Appendix C Traffic Impact Assessment

PROPOSED TOWNHOUSE DEVELOPMENT

56 Blinzinger Road, Banyo 4014

Traffic Impact Assessment
For AR Developments Pty Ltd

L+R ENGINEERS MANAGERS SCIENTISTS

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RPEQ #31707

1. Introduction

Lambert & Rehbein (SEQ) Pty Ltd has been commissioned by AR Developments Pty Ltd to prepare a Traffic Impact Assessment (TIA) report in support of the proposed residential townhouse development located at 56 Blinzinger Road, Banyo 4014. The site is formally described as Lot 1 & 2 on RP124669 with a total area of 4.86ha.

The proposed development is for a total of 216 townhouse units consisting of 126 three (3) bedroom units and 90 four (4) bedroom units with two (2) access driveways onto Wellington Street and Blinzinger Road. The proposed site layout, prepared by AR Developments Pty Ltd has been included in **Appendix A**.

This report has been undertaken to assess the potential impact that the proposed development could have on the external road network surrounding the site and compliance with Council expectations and is set out as follows:

Section 2 discusses the existing land use and traffic arrangements in the vicinity of the proposed development site.

Section 3 provides details of the proposed development, including an assessment of the site layout, access, and servicing arrangements.

Section 4 displays the calculations and assumptions used to establish the forecast generation of the proposed development traffic.

Section 5 summarises the key outcomes of the traffic investigations.

A response to BCC's Transport, Access, Parking and Servicing (TAPS) Code is attached in **Appendix E.**

Lambert & Rehbein has derived the data in this report primarily from the data provided by the Client, and desktop site investigation.

This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in connection with the provisions of the agreement between Lambert & Rehbein and the Client. Lambert & Rehbein accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

2. Context of the Development Site

This section of the report describes the context of the proposed development and includes a description of the existing road network, adjacent land uses, and existing active and public transport facilities servicing the site.

2.1. Development Site

The development site is located at 56 Blinzinger Road, Banyo 4014, formally described as Lot 1 & 2 on RP124669 with a total area of 4.86ha. The site is currently unoccupied and gains access to the external road network via three (3) existing crossovers onto Blinzinger Road and three (3) existing crossovers onto Wellington Street.

The site is immediately surrounded by 'Low Density Residential' zoning in all directions with some 'Character' zoning towards the southeast and northwest.

Figure 2-1 shown the proposed development site in the context of the surrounding road network.



Figure 2-1 Development Site Location (Source: Nearmap 2026)

We note the development site is also located within the Economic Development Queensland (EDQ) Land Activation Program (SEQ Tranche 1) Provisional Priority Development Area and therefore is assessed against the Land Activation Program (SEQ Tranche 1) Provisional Land Use Plan.

2.2. Adjacent Road Network

Inspection of the land use, road condition, intersection characteristics, public transport facilities, pedestrian access, and cyclist provisions surrounding the proposed development site have been undertaken in preparation of this traffic assessment. This was completed to collect information about the road network operation, safety characteristics, public transport network and specific network / land-use factors potentially of influence on the proposed development.

2.2.1. Blinzinger Road

Blinzinger Road runs along the southwestern frontage of the development site and is classified as a 'Neighbourhood Road' under the jurisdiction of BCC. The general form of Blinzinger Road is shown in **Figure 2-2** and was observed to have to have the following characteristics at the site frontage:

- Two-way, two-lane road;
- Kerb and channel provided on both sides of the road;
- Pavement width of approximately 12m;
- On-street parking permitted on both sides of the road;
- Pedestrian footpath provided along at least one (1) side of the road; and
- Posted speed limit of 50km/hr.



Figure 2-2 Blinzinger Road Facing Northwest (Source: Google)

2.2.2. Wellington Street

Wellington Street runs along the southeastern frontage of the development site and is classified as a 'Neighbourhood Road' under the jurisdiction of BCC. The general form of Wellington Street is shown in **Figure 2-3** and was observed to have to have the following characteristics at the site frontage:

- Two-way, two-lane road;
- Kerb and channel provided on both sides of the road;
- Pavement width of approximately 9m;
- On-street parking permitted on both sides of the road;
- No pedestrian footpaths provided along either side of the road; and
- Posted speed limit of 50km/hr.

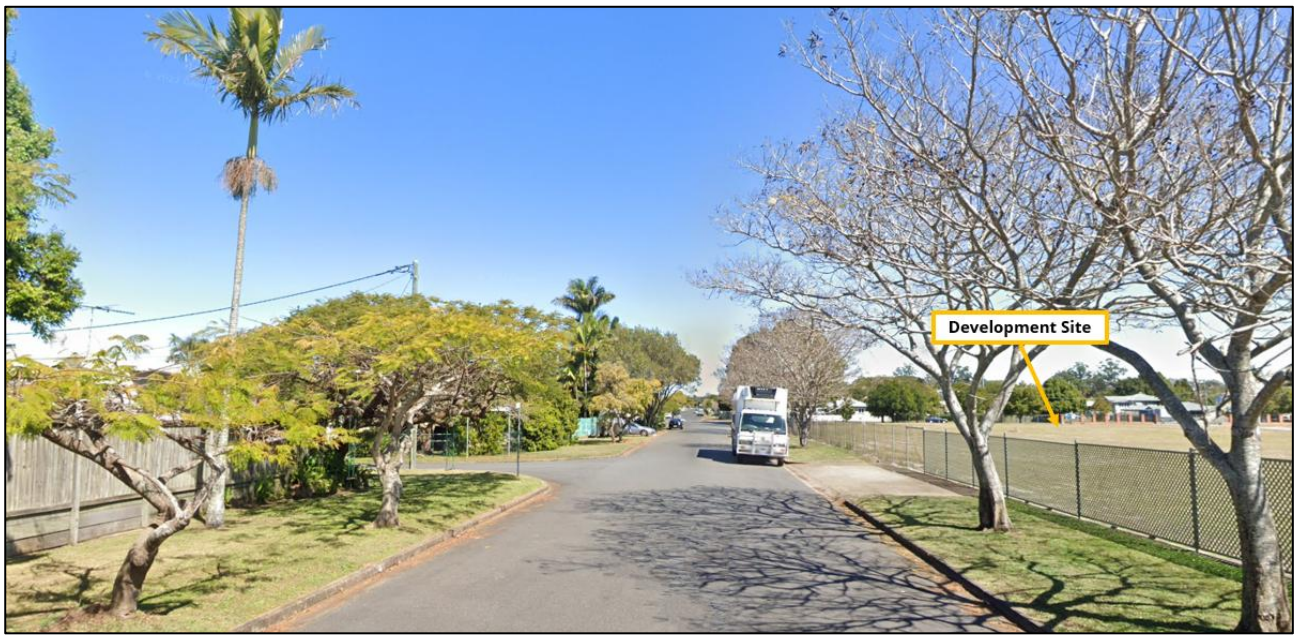


Figure 2-3 Wellington Street Facing Southwest (Source: Google)

2.3. Public Transport

The development site is well connected to the existing public transport network with four (4) Translink bus stops located within a typical 400m walking radius of the development site, as seen in **Figure 2-4**. The services that operate from these stops are summarised below in **Table 2-1**. We note the site is also located less than 650m from the Banyo Train Station and approximately 800m from the Bindha Train Station.

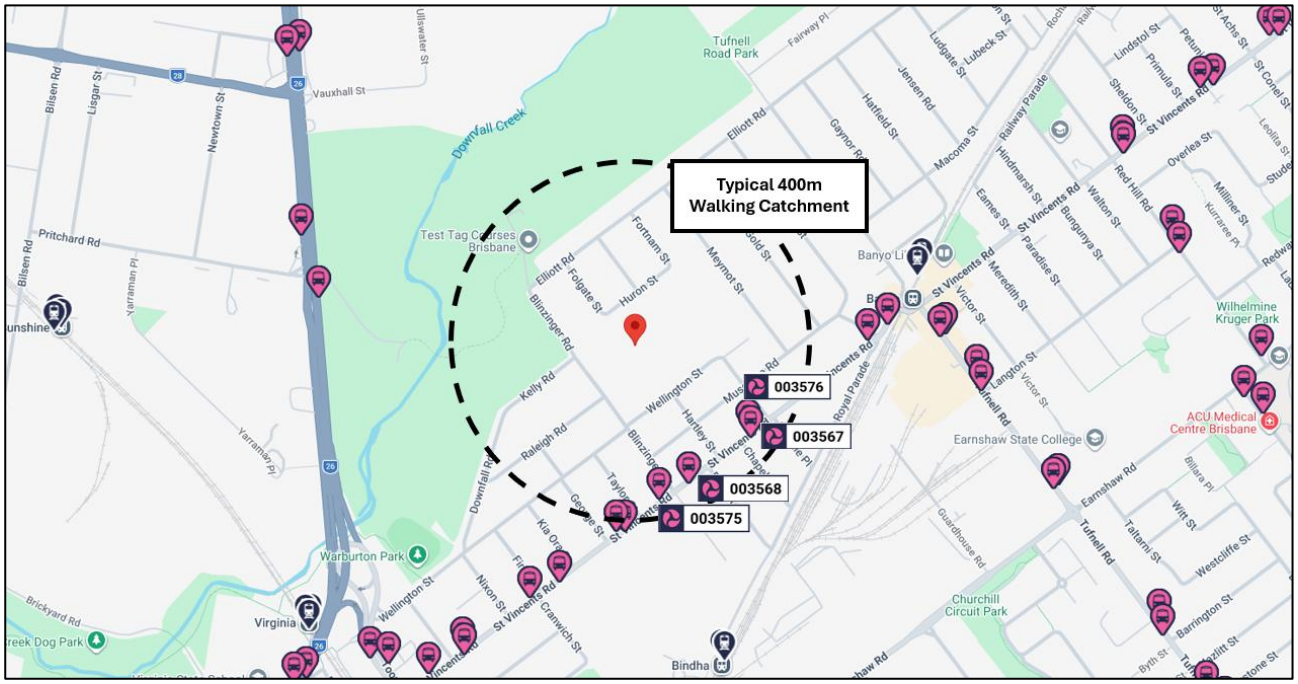


Figure 2-4 Translink Bus Stop Locations

Table 2-1: Translink Bus Stop Routes

Description (# Translink ID)	Route ID	Route Description
Saint Vincents Rd at Blinzinger Road, stop 27, Banyo (#003575) and (#003568)	306	Towards Nudgee Beach Outbound / Towards City, Adelaide St Stop 47 Inbound
Saint Vincents Rd at Chapel Street, stop 28, Banyo (#003567) and (#003576)	306	Towards Nudgee Beach Outbound / Towards City, Adelaide St Stop 47 Inbound

2.4. Active Transport

The development site has connectivity to existing active transport network with pedestrian pathways provided along on at least one side of Blinzinger Road which connects onto St Vincents Road. As seen on BCC's Bicycle network overlay in **Figure 2-5**, there is a mapped secondary on-road cycle route (light green dashed line) identified along Blinzinger Road which also connects onto St Vincents Road, providing connectivity to various public transport options nearby and to retail land uses towards the east.

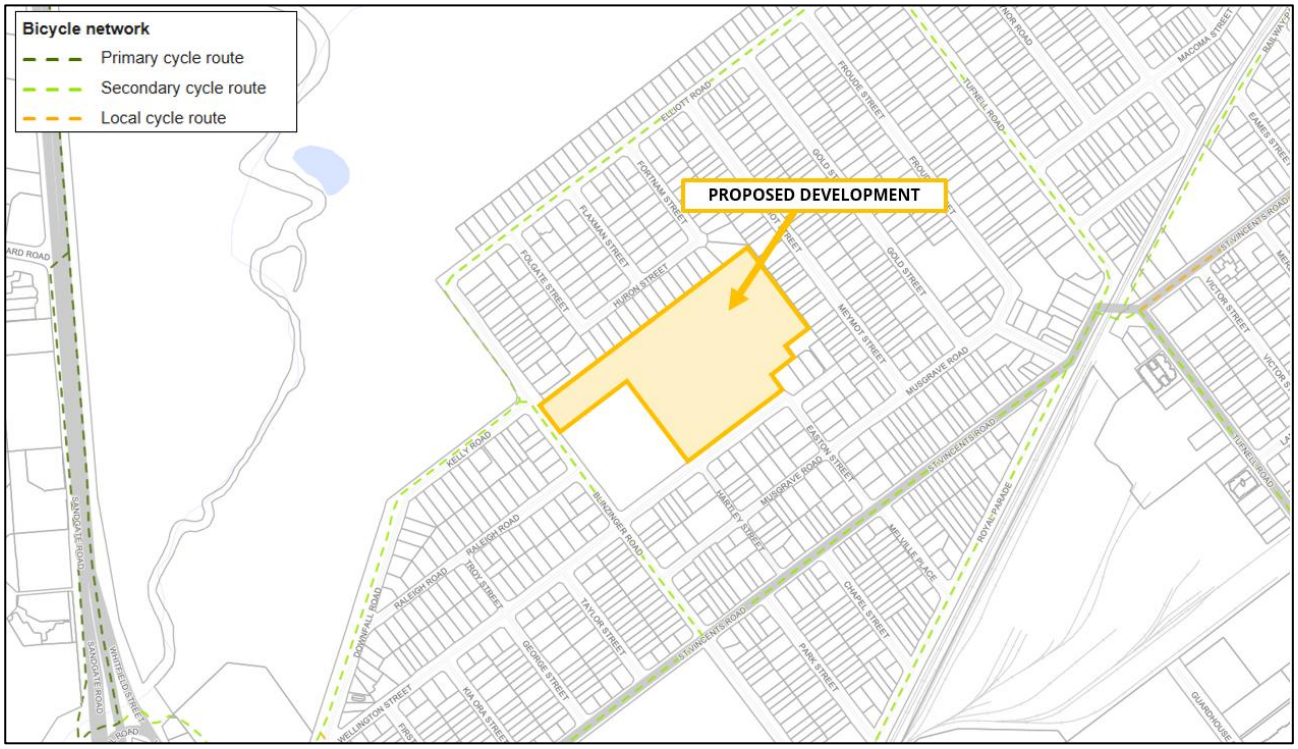


Figure 2-5 Surrounding Bicycle Network (Source: BCC City Plan Mapping)

2.5. Future Infrastructure Upgrades

The following resources were reviewed to determine if there are any future infrastructure upgrades within close proximity of the development site:

- BCC's Local Government Infrastructure Plan (LGIP),
- Queensland Transport and Roads Investment Program (QTRIP),
- Queensland Government's Development Assessment Mapping System (DAMS).

