50 Kates Street, Morningside Vehicle Tracking Analyses		
drawn: RQ	Scale: 1:200 @ A3	date: 31/08/2026
The base drawing is provided to Q Traffic by others. This drawing is draft for discussion purposes only		
2309_DKT01	SK.01	A
project no.	drawing no.	rev

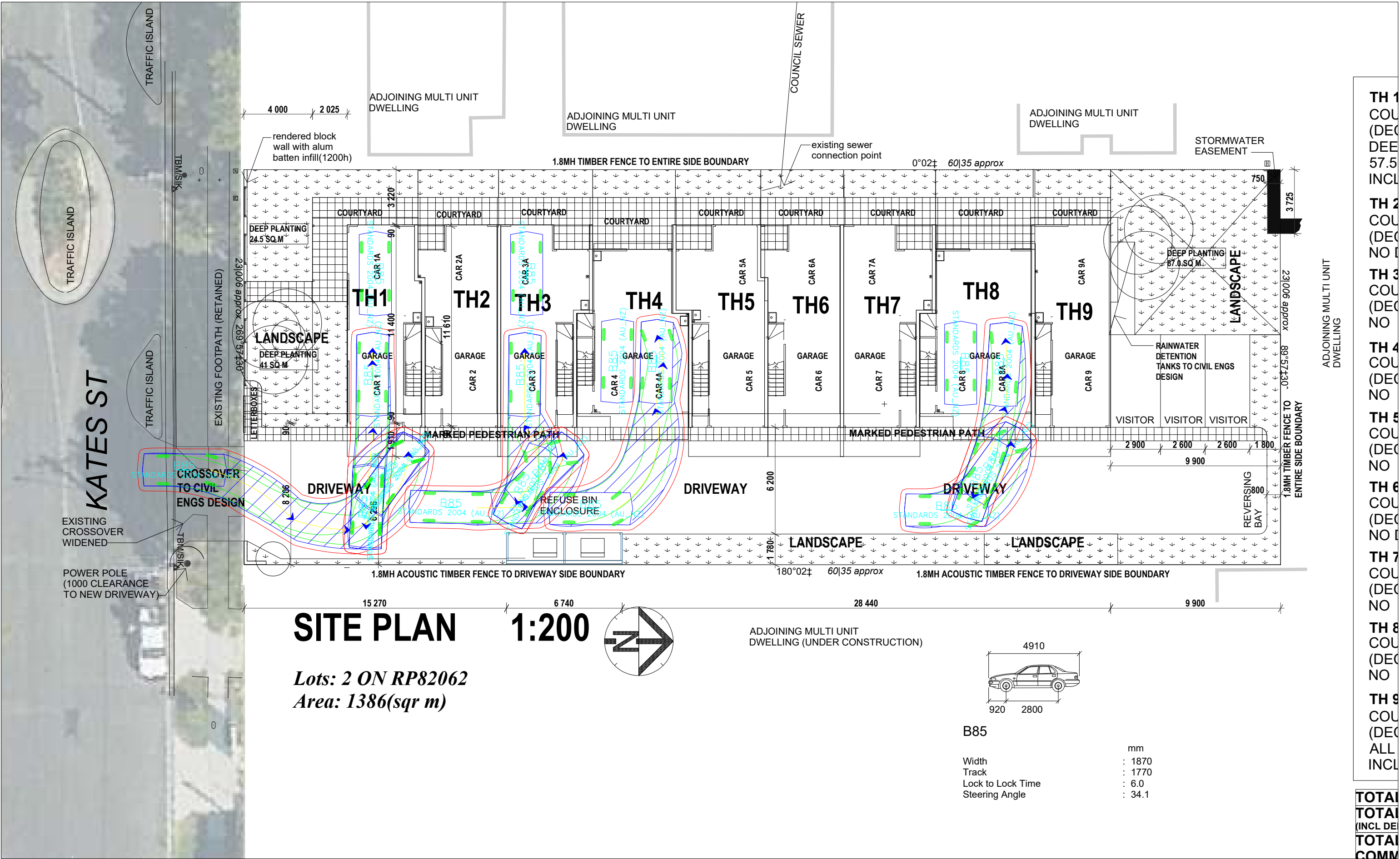
APPENDIX C

Vehicle Tracking Diagram – Access Driveway

drawing title 50 Kates Street, Morningside Vehicle Tracking Analyses		
drawn: RQ	Scale: 1:200 @ A3	date: 31/08/2026
The base drawing is provided to Q Traffic by others. This drawing is draft for discussion purposes only		
22039_DKT01 project no.	SK.02 drawing no.	A rev

APPENDIX D

Vehicle Tracking Diagram – Garage Access / Egress



I, Richard Quinn (RPEQ 08565), certify that the swept paths have been carried out in accordance with AS2890.1 and/or AS2890.2