A review of these sources found no planned upgrades within close proximity of the development site.

2.6. Crash History

An investigation of the road crash history in the immediate vicinity of the subject site has been undertaken using publicly available crash data from the Queensland Government's mapping service Queensland Globe. The analysis found that there was four (4) Killed or Seriously Injured' (KSI) crashes recorded within the vicinity of the site within the last five (5) years of available data as shown in **Figure 2-6** and summarised in **Table 2-2**.



Figure 2-6 Road Crash Location (Source: QLD Globe)

Table 2-2 Detailed Crash Description

ID	SEVERITY	TYPE	NATURE	YEAR	CONDITIONS	CRASH DCA	DESCRIPTION	CRASH REFERENCE NUMBER
1	Hospitalisation	Multi - Vehicle	Angle	2020	Daylight - Raining	400	Vehs Manoeuvring: Other	375177
2	Hospitalisation	Single Vehicle	Hit object	2020	Dawn/Dusk - Clear	700	Off Path-Straight: Other	200830
3	Hospitalisation	Multi - Vehicle	Angle	2020	Darkness - Clear	104	Vehs Adjacent Approach: Thru-Right	218495

ID	SEVERITY	TYPE	NATURE	YEAR	CONDITIONS	CRASH DCA	DESCRIPTION	CRASH REFERENCE NUMBER
4	Hospitalisation	Single Vehicle	Hit parked vehicle	2019	Daylight - Clear	703	Off Path-Straight: Left Off Cway Hit Obj	203208

As seen in **Table 2-2**, there has been four (4) hospitalisation crashes in the last five years of publicly available data however no trend is identifiable with these crashes all recorded at different locations.

3. Details of the Proposed Development

This section of the report describes the nature of the proposed development, the proposed access arrangements, servicing arrangements and on-site manoeuvrability.

3.1. Proposed Development

The proposed development is for a total of 216 townhouse units consisting of 126 three (3) bedroom units and 90 four (4) bedroom units with two (2) access driveways – one (1) onto Wellington Street and the other onto Blinzinger Road. The proposed site layout, prepared by AR Developments Pty Ltd has been included in **Appendix A**.

3.2. Access Arrangements

The proposed development will gain access to the external road network via two 6.5m wide Type B2 crossovers onto Blinzinger Road and Wellington Street which have been designed in accordance with BCC's Standard Drawing BSD-2021. We note that the Blinzinger Road site access does not achieve Council's required 10m separation from the Kelly Road intersection for minor roads and therefore, it is recommended that this access be restricted to left-in, left-out movements only, which will limit its interaction with the Kelly Road intersection.

We recommend providing no right-turn signage (R2-6) at the access, internal and external to the site, generally in accordance with the requirements of the Manual of Uniform Traffic Control Devices (MUTCD) (Section 2.8.4 of AS1742.2:2020), with double centre line marking to reinforce the left-in and left-out movements.

The Wellington Street access will provide all-movement access to and from the site and will operate as a four-way intersection with Hartley Street, located at the request of EDQ. We note as per BCC's Infrastructure Design Planning Scheme Policy a four-way priority-controlled intersection in acceptable on minor roads where traffic volumes are less than 3,000 vehicles per day.

Pedestrian access to the proposed site will be provided via pathway connections to both Blinzinger Road and Wellington Street. The proposed development will also provide external pedestrian pathways along the development sites frontage on both Blinzinger Road and Wellington Street which are intended to ultimately provide a pedestrian connection from the development site to the nearby Banyo Train Station.

The development will provide allowance for a clear pedestrian sight triangle on the exit side of both access driveways to ensure adequate inter-visibility is provided between exiting vehicles and pedestrians on the footpath along the site frontage. Any obstructions and landscaping located in this section will be limited to 500mm in height.

A 1.2m wide pedestrian route is proposed internally within the site, marked within the 6.5m wide private internal roadway. The internal footpaths are generally provided to avoid conflict with refuse collection for lots 192 to 216 and to provide the best pedestrian safety and connectivity. The internal roadway will

function as a low speed shared zone and the pedestrian route will be identified with a different colour/finish to enhance the shared zone within the site, which we note is common in similar townhouse developments. Shared zone signage (R4-4 and R4-5) should also be clearly displayed at the entrance to the site, generally in accordance with the requirements of Section 3.1.10 of AS1742.4:2020.

Units 1 – 20 will gain direct access onto Wellington Street. We note Wellington Street is classified as a 'Neighbourhood Road' with direct lot access permitted and the proposed driveways will be designed in accordance with BCC's Standard Drawing BSD-2022. The proposed internal network will be designed as 6.5m wide private road and will provide direct lot access to the remaining units.

3.3. Servicing Arrangements

The proposed internal 6.5m wide private road is designed to provide sufficient space for BCC's side loading Refuse Collection Vehicle (RCV) and a Heavy Rigid Vehicle (HRV). All refuse collection will take place at individual unit frontages except units 1 to 20. Servicing for these units will take place along the north-western internal 6.5m wide roadway, with wheeling distance for bins kept to less than 50m. A swept path assessment has been included in **Appendix B,** which demonstrates that the largest anticipated vehicle, which is a HRV, can successfully manoeuvre through the site. We note the HRV requires the full width of the driveway to enter/exit the development site and the full aisle width to undertake turning manoeuvres within the site however, as this is only an occasional manoeuvre, this is considered acceptable as per Section 3.2 of the BCC's Transport, Access, Parking and Servicing (TAPS) Planning Scheme Policy.

3.4. Car Parking Provisions

BCC's City Plan outlines the minimum parking rate for a multiple dwelling development. The relevant car parking rates and required supply are outlined below in **Table 3-1.**

Table 3-1: Car Parking Requirement

Use	Yield	Parking Rate	Minimum Car Parking Requirements	Proposed Car Parking Supply
Multiple Dwelling (4-bedrooms)	124 x 3 bed dwellings + 92 x 4 bed dwellings	2 spaces per 3 bed dwelling + 2.5 spaces per 4 bed dwelling + 0.25 visitor spaces per dwelling	248 + 230 residential + 54 visitor	496 residential + 50 visitor

As summarised in **Table 3-1**, the minimum car parking requirement is 532 spaces (including 54 visitor bays). As shown in the site layout in **Appendix A**, the proposed development will provide 546 spaces (including 50 visitor bays), thereby meeting Council's requirements for the total number of spaces.

Each townhouse unit will provide one (1) space within each garage with 203 units providing a second parking space in their driveway and 77 units providing an allocated third space adjacent to their unit. 50 visitor car parks will also be provided in the vicinity of the recreational open space, resulting in a total of 546 car parks across the site.

While the development proposes a shortfall of four (4) visitor parking spaces, the additional residential spaces allocated across the site is expected to cater for the visitor demand, and therefore the on-site parking allocated is anticipated to accommodate the design peak parking demand without any overflow of car parking to an adjacent premises or adjacent street in accordance with PO13 of the TAPS Code.

BCC's TAPS PSP also requires that at least one (1) PWD visitor space to be provided for multiple dwellings with more than 10 units. The proposed will provide two (2) PWD visitor spaces adjacent to the Recreational Area, thereby meeting Council's requirement.

Table 3-2 below presents the traffic engineering elements of the proposed car parking areas and the respective level of compliance with *AS2890.1 Parking Facilities – Off-street Car Parking (*AS2890.1) and BCC's *Transport, access, parking and servicing planning scheme policy* (TAPS PSP).

Table 3-2: Car Parking Design

Design Aspect	Proposed Development	BCC TAPS PSP Requirements	AS2890.1 Requirements	Compliance
Parking Bay Length - Visitor Bay	5.4m	5.4m	5.4m	BCC TAPS PSP AS2890.1
Parking Bay Width - Visitor Bay	2.6m	2.6m	2.6m	BCC TAPS PSP AS2890.1
Parking Bay Length - PWD Bay	5.4m	5.4m	5.4m	BCC TAPS PSP AS2890.1
Parking Bay Width - PWD Bay	2.6 m plus 2.5 m shared area	2.4 m plus 2.4 m shared area	2.4 m plus 2.4 m shared area	BCC TAPS PSP AS2890.1
Parking Aisle Width	6.5m	6.2m	5.8m	BCC TAPS PSP AS2890.1
Service Aisle Width	6.5m	6.5m	6.5m	BCC TAPS PSP AS2890.2

As outlined in **Table 3-2** above**,** the proposed car parking areas are designed generally in accordance with the requirements of AS2890.1 and BCC's TAPS PSP.

3.5. Bicycle Parking Supply

BCC's TAPS PSP outlines the bicycle parking provisions for multiple dwellings which is summarised in **Table 3-3.**

Table 3-3: Bicycle Parking Requirement

Use	Yield	Parking Rate	Minimum Bicycle Parking Requirements	Proposed Supply
Multiple Dwelling	216 dwellings	1 space per dwelling + 0.25 visitor spaces per dwelling	216 + 54 visitor = 270 spaces	216 spaces in residential garages + 18 spaces across the site

As summarised in **Table 3-3**, the minimum bicycle parking requirement is 270 spaces including 54 spaces for visitors. It is understood that the proposed development will provide 216 spaces within the garage of each dwelling unit and 18 visitor spaces across the site.

The proposed development seeks a performance outcome for the provision of visitor bicycle parking. The specified parking rate of 1 space per 4 dwellings is considered excessive and not entirely reflective of a typical visitor bicycle parking demand at medium-density residential developments where visitors are more likely to park at the individual units. The provision of visitor bicycle parking at a rate of 1 space per 4 dwellings can lead to parking facilities being heavily underutilised and an inefficient use of space. The development instead proposes to provide visitor bicycle parking at a rate of 1 space per 12 dwellings (or 'flats'), generally in accordance with the rates outlined in Austroads *Guide to Traffic Management Part 11: Parking Management Techniques*. The provision of 18 visitor bicycle parking spaces will cater for the visitor bicycle parking demand in our view.

Visitor bicycle parking will be provided adjacent to the Recreational Area, designed as horizontal double-sided loops, generally in accordance with AS2890.3.

Residential bicycle parking should be designed generally in accordance with AS2890.3 and should not impact the usability of each garage, remaining clear of the car parking envelope

4. Impact Assessment

This section of the report provides details of the potential impact that the development generated traffic volumes could have on the operation of the surrounding road network during the AM and PM peak periods.

4.1. Background Traffic

Vehicle movement survey data was sourced from the Preliminary Traffic Advice Technical Note, dated 24 November 2025, prepared by Stantec for EDQ in relation to the development of the site. The vehicle movement survey data was collected on Wednesday 29th October 2025 at the following intersections and presented in 15-minute periods to capture peak periods. The individual intersections and their peak hours are summarised below.

- Blinzinger Road / Wellington Street:
  - AM Peak: 7:30 AM to 8:30 AM; and
  - PM Peak: 3:15 PM to 4:15 PM.
- Blinzinger Road / St Vincents Road:
  - AM Peak: 7:30 AM to 8:30 AM; and
  - PM Peak: 4:00 PM to 5:00 PM.
- St Vincents Road / Easton Street / Melville Place:
  - AM Peak: 7:30 AM to 8:30 AM; and
  - PM Peak: 4:00 PM to 6:00 PM.

A summary of the traffic survey data is displayed in **Figure C1** attached in **Appendix C**.

For the purposes of this assessment, the opening year for the proposed development has been assumed to be 2028 and a 10-year design horizon of 2038. To assess the future background traffic, a linear growth rate of 1.25% per annum has been applied to all movements at all three (3) intersections. This was based on the projected traffic volume increase for catchment 16 in the Brisbane City Council's LGIP.

The predicted background traffic in the opening year (2028) and at the 10-year design horizon (2038) have been presented in **Figure C2** and **Figure C3** respectively, attached in **Appendix C**.

4.2. Trip Generation

Traffic associated with the proposed development has been forecast using the trip generation rates based on the Transport for New South Wales (TfNSW) (formerly RMS) *Guide to Transport Impact Assessment* trip generation rates for medium density residential dwellings. The traffic generation rates, and in/out directionality of movements adopted for the proposed development is shown in **Table 4-1**.

Table 4-1: Proposed Development Traffic Generation and Directional Rates

Land Use	Generation Rate		Directionality (% In / % Out)	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Medium Density Residential Dwellings	0.41 trips / dwelling	0.60 trips / dwelling	20% / 80%	70% / 30%

As such, based on the above guidelines and assumptions, the estimated traffic generated by the proposed development is documented in **Table 4-2**.

Table 4-2: Proposed Development Traffic Generation

Land Use	Yield	AM(In)	AM (Out)	PM (In)	PM (Out)
Medium Density Residential Dwellings	216 dwellings	18	71	91	39
Total Trips per Peak		**89**		**130**	

As shown in **Table 4-2** above, the development site is anticipated to generate a total of 89 trips (combined in and out) in AM peak period and 130 trips (combined in and out) in the PM peak period.

4.2.1. Adjacent Proposed Development Traffic

We note there are two additional developments proposed on the subject lot which will add additional traffic to the surrounding intersections. We understand these developments will consist of 180 aged care units and 64 affordable housing apartments. Traffic generated by these developments has been incorporated into the 2028 and 2038 design traffic scenario for the purpose of analysis.

Traffic associated with these developments has been forecast using the trip generation rates based on the Transport for New South Wales (TfNSW) (formerly RMS) *Guide to Transport Impact Assessment* trip generation rates. The traffic generation rates, and in/out directionality of movements adopted for the proposed development is shown in **Table 4-3**.