Richard Quinn

LEGEND

- Vehicle Wheelpath
- Body of Vehicle
- 300mm Clearance Envelope from Body of Vehicle

drawing title

50 Kates Street, Morningside
Vehicle Tracking Analyses

drawn: RQ

Scale: 1:200 @ A3

date: 31/08/2026

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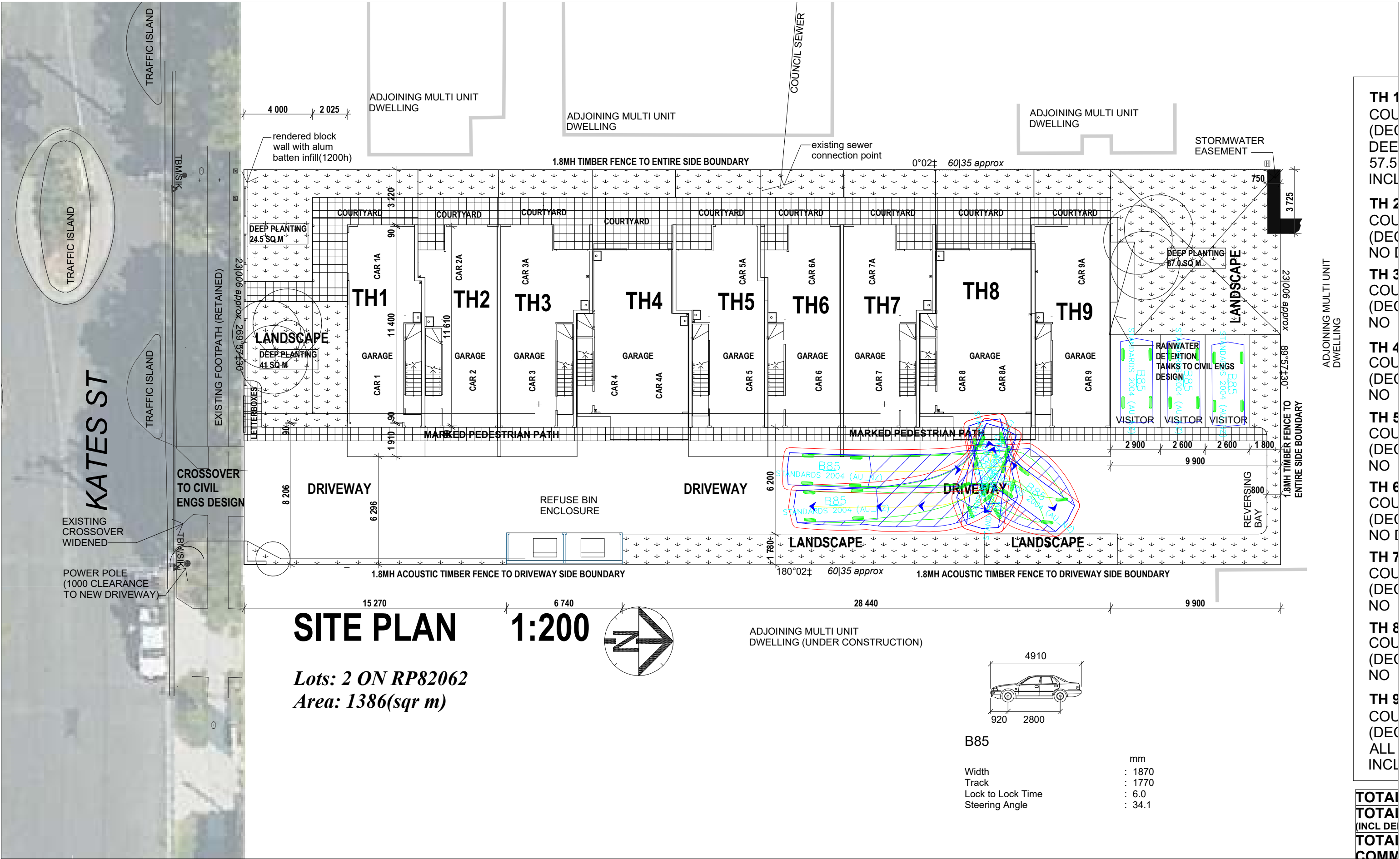
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I, Richard Quinn (RPEQ 08565), certify that the swept paths have been carried out in accordance with AS2890.1 and/or AS2890.2

Richard Quinn

LEGEND

- Vehicle Wheelpath
- Body of Vehicle
- 300mm Clearance Envelope from Body of Vehicle

drawing title

50 Kates Street, Morningside
Vehicle Tracking Analyses

drawn: RQ

Scale: 1:200 @ A3

date: 31/08/2026

The base drawing is provided to Q Traffic by others. This drawing is draft for discussion purposes only

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