Table 4-3: Proposed Development Traffic Generation and Directional Rates

Land Use	Generation Rate		Directionality (% In / % Out)	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Housing for Seniors	0.3 trips / dwelling*	0.17 trips / dwelling	20% / 80%	70% / 30%
High Density Residential Dwellings	0.19 trips / dwelling	0.15 trips / dwelling	20% / 80%	70% / 30%

** Peak rate adopted based on there being no rate for the AM network peak hour*

As such, based on the above guidelines and assumptions, the estimated traffic generated by these developments is documented in **Table 4-4**.

Table 4-4: Proposed Development Traffic Generation

Land Use	Yield	AM(In)	AM (Out)	PM (In)	PM (Out)
Housing for Seniors	180 dwellings	11	44	22	10
High Density Residential Dwellings	64 dwellings	3	10	7	3
Total Trips per Peak		**68**		**42**	

As shown in **Table 4-4** above, the adjacent development sites are anticipated to generate a total of 68 trips (combined in and out) in AM peak period and 42 trips (combined in and out) in the PM peak period. These trips have been added to the network in the design traffic scenarios.

4.3. Traffic Distribution

The distribution of the proposed development's new trips to the surrounding road network has been based on the configuration of the surrounding transport network. The adopted vehicle trip distribution is summarised below and displayed in **Figure C4**, attached in **Appendix C**.

- 15% to/from the northeast;
- 40% to/from northwest via Wellington Street and Kelly Road; and
- 45% to/from southwest via St Vincents Road.

4.4. Development Traffic

Based on the above trip distribution, the total development traffic in and out of the site is displayed in **Figure C6**, attached in **Appendix C**.

4.5. Design Traffic

The design traffic scenario (background traffic plus development generated traffic) in 2028 and 2038 is displayed in **Figure C8** and **Figure C9**, attached in **Appendix C**.

4.6. Intersection Analysis

This section details the intersection analysis undertaken as part of this assessment for the surrounding road network. SIDRA Intersection Analysis software was also used to analyse the performance of the following intersections:

- Blinzinger Road / Wellington Street;
- Blinzinger Road / St Vincents Road; and
- St Vincents Road / Easton Street / Melville Place.

4.6.1. SIDRA Model Assumptions

SIDRA Intersection software has been used to analyse the performance of the intersections within the impact assessment area. The following parameters have been applied to the SIDRA model:

- A Saturation Flow of 1,950 through car units per hour;
- A Peak Flow Period of 30 minutes, with a conservative Peak Flow Factor of 95%;
- Existing Intersection geometry based on measurements of aerial imagery and proposed upgrade plans; and
- SIDRA default gap acceptance parameters.

We note that the intersections have been analysed using conservative values for both peak flow factors and peak flow periods. These values effectively inflate the design traffic volumes, producing a more conservative assessment of each intersection.

4.6.2. Blinzinger Road / Wellington Street

The existing form of the Blinzinger Road / Wellington Street intersection has been modelled in SIDRA as shown in **Figure 4-1** below.

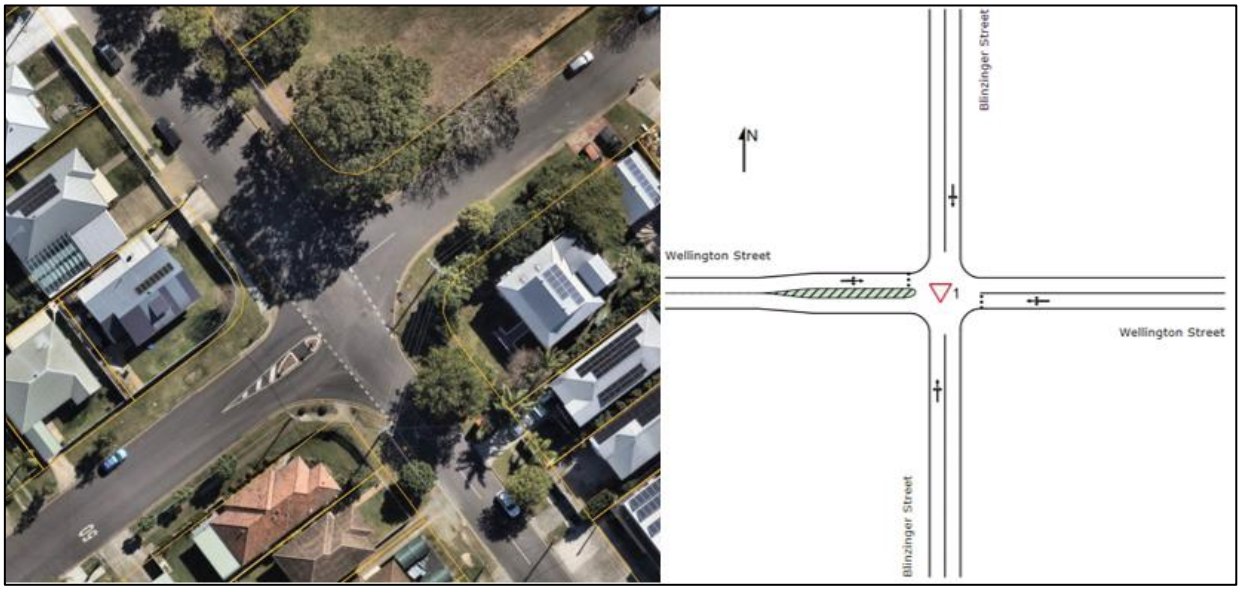


Figure 4-1 Blinzinger Road / Wellington Street – SIDRA Layout

Table 4-5 presents the results of the Blinzinger Road / Wellington Street intersection SIDRA analysis with detailed movement SIDRA Outputs attached in **Appendix D**.

Table 4-5 Blinzinger Road / Wellington Street Intersection SIDRA Analysis Results

Scenario	Approach	AM Peak				PM Peak			
		DoS	Avg Delay (s)	LoS	95% Back of Queue (m)	DoS	Avg Delay (s)	LoS	95% Back of Queue (m)
2028 Background Traffic	Blinzinger Road (S)	0.029	2.2	NA	0.2	0.036	1.9	NA	0.1
	Wellington Street (E)	0.01	5.2	LOS A	0.2	0.009	5.5	LOS A	0.2
	Blinzinger Road (N)	0.082	3.6	NA	2.8	0.063	4.5	NA	2.1
	Wellington Street (W)	0.107	6.1	LOS A	2.8	0.089	6	LOS A	2.4
2028 Design Traffic	Jubilee Terrace (S)	0.039	2.4	NA	0.7	0.071	2.9	NA	1.9
	Kennedy Terrace (E)	0.031	5.7	LOS A	0.8	0.021	5.7	LOS A	0.5
	Jubilee Terrace (N)	0.134	3.3	NA	4.6	0.082	4.2	NA	2.7
	Wellington Street (W)	0.127	6.8	LOS A	3.4	0.114	6.3	LOS A	3.1
2038 Background Traffic	Blinzinger Road (S)	0.032	2.2	NA	0.2	0.041	1.9	NA	0.1
	Wellington Street (E)	0.011	5.2	LOS A	0.3	0.009	5.6	LOS A	0.2
	Blinzinger Road (N)	0.09	3.6	NA	3.1	0.071	4.5	NA	2.4
	Wellington Street (W)	0.121	6.2	LOS A	3.2	0.1	6.1	LOS A	2.7
2038 Design Traffic	Jubilee Terrace (S)	0.041	2.4	NA	0.7	0.075	2.9	NA	2
	Kennedy Terrace (E)	0.033	5.7	LOS A	0.9	0.021	5.7	LOS A	0.5
	Jubilee Terrace (N)	0.142	3.4	NA	4.9	0.091	4.2	NA	3.1
	Wellington Street (W)	0.143	6.9	LOS A	3.8	0.127	6.4	LOS A	3.5

As illustrated in **Table 4-5**, the Blinzinger Road / Wellington Street intersection will theoretically operate below the practical capacity (DoS ≤0.80) for a priority-controlled intersection in both peak periods, in both the background and design traffic scenarios. In the design traffic scenario, the development generated traffic will result in minor increases in degree of saturation, average delay and queue lengths on all approaches.

4.6.3. Blinzinger Road / St Vincents Road

The existing form of the Blinzinger Road / St Vincents Road intersection has been modelled in SIDRA as shown in **Figure 4-2** below**.**



Figure 4-2 Blinzinger Road / St Vincents Road Intersection – SIDRA Layout

Table 4-6 presents the results of the Blinzinger Road / St Vincents Road intersection SIDRA analysis with detailed movement SIDRA Outputs attached in **Appendix E**.

Table 4-6 Jubilee Terrace / Effie Street Intersection SIDRA Analysis Results

Scenario	Approach	AM Peak				PM Peak			
		DoS	Avg Delay (s)	LoS	95% Back of Queue (m)	DoS	Avg Delay (s)	LoS	95% Back of Queue (m)
2028 Background Traffic	Blinzinger Road (S)	0.033	12.7	LOS B	0.8	0.026	13.9	LOS B	0.6
	St Vincents Rd (E)	0.286	0.4	NA	1.3	0.282	0.5	NA	1.7
	Blinzinger Road (N)	0.288	17.7	LOS C	8.1	0.172	15	LOS C	4.1
	St Vincents Rd (W)	0.185	0.6	NA	0.5	0.211	0.6	NA	0.6
2028 Design Traffic	Blinzinger Road (S)	0.033	12.7	LOS B	0.8	0.026	14	LOS B	0.6
	St Vincents Rd (E)	0.288	0.4	NA	1.5	0.287	0.6	NA	2.2
	Blinzinger Road (N)	0.496	21.4	LOS C	17.6	0.269	17.5	LOS C	7.1
	St Vincents Rd (W)	0.193	0.8	NA	0.5	0.241	1.2	NA	0.6
2038 Background Traffic	Blinzinger Road (S)	0.04	13.7	LOS B	0.9	0.03	15.4	LOS C	0.7
	St Vincents Rd (E)	0.32	0.4	NA	1.6	0.317	0.5	NA	2.1
	Blinzinger Road (N)	0.38	21.3	LOS C	11.3	0.228	17.4	LOS C	5.6
	St Vincents Rd (W)	0.207	0.6	NA	0.5	0.236	0.6	NA	0.6

Scenario	Approach	AM Peak				PM Peak			
		DoS	Avg Delay (s)	LoS	95% Back of Queue (m)	DoS	Avg Delay (s)	LoS	95% Back of Queue (m)
2038 Design Traffic	Blinzinger Road (S)	0.04	13.7	LOS B	0.9	0.031	15.6	LOS C	0.7
	St Vincents Rd (E)	0.322	0.4	NA	1.7	0.323	0.7	NA	2.6
	Blinzinger Road (N)	0.632	27.4	LOS D	24.4	0.349	20.9	LOS C	9.6
	St Vincents Rd (W)	0.215	0.8	NA	0.5	0.266	1.1	NA	0.7

As illustrated in **Table 4-6**, the Blinzinger Road / St Vincents Road intersection will theoretically operate below the practical capacity (DoS ≤0.80) for a priority-controlled intersection in both peak periods, in both the background and design traffic scenarios. In the design traffic scenario, the development generated traffic will result in acceptable increases in degree of saturation, average delay and queue lengths on all approaches. The maximum average delay for a turn movement was 32.9s which is considered acceptable from a safety perspective.

4.6.4. St Vincents Road / Easton Street / Melville Place

The existing form of the St Vincents Road / Easton Street / Melville Place intersection has been modelled in SIDRA as shown in **Figure 4-3** below.



Figure 4-3 St St Vincents Road / Easton Street / Melville Place Intersection – SIDRA Layout

Table 4-7 presents the results of the St Vincents Road / Easton Street / Melville Place intersection SIDRA analysis with detailed movement SIDRA Outputs attached in **Appendix E**.

Table 4-7 St Vincents Road / Easton Street / Melville Place Intersection SIDRA Analysis Results

Scenario	Approach	AM Peak				PM Peak			
		DoS	Avg Delay (s)	LoS	95% Back of Queue (m)	DoS	Avg Delay (s)	LoS	95% Back of Queue (m)
2028 Background Traffic	Melville Place (S)	0.034	8.9	LOS A	0.8	0.019	9.8	LOS A	0.4
	St Vincents Rd (E)	0.264	0.2	NA	0.7	0.277	0.3	NA	1
	Easton Street (N)	0.047	10.7	LOS B	1.1	0.036	10.8	LOS B	0.9
	St Vincents Rd (W)	0.195	0.5	NA	1	0.21	0.6	NA	1.3
2028 Design Traffic	Melville Place (S)	0.035	9	LOS A	0.8	0.019	10	LOS A	0.4
	St Vincents Rd (E)	0.267	0.3	NA	1	0.291	0.6	NA	2.1
	Easton Street (N)	0.057	9.6	LOS A	1.3	0.043	10	LOS B	1.1
	St Vincents Rd (W)	0.2	0.5	NA	1	0.211	0.6	NA	1.4
2038 Background Traffic	Melville Place (S)	0.041	9.6	LOS A	1	0.022	10.9	LOS B	0.5
	St Vincents Rd (E)	0.296	0.2	NA	0.9	0.31	0.3	NA	1.2
	Easton Street (N)	0.061	12.3	LOS B	1.4	0.046	12.4	LOS B	1.1
	St Vincents Rd (W)	0.22	0.5	NA	1.2	0.236	0.7	NA	1.7
2038 Design Traffic	Melville Place (S)	0.042	9.7	LOS A	1	0.022	11.1	LOS B	0.5
	St Vincents Rd (E)	0.3	0.3	NA	1.1	0.325	0.6	NA	2.3
	Easton Street (N)	0.073	10.8	LOS B	1.7	0.053	11.3	LOS B	1.3
	St Vincents Rd (W)	0.224	0.5	NA	1.2	0.237	0.7	NA	1.7

As illustrated in **Table 4-7**, the St Vincents Road / Easton Street / Melville Place intersection will theoretically operate below the practical capacity (DoS ≤0.80) for a priority-controlled intersection in both peak periods, in both the background and design traffic scenarios. In the design traffic scenario, the development generated traffic will result in very minor increases in degree of saturation, average delay and queue lengths on all approaches.

4.6.5. Turn Lane Warrant Assessment

A turn lane warrant assessment has also been undertaken at the proposed Blinzinger Road and Wellington Street site access locations for the 2038 design scenarios. We note the posted speed limit on Blinzinger Road and Wellington Street is 50km/h, therefore the turn lane warrant assessment has been

based on DTMR's *Road Planning Design Manual (RPDM)* 'Design Speed < or = 70 km/hr' turn lane warrant assessment graph. The results are shown in **Figure 4-4** and **Figure 4-5** below.

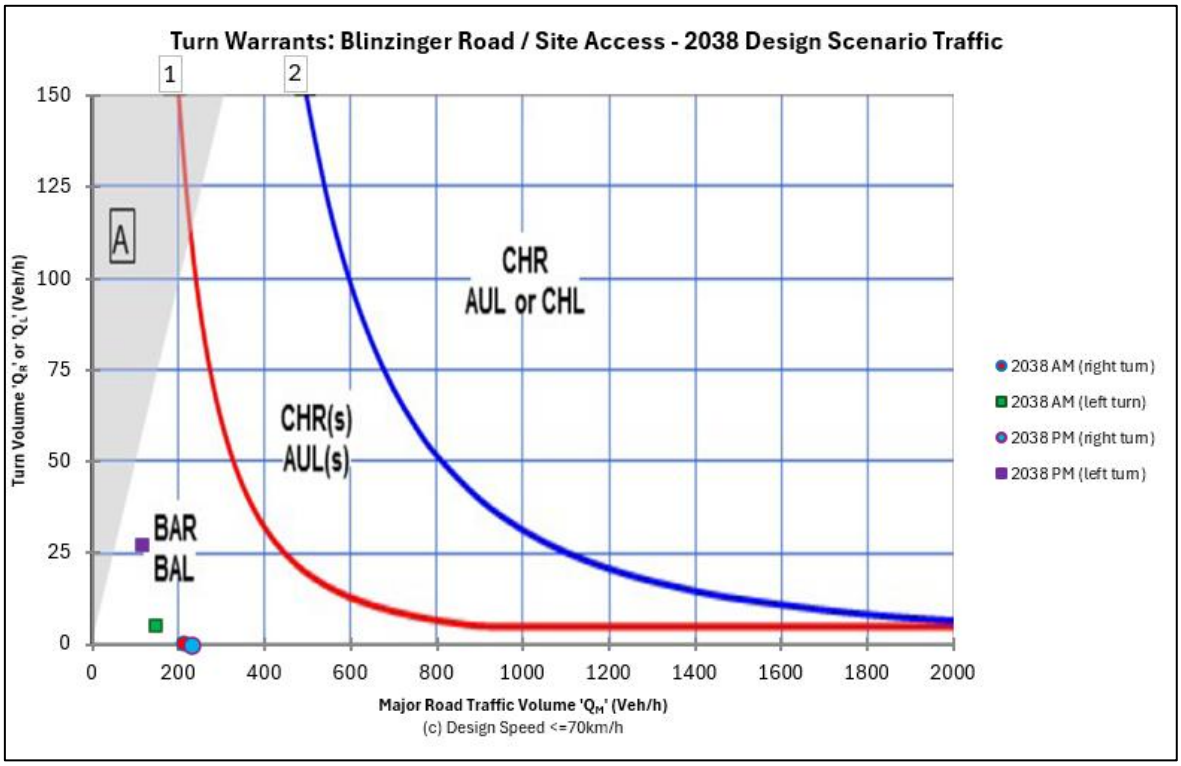


Figure 4-4 Turn Lane Warrant Assessment – Blinzinger Road / Site Access – 2038 AM & PM Peak

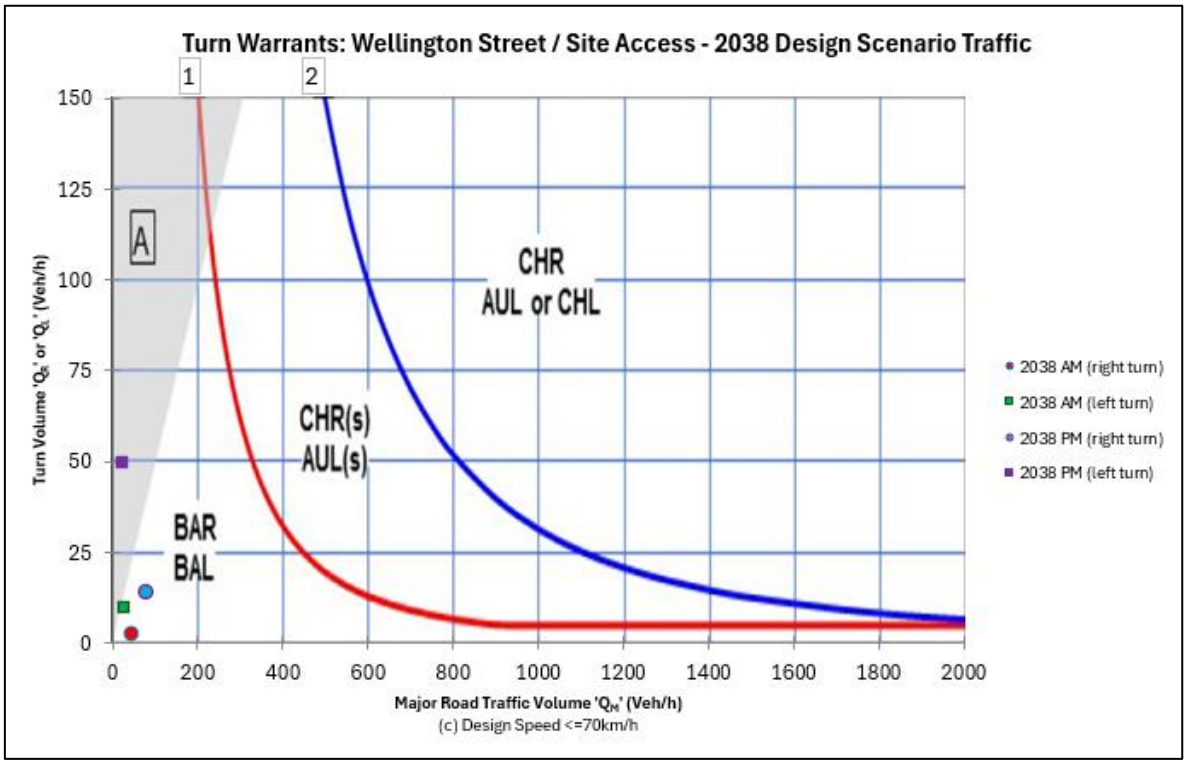


Figure 4-5 Turn Lane Warrant Assessment – Wellington Street / Site Access – 2038 AM & PM Peak

As shown in **Figure 4-4** and **Figure 4-5**, the assessment indicated that both access intersections do not require any additional turn lane treatments in either AM or PM peak periods.

5. Summary

Lambert & Rehbein (SEQ) Pty Ltd has been commissioned by AR Developments Pty Ltd to prepare a Traffic Impact Assessment (TIA) report in support of the proposed residential townhouse development located at 56 Blinzinger Road, Banyo 4014. The site is formally described as Lot 1 & 2 on RP124669 with a total area of 4.86ha.

The proposed development is for a total of 216 units consisting of 126 three (3) bedroom units and 90 four (4) bedroom units. The proposed development will gain access to the external road network via two 6.5m wide Type B2 crossovers onto Blinzinger Road and Wellington Street which have been designed in accordance with BCC's Standard Drawing BSD-2021.

We note that the Blinzinger Road site access does not achieve Council's required 10m separation from the Kelly Road intersection for minor roads and therefore it is recommended that this access be restricted to left-in, left-out movements only, which will limit its interaction with the Kelly Road intersection.

The Wellington Street access will provide all-movement access to and from the site and will operate as a four-way intersection with Hartley Street and has been located at the request of EDQ. We note as per BCC's Infrastructure Design Planning Scheme Policy a four-way priority-controlled intersection is acceptable on minor roads where traffic volumes are less than 3,000 vehicles per day.

Pedestrian access to the proposed site will be provided via pathway connections to both Blinzinger Road and Wellington Street. The proposed development will also provide external pedestrian pathways along the development sites frontage on both Blinzinger Road and Wellington Street which are intended to ultimately provide a pedestrian connection from the development site to the nearby Banyo Train Station.

A 1.2m wide pedestrian route is proposed internally within the site, marked within the 6.5m wide private internal roadway. The internal footpaths are generally provided to avoid conflict with refuse collection for lots 192 to 216 and to provide the best pedestrian safety and connectivity. The internal roadway will function as a low speed shared zone and the pedestrian route will be identified with a different colour/finish to enhance the shared zone within the site, which we note is common in similar townhouse developments. Shared zone signage (R4-4 and R4-5) should also be clearly displayed at the entrance to the site, generally in accordance with the requirements of Section 3.1.10 of AS1742.4:2020.

Units 1 – 20 will gain direct access onto Wellington Street. We note Wellington Street is classified as a 'Neighbourhood Road' with direct lot access permitted and the proposed driveways will be designed in accordance with BCC's Standard Drawing BSD-2022. The proposed internal network will be designed as 6.5m wide private road and will provide direct lot access to the remaining units.

The proposed internal 6.5m wide private road is designed to provide sufficient space for BCC's side loading Refuse Collection Vehicle (RCV) and a Heavy Rigid Vehicle (HRV). All refuse collection will take place at individual unit frontages except units 1 to 20. Servicing for these units will take place along the northern internal 6.5m wide road, with wheeling distance for bins kept to less than 50m.

We note the HRV requires the full width of the driveway to enter/exit the development site and the full aisle width to undertake turning manoeuvres within the site however, as this is only an occasional manoeuvre, this is considered acceptable as per Section 3.2 of the BCC's Transport, Access, Parking and Servicing (TAPS) Planning Scheme Policy.

The minimum car parking requirement is 532 spaces (including 54 visitor bays). The proposed development will provide 546 spaces (including 50 visitor bays), thereby meeting Council's requirements from a total parking perspective. While the development proposes a shortfall of four (4) visitor parking spaces, the additional residential spaces allocated across the site is expected to cater for the visitor demand. The proposed car parking areas are designed generally in accordance with the requirements of AS2890.1 and BCC's TAPS PSP.

BCC's TAPS PSP also requires that at least one (1) PWD visitor space to be provided for multiple dwellings with more than 10 units. The proposed will provide two (2) PWD visitor spaces adjacent to the Recreational Area, thereby meeting Council's requirement.

The minimum bicycle parking requirement is 270 spaces including 54 spaces for visitors. It is understood that the proposed development will provide 216 spaces within the garage of each dwelling unit and 18 visitor spaces across the site.

The provision of visitor bicycle parking at a rate of 1 space per 4 dwellings can lead to parking facilities being heavily underutilised and an inefficient use of space. The development instead proposes to provide visitor bicycle parking at a rate of 1 space per 12 dwellings (or 'flats'), generally in accordance with the rates outlined in Austroads *Guide to Traffic Management Part 11: Parking Management Techniques*. The provision of 18 visitor bicycle parking spaces will cater for the visitor bicycle parking demand in our view.

The Blinzinger Road / Wellington Street intersection, Blinzinger Road / St Vincents Road intersection and St Vincents Road / Easton Street / Melville Place intersection will theoretically operate below the practical capacity (DoS ≤0.80) for a priority-controlled intersection in both peak periods, in both the background and design traffic scenarios. In the design traffic scenario, the development generated traffic will result in acceptable increases in degree of saturation, average delay and queue lengths on all approaches.

A turn lane warrant assessment has also been undertaken at the proposed Blinzinger Road and Wellington Street site access locations for the 2038 design scenarios. The assessment indicated that both access intersections do not require any additional turn lane treatments in either AM or PM peak periods.

In our view there are no traffic and transport engineering matters identified that should preclude approval of the proposed development, at this location.

Appendix A – Site Layout

DRAWING SET

Drawing No.	Description	Rev.	Date
CD 1.00	COVER PAGE	D	30.09.26
CD 1.01	AERIAL IMAGE OF DEVELOPMENT SITE	D	30.09.26
CD 1.02	PROPOSED MASTER PLAN	D	30.09.26
CD 1.03	STAGING PLAN	D	30.09.26
CD 1.04	BLOCK TYPES PLAN	D	30.09.26
CD 1.05	CARPARKING ALLOCATION PLAN	D	30.09.26
CD 1.06	PRIVATE OPEN SPACE INDICATION PLAN	D	30.09.26
CD 1.07	POS AREA CALCULATIONS	D	30.09.26

PROPOSED RESIDENTIAL TOWNHOUSES

WELLINGTON ST & BLINZINGER RD, BANYO, QLD

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

AR DEVELOPMENTS PTY.LTD.
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ph: (07) 3908 1111
Fax: (07) 3908 1112
Email: admin@ardevelopments.com.au

WELLINGTON ST & BLINZINGER RD BANYO, QLD
Project Name

COVER PAGE
Drawing Title

Cad Ref:

D
Revision

30.09.26
Issue / Revision date

Checked:

Drawing Scales @ A3

CD 1.00
Sheets in Set



AERIAL IMAGE OF DEVELOPMENT SITE

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
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WELLINGTON ST & BLINZINGER RD BANYO, QLD
Project Name

AERIAL IMAGE OF DEVELOPMENT SITE
Drawing Title

Cad Ref: ----------

D
Revision

30.09.26
Issue / Revision date

Checked:

1 : 2000
Drawing Scales @ A3

CD 1.01
Sheets in Set



SITE COVERAGE:	
SITE AREA:	48,544.6SQM
TOTAL SITE COVER:	16,842m² (34.7%)

STAGING	
STAGE 1:	20 UNITS
STAGE 2:	38 UNITS
STAGE 3:	67 UNITS
STAGE 4:	54 UNITS
STAGE 5:	37 UNITS
TOTAL:	216 UNITS

DEVELOPMENT DETAILS
WELLINGTON STREET & BLINZINGER ROAD, BANYO
LOCAL AUTHORITY: BRISBANE CITY COUNCIL
TOTAL SITE AREA: 48,544.6 SQM (APPROX.)
TOTAL UNITS: 216
1 DWELLING / 224.7 m²

CARPARKING

TOTAL CAR PARKING:	_	546 CAR PARKS
GARAGE PARKING:		216 GARAGE
DRIVEWAY PARKING (TCP):		203 TANDEM PARKS
UNIT ALLOCATED PARKING (U):		77 UNIT ALLOCATED
VISITOR PARKING (V) (MIN. 5.4m X 2.4m):		50 VISITOR

BLOCK SUMMARY

UNIT TYPE	NUMBER OF BLOCK	3 BEDROOM UNITS PER BLOCK	TOTAL 3 BEDROOM UNITS	4 BEDROOM UNITS PER BLOCK	TOTAL 4 BEDROOM UNITS
4 PACK	27	2	54	2	56
5 PACK	6	3	18	2	10
6 PACK	13	4	52	2	26
TOTAL	46	TOTAL	124	TOTAL	92

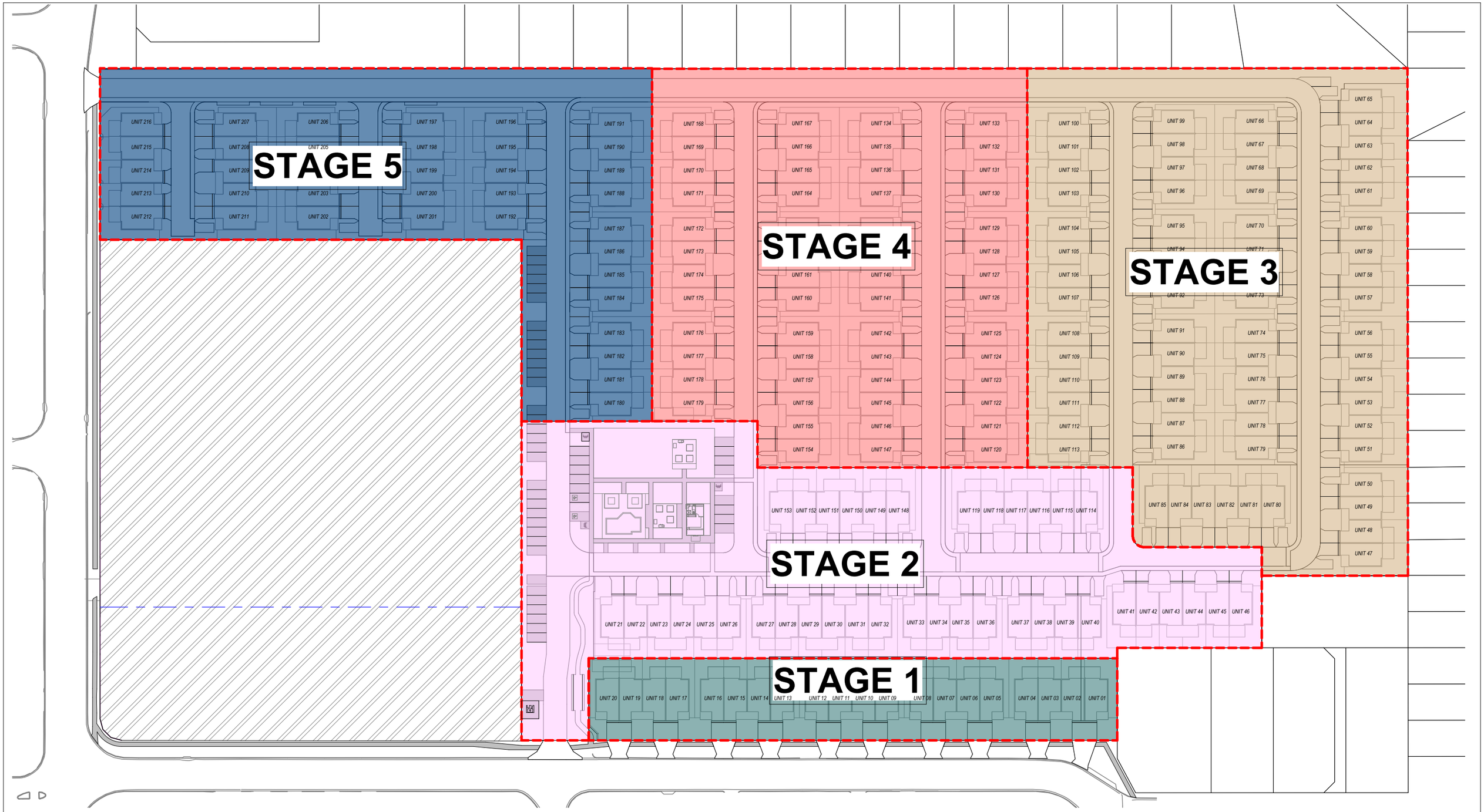
PROPOSED MASTER PLAN

Scale 1 : 1000

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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WELLINGTON ST & BLINZINGER RD BANYO, QLD	Project Name
PROPOSED MASTER PLAN	Drawing Title
Cad Ref:	
D	Revision
30.09.26	Issue / Revision date
Checked:	
1 : 1000	Drawing Scales @ A3
CD 1.02	Sheets in Set



STAGING
STAGE 1: 20 UNITS
STAGE 2: 38 UNITS
STAGE 3: 67 UNITS
STAGE 4: 54 UNITS
STAGE 5: 37 UNITS
TOTAL: 216 UNITS

STAGING PLAN

Scale 1 : 1000

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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WELLINGTON ST & BLINZINGER RD BANYO, QLD — Project Name

STAGING PLAN — Drawing Title

Cad Ref:

D — Revision

30.09.26 — Issue / Revision date

Checked:

1 : 1000 — Drawing Scales @ A3

CD 1.03 — Sheets in Set



BLOCK TYPE:					
		NO. OF BLOCKS			NO. OF BLOCKS
A1	SIX PACK GABLE	3	C2	FIVE PACK SKILLION	3
A2	SIX PACK GABLE	3	D1	FOUR PACK GABLE	5
B1	SIX PACK SKILLION	3	D2	FOUR PACK GABLE	8
B2	SIX PACK SKILLION	4	E1	FOUR PACK SKILLION	8
C1	FIVE PACK SKILLION	3	E2	FOUR PACK SKILLION	6
				TOTAL:	**46**

BLOCK TYPES PLAN

Scale 1 : 1000

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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BLOCK TYPES PLAN
Drawing Title

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Revision

30.09.26
Issue / Revision date

Checked:

Cad Ref:

1 : 1000
Drawing Scales @ A3

CD 1.04
Sheets in Set



BIKE RACKS:		
		NO. OF RACKS
	BIKE RACKS (6 BIKE PARKS PER RACK)	3
	TOTAL BIKE PARKS:	18

CAR PARKING CALCULATIONS:		
CAR PARK TYPE		NUMBERS
	CAR PARKING - GARAGE	216
	CAR PARKING - TCP	203
	CAR PARKING - ALLOCATED	77
	CAR PARKING - VISITOR	50
	TOTAL:	546

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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WELLINGTON ST & BLINZINGER RD BANYO, QLD
Project Name

CARPARKING ALLOCATION PLAN
Drawing Title

D
Revision

30.09.26
Issue / Revision date

Cad Ref:

Checked:

1 : 1000
Drawing Scales @ A3

CD 1.05
Sheets in Set

CARPARKING ALLOCATION PLAN

Scale 1 : 1000



LEGEND:

TOTAL SITE AREA:		48,554.6m²
	PRIVATE OPEN SPACE (GROUND)	8825.35m²
	PRIVATE OPEN SPACE (FIRST)	260.36m²
	TOTAL PRIVATE OPEN SPACE	9085.71m²
	REC AREA:	1655.42m²

PRIVATE OPEN SPACE INDICATION PLAN

Scale 1 : 1000

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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WELLINGTON ST & BLINZINGER RD BANYO, QLD
Project Name

PRIVATE OPEN SPACE INDICATION PLAN
Drawing Title

Cad Ref:

D
Revision

30.09.26
Issue / Revision date

Checked:

As indicated
Drawing Scales @ A3

CD 1.06
Sheets in Set

PRIVATE AREA GROUND	
ID	AREA
UNIT 01 GROUND	50.19
UNIT 02 GROUND	35.31
UNIT 03 GROUND	35.32
UNIT 04 GROUND	44.50
UNIT 05 GROUND	44.50
UNIT 06 GROUND	35.31
UNIT 07 GROUND	35.31
UNIT 08 GROUND	44.50
UNIT 09 GROUND	44.50
UNIT 10 GROUND	35.31
UNIT 11 GROUND	35.31
UNIT 12 GROUND	44.50
UNIT 13 GROUND	44.50
UNIT 14 GROUND	35.31
UNIT 15 GROUND	35.31
UNIT 16 GROUND	44.50
UNIT 17 GROUND	44.50
UNIT 18 GROUND	35.31
UNIT 19 GROUND	35.31
UNIT 20 GROUND	44.50
UNIT 21 GROUND	44.50
UNIT 22 GROUND	35.32
UNIT 23 GROUND	35.31
UNIT 24 GROUND	35.31
UNIT 25 GROUND	35.31
UNIT 26 GROUND	44.50
UNIT 27 GROUND	44.50
UNIT 28 GROUND	35.32
UNIT 29 GROUND	35.31
UNIT 30 GROUND	35.31
UNIT 31 GROUND	35.32
UNIT 32 GROUND	44.50
UNIT 33 GROUND	44.50
UNIT 34 GROUND	35.32
UNIT 35 GROUND	35.31
UNIT 36 GROUND	44.50
UNIT 37 GROUND	44.50
UNIT 38 GROUND	35.31
UNIT 39 GROUND	35.30
UNIT 40 GROUND	52.76
UNIT 41 GROUND	49.90
UNIT 42 GROUND	39.53
UNIT 43 GROUND	39.53
UNIT 44 GROUND	39.50
UNIT 45 GROUND	39.56
UNIT 46 GROUND	56.05
UNIT 47 GROUND	63.96
UNIT 48 GROUND	45.08
UNIT 49 GROUND	45.04
UNIT 50 GROUND	56.59
UNIT 51 GROUND	56.53
UNIT 52 GROUND	44.90
UNIT 53 GROUND	44.86
UNIT 54 GROUND	44.82
UNIT 55 GROUND	44.78

PRIVATE AREA GROUND	
ID	AREA
UNIT 56 GROUND	56.27
UNIT 57 GROUND	56.22
UNIT 58 GROUND	44.65
UNIT 59 GROUND	44.61
UNIT 60 GROUND	56.05
UNIT 61 GROUND	55.99
UNIT 62 GROUND	44.47
UNIT 63 GROUND	44.43
UNIT 64 GROUND	43.98
UNIT 65 GROUND	55.78
UNIT 66 GROUND	44.50
UNIT 67 GROUND	35.32
UNIT 68 GROUND	35.32
UNIT 69 GROUND	44.46
UNIT 70 GROUND	44.46
UNIT 71 GROUND	35.32
UNIT 72 GROUND	35.32
UNIT 73 GROUND	44.58
UNIT 74 GROUND	44.54
UNIT 75 GROUND	35.32
UNIT 76 GROUND	35.32
UNIT 77 GROUND	35.30
UNIT 78 GROUND	35.29
UNIT 79 GROUND	44.47
UNIT 80 GROUND	44.52
UNIT 81 GROUND	35.33
UNIT 82 GROUND	35.33
UNIT 83 GROUND	35.32
UNIT 84 GROUND	35.33
UNIT 85 GROUND	44.52
UNIT 86 GROUND	44.49
UNIT 87 GROUND	35.31
UNIT 88 GROUND	35.32
UNIT 89 GROUND	35.32
UNIT 90 GROUND	35.32
UNIT 91 GROUND	44.53
UNIT 92 GROUND	44.62
UNIT 93 GROUND	35.32
UNIT 94 GROUND	35.32
UNIT 95 GROUND	44.46
UNIT 96 GROUND	44.46
UNIT 97 GROUND	35.32
UNIT 98 GROUND	35.32
UNIT 99 GROUND	44.50
UNIT 100 GROUND	44.50
UNIT 101 GROUND	35.32
UNIT 102 GROUND	35.32
UNIT 103 GROUND	44.46
UNIT 104 GROUND	44.46
UNIT 105 GROUND	35.32
UNIT 106 GROUND	35.32
UNIT 107 GROUND	44.58
UNIT 108 GROUND	44.54
UNIT 109 GROUND	35.32
UNIT 110 GROUND	35.32

PRIVATE AREA GROUND	
ID	AREA
UNIT 111 GROUND	35.30
UNIT 112 GROUND	35.29
UNIT 113 GROUND	44.49
UNIT 114 GROUND	50.78
UNIT 115 GROUND	40.34
UNIT 116 GROUND	40.34
UNIT 117 GROUND	40.34
UNIT 118 GROUND	40.34
UNIT 119 GROUND	50.78
UNIT 120 GROUND	44.51
UNIT 121 GROUND	35.31
UNIT 122 GROUND	35.32
UNIT 123 GROUND	35.32
UNIT 124 GROUND	35.32
UNIT 125 GROUND	44.53
UNIT 126 GROUND	44.62
UNIT 127 GROUND	35.32
UNIT 128 GROUND	35.32
UNIT 129 GROUND	44.46
UNIT 130 GROUND	44.46
UNIT 131 GROUND	35.32
UNIT 132 GROUND	35.32
UNIT 133 GROUND	44.50
UNIT 134 GROUND	44.50
UNIT 135 GROUND	35.32
UNIT 136 GROUND	35.32
UNIT 137 GROUND	44.46
UNIT 138 GROUND	44.46
UNIT 139 GROUND	35.32
UNIT 140 GROUND	35.32
UNIT 141 GROUND	44.58
UNIT 142 GROUND	44.54
UNIT 143 GROUND	35.32
UNIT 144 GROUND	35.32
UNIT 145 GROUND	35.30
UNIT 146 GROUND	35.29
UNIT 147 GROUND	44.49
UNIT 148 GROUND	50.78
UNIT 149 GROUND	40.34
UNIT 150 GROUND	40.34
UNIT 151 GROUND	40.34
UNIT 152 GROUND	40.34
UNIT 153 GROUND	50.78
UNIT 154 GROUND	44.51
UNIT 155 GROUND	35.31
UNIT 156 GROUND	35.32
UNIT 157 GROUND	35.32
UNIT 158 GROUND	35.32
UNIT 159 GROUND	44.53
UNIT 160 GROUND	44.62
UNIT 161 GROUND	35.32
UNIT 162 GROUND	35.32
UNIT 163 GROUND	44.46
UNIT 164 GROUND	44.46
UNIT 165 GROUND	35.32

PRIVATE AREA GROUND	
ID	AREA
UNIT 166 GROUND	35.32
UNIT 167 GROUND	44.50
UNIT 168 GROUND	44.50
UNIT 169 GROUND	35.32
UNIT 170 GROUND	35.32
UNIT 171 GROUND	44.46
UNIT 172 GROUND	44.46
UNIT 173 GROUND	35.32
UNIT 174 GROUND	35.32
UNIT 175 GROUND	44.58
UNIT 176 GROUND	44.54
UNIT 177 GROUND	35.32
UNIT 178 GROUND	35.32
UNIT 179 GROUND	44.49
UNIT 180 GROUND	44.51
UNIT 181 GROUND	35.32
UNIT 182 GROUND	35.32
UNIT 183 GROUND	44.53
UNIT 184 GROUND	44.62
UNIT 185 GROUND	35.32
UNIT 186 GROUND	35.32
UNIT 187 GROUND	44.46
UNIT 188 GROUND	44.46
UNIT 189 GROUND	35.32
UNIT 190 GROUND	35.32
UNIT 191 GROUND	44.50
UNIT 192 GROUND	51.59
UNIT 193 GROUND	35.27
UNIT 194 GROUND	35.31
UNIT 195 GROUND	35.32
UNIT 196 GROUND	44.50
UNIT 197 GROUND	44.50
UNIT 198 GROUND	35.32
UNIT 199 GROUND	35.31
UNIT 200 GROUND	35.32
UNIT 201 GROUND	51.59
UNIT 202 GROUND	51.59
UNIT 203 GROUND	35.27
UNIT 204 GROUND	35.31
UNIT 205 GROUND	35.32
UNIT 206 GROUND	44.50
UNIT 207 GROUND	44.50
UNIT 208 GROUND	35.32
UNIT 209 GROUND	35.31
UNIT 210 GROUND	35.32
UNIT 211 GROUND	51.59
UNIT 212 GROUND	52.53
UNIT 213 GROUND	35.92
UNIT 214 GROUND	35.96
UNIT 215 GROUND	35.96
UNIT 216 GROUND	40.42
	8,825.35 m²

PRIVATE FIRST FLOOR BALCONY AREA:

92 UNITS X 2.83m² = 260.36m²

Rev.	Date	Description
D	30.09.26	REVISE ISSUE
C	11.09.26	PMT LOCATION UPDATE
B	04.09.26	REVISE ISSUE
A	28.08.26	PRELIMINARY ISSUE

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ph: (07) 3908 1111
Fax: (07) 3908 1112
Email: admin@ardevelopments.com.au

WELLINGTON ST & BLINZINGER RD BANYO, QLD
Project Name

POS AREA CALCULATIONS
Drawing Title

Cad Ref:

D
Revision

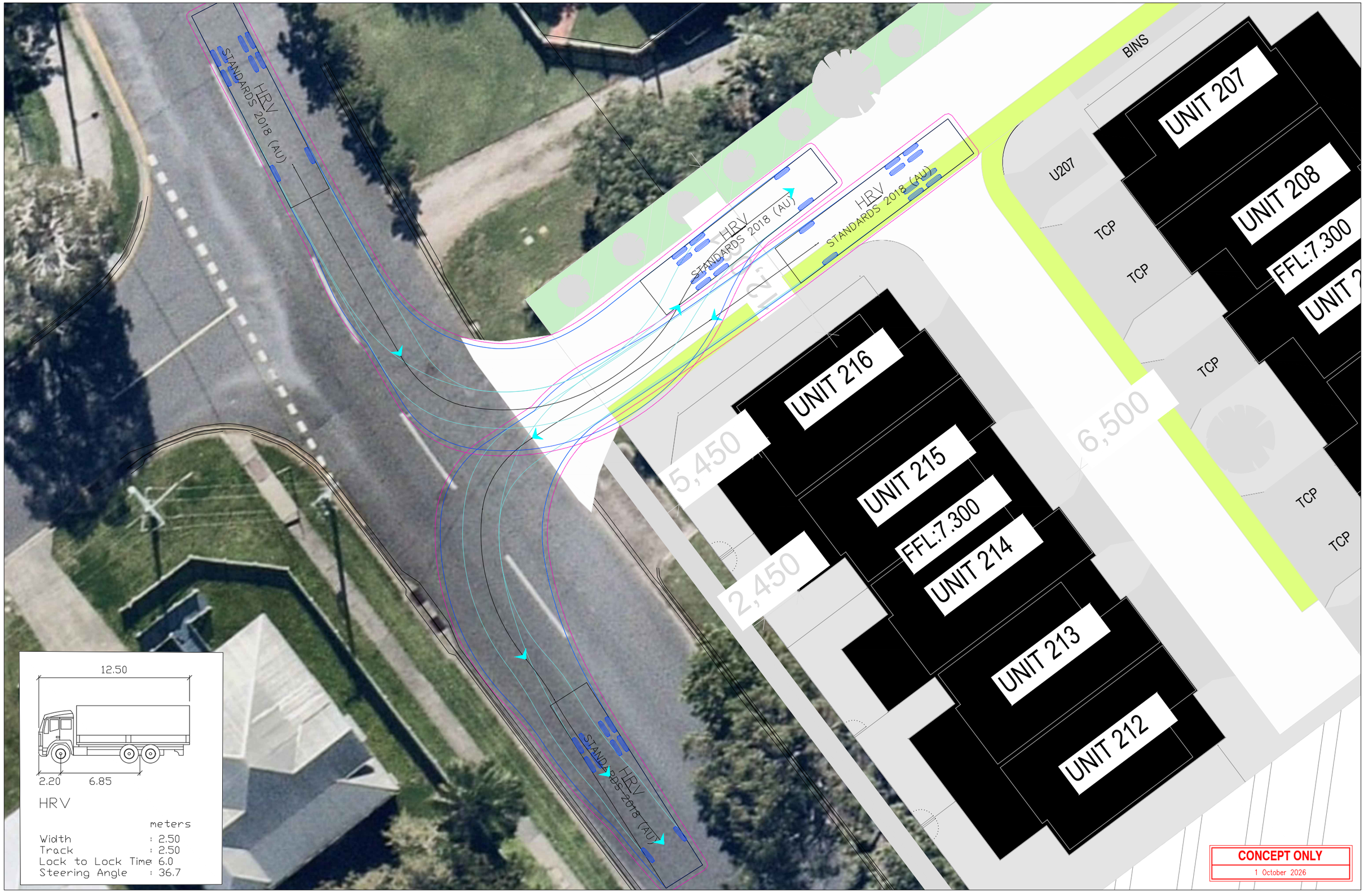
30.09.26
Issue / Revision date

Checked:

1 : 50
Drawing Scales @ A3

CD 1.07
Sheets in Set

Appendix B – Swept Path Assessment



0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
BLINZINGER ROAD ACCESS
SWEPT PATH ASSESSMENT

L+R ENGINEERS MANAGERS SCIENTISTS
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Figure No: B26299-SK-001
Scale: AS SHOWN
File Ref: SEE BELOW
Sheet Size: A1

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HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7



CONCEPT ONLY
1 October 2026

0 2 4 6 8m
SCALE 1:200 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
WELLINGTON STREET ACCESS
SWEPT PATH ASSESSMENT

L+R ENGINEERS MANAGERS SCIENTISTS
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Figure No: B26299-SK-002
Scale: AS SHOWN
File Ref: SEE BELOW
Sheet Size: A1

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HRV IN

HRV OUT

HRV STANDARDS 2018 (AU)

U191

U196

TCP

UNIT 196

UNIT 195

FFL:6.400

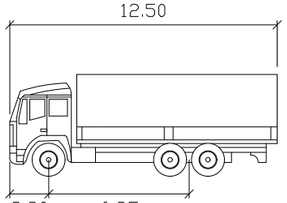
UNIT 194

UNIT 193

UNIT 192

UNIT 1

12.50



2.20 6.85

HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

CONCEPT ONLY

1 October 2026

0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
INTERNAL MANOEUVERING
SWEPT PATH ASSESSMENT

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Rev. A | Date 01/10/26

Figure No: B26299-SK-003

Scale: AS SHOWN | File Ref: SEE BELOW | Sheet Size A1

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HRV IN

HRV OUT

HRV STANDARDS 2018 (AU)

UNIT 168

UNIT 169

FFL:6.400

UNIT 170

UNIT 171

U167

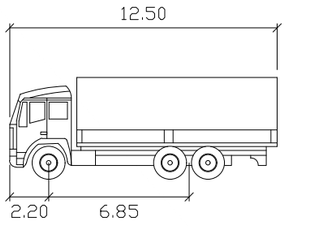
U168

U171

U172

U190

TCP



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

CONCEPT ONLY

1 October 2026

0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
INTERNAL MANOEUVERING
SWEPT PATH ASSESSMENT

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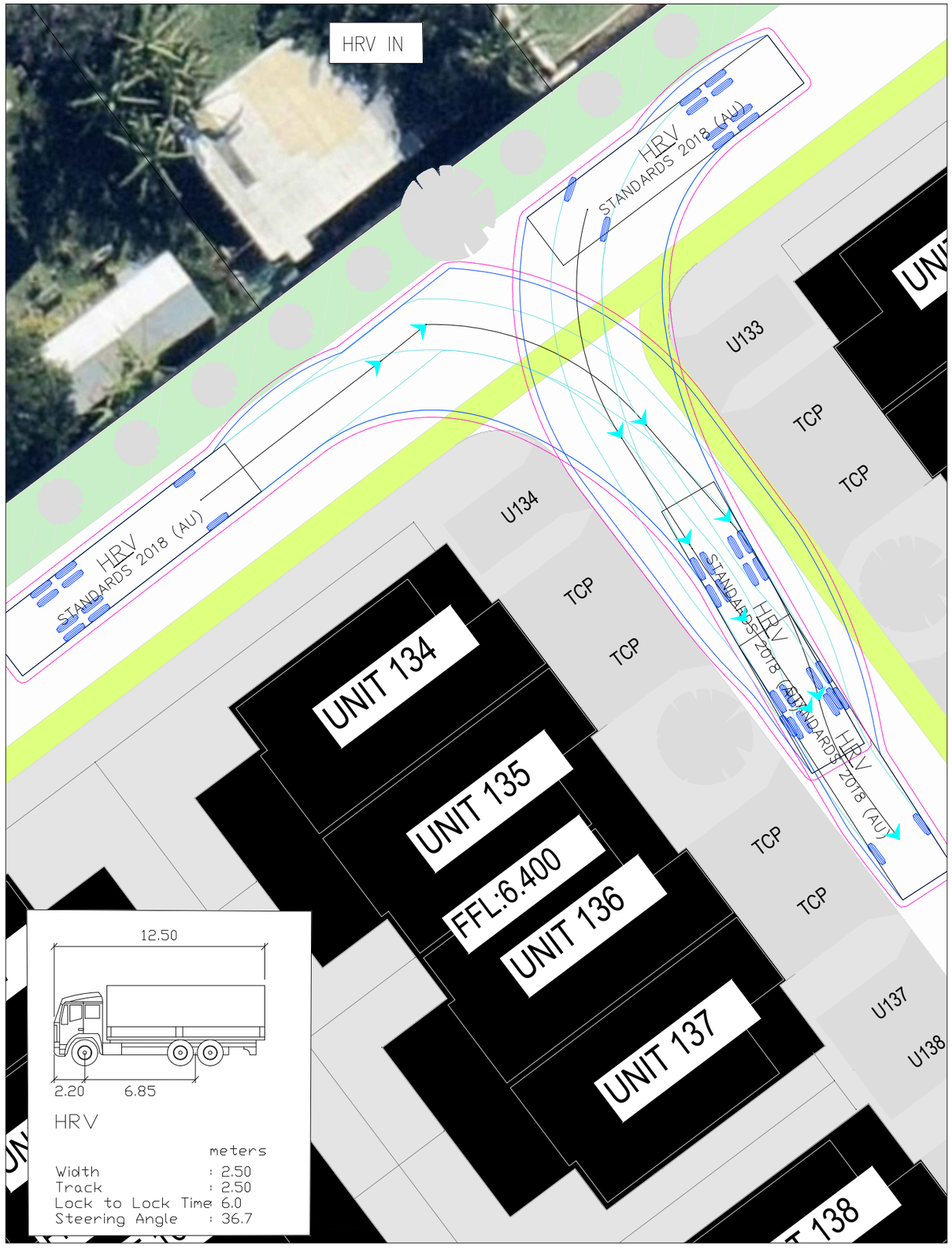
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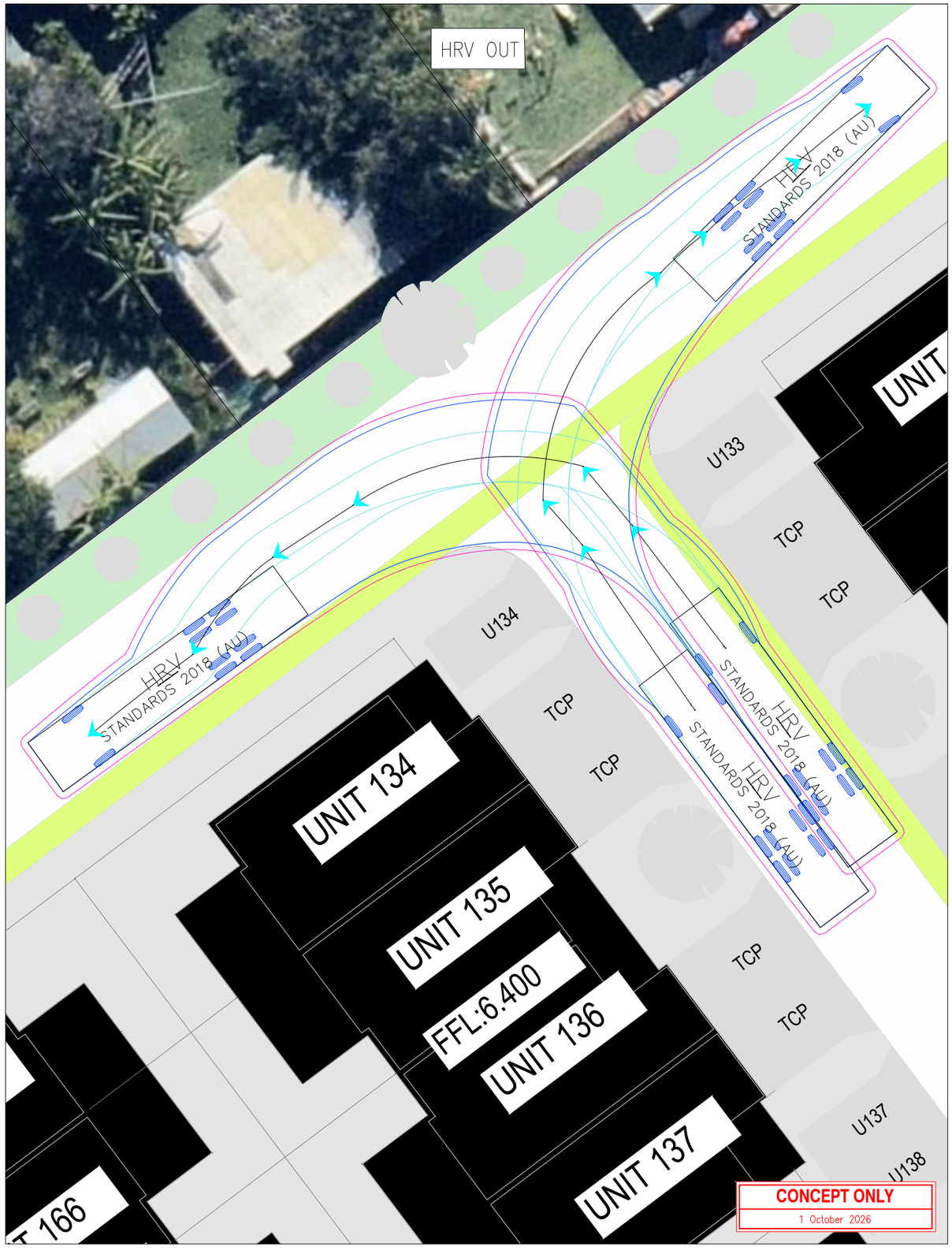
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0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
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SWEPT PATH ASSESSMENT

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Figure No: B26299-SK-005
Scale: AS SHOWN
File Ref: SEE BELOW
Sheet Size: A1

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HRV IN

HRV STANDARDS 2018 (AU)

HRV STANDARDS 2018 (AU)

HRV STANDARDS 2018 (AU)

UNIT 100

UNIT 101

FFL:6.400

UNIT 102

UNIT 103

U99

U100

TCP

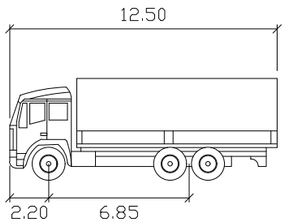
TCP

TCP

TCP

TCP

U171



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

HRV OUT

HRV STANDARDS 2018 (AU)

HRV STANDARDS 2018 (AU)

HRV STANDARDS 2018 (AU)

UNIT 100

UNIT 101

FFL:6.400

UNIT 102

UNIT 103

U99

U100

TCP

TCP

TCP

TCP

TCP

U171

U172

CONCEPT ONLY

1 October 2026

0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
INTERNAL MANOEUVERING
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Figure No: B26299-SK-006

Scale: AS SHOWN A1

File Ref: SEE BELOW Sheet Size

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HRV IN

HRV OUT

UNIT 65

UNIT 64

UNIT 66

UNIT 67

FFL:6.400

UNIT 68

UNIT 69

UNIT 70

UNIT 98

UNIT 97

V50

U65

U66

U69

U70

TCP

HRV STANDARDS 2018 (AU)

12.50

2.20

6.85

HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

CONCEPT ONLY

1 October 2026

0 1 2 3 4m

SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
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File Ref: SEE BELOW

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0 1 2 3 4m
SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
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Title:
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Figure No: B26299-SK-008
Scale: AS SHOWN
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HRV IN

HRV OUT

UNIT 85

UNIT 84

UNIT 83

FFL:7.400

JNIT 114

115

U86

U85

U114

U40

TCP

HRV
STANDARDS 2018 (AU)

UNIT 42

UNIT 41

UNIT 40

UNIT 39

UNIT 38

FFL:7.400

4,673

6,500

12.50

2.20

6.85

HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

CONCEPT ONLY
1 October 2026

0 1 2 3 4m
SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
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HRV IN

UNIT 119 JNIT

JNIT 148

UNIT 35

UNIT 34

UNIT 33

UNIT 32

UNIT 31

FFL:7.400

U119

U148

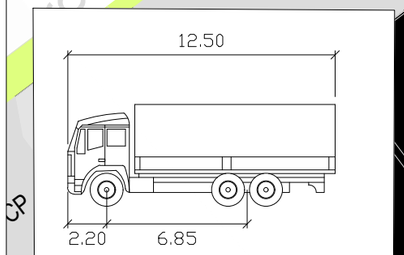
U36

U33

U32

TCP

HRV
STANDARDS 2018 (AU)



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

HRV OUT

UNIT 119 JNIT 118

JNIT 148

49

CONCEPT ONLY
1 October 2026

0 1 2 3 4m
SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

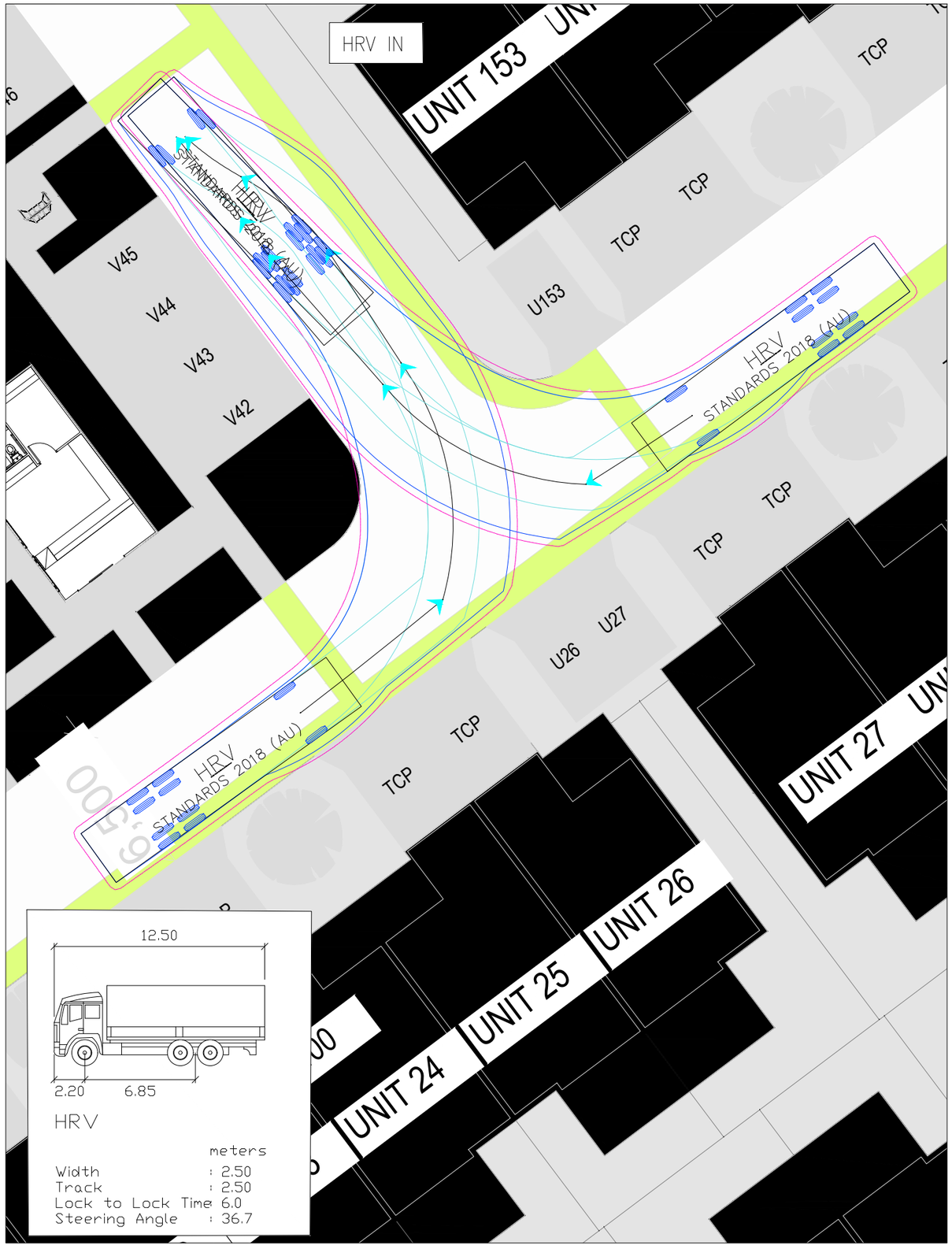
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SWEPT PATH ASSESSMENT

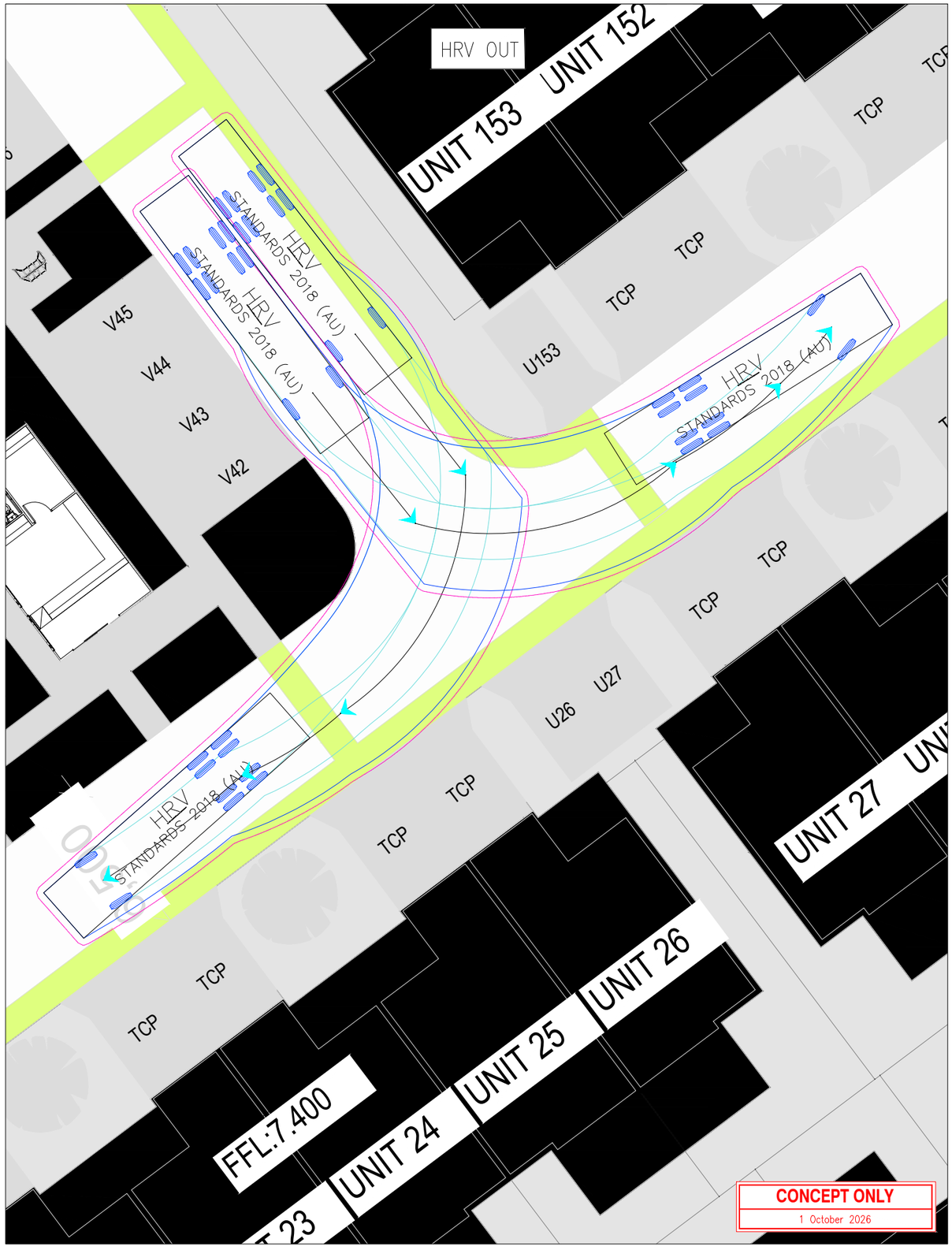
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LEVEL 3, 12 COMMERCIAL ROAD
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Sheet Size: A1

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0 1 2 3 4m
SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
INTERNAL MANOEUVERING
SWEPT PATH ASSESSMENT

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HRV IN

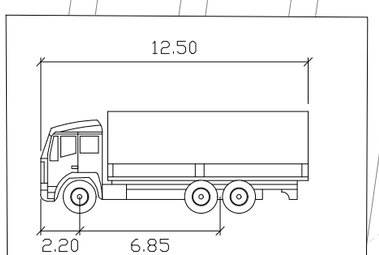
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V39 V38 V37 V36 V35 V15 V14 V13 V12 V11 V10 V09 V08 V07 V06 V05 V04 V03 V02 V01

TCP

HRV STANDARDS 2018 (AU)

6,500



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	6.0
Steering Angle	: 36.7

CONCEPT ONLY
1 October 2026

0 1 2 3 4m
SCALE 1:100 (A1)

Project:
56 BLINZINGER ROAD, BANYO 4014
PROPOSED TOWNHOUSE DEVELOPMENT

Client:
AR Developments Pty Ltd

Title:
INTERNAL MANOEUVERING
SWEPT PATH ASSESSMENT

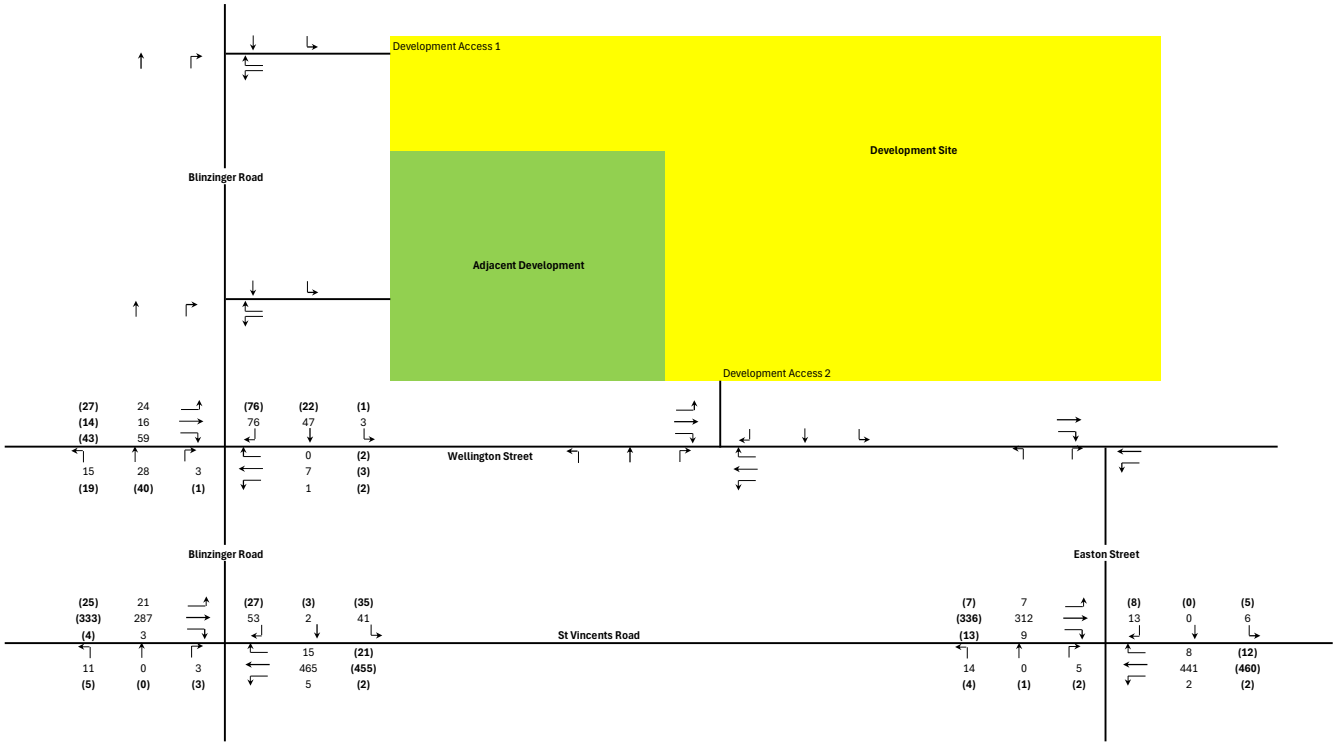
L+R ENGINEERS MANAGERS SCIENTISTS
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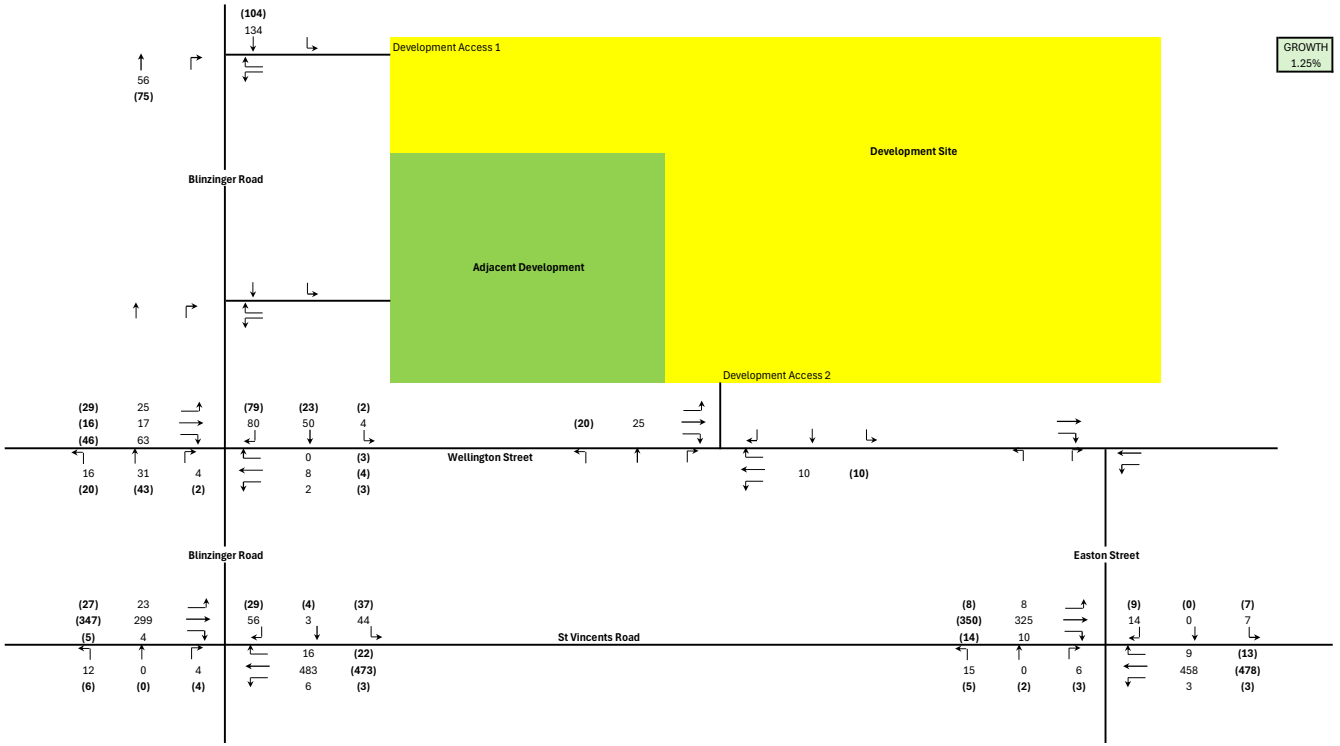
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Appendix C – Traffic Movement Diagrams



Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

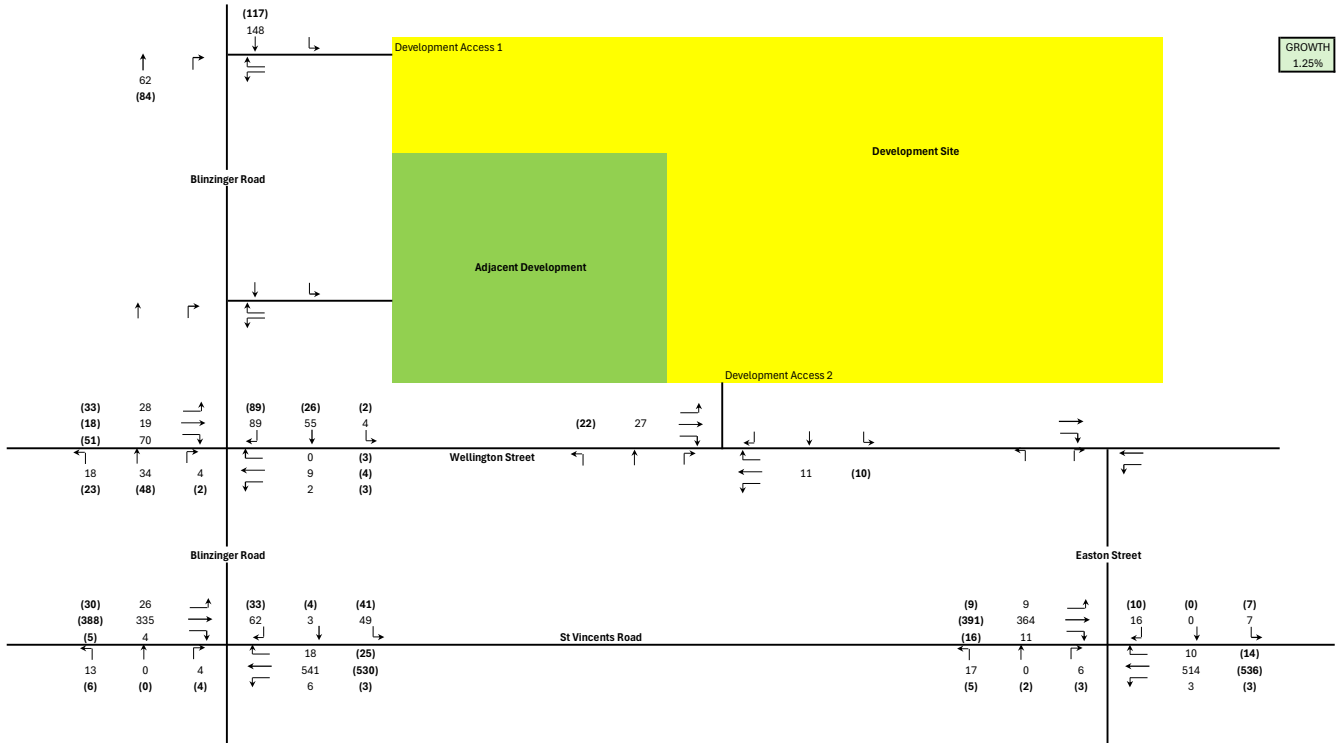
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Project Name:	Proposed Townhouse Development	**Background Traffic 2025**	L+R ENGINEERS MANAGERS SCIENTISTS			C1
Address:	56 Blinzinger Road, Banyo				A 29/09/2026	
Client:	AR Developments Pty Ltd		Prepared: ZN	Approved: AG	Rev: Date:	



Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

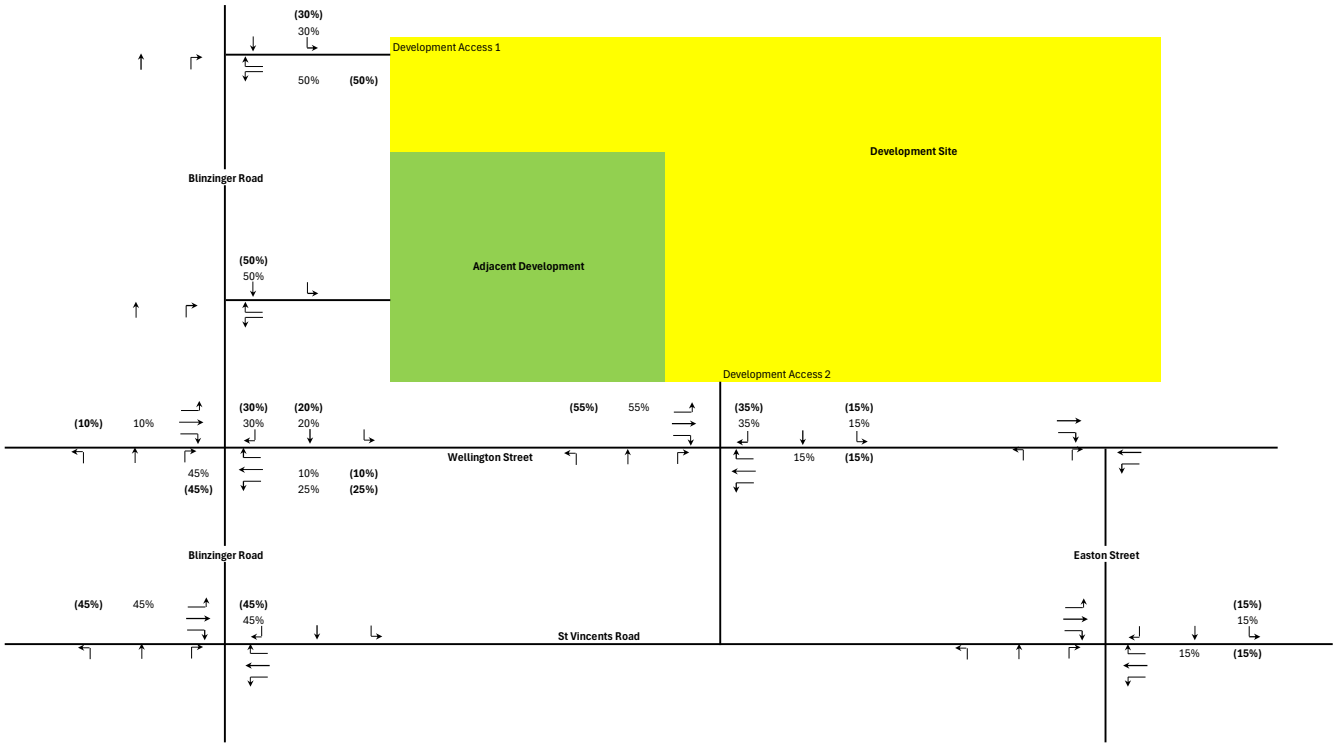
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Project Name:	Proposed Townhouse Development					C2
Address:	56 Blinzinger Road, Banyo			A	29/09/2026	
Client:	AR Developments Pty Ltd		Prepared: ZN	Approved: AG	Rev: Date:	

L+R ENGINEERS MANAGERS SCIENTISTS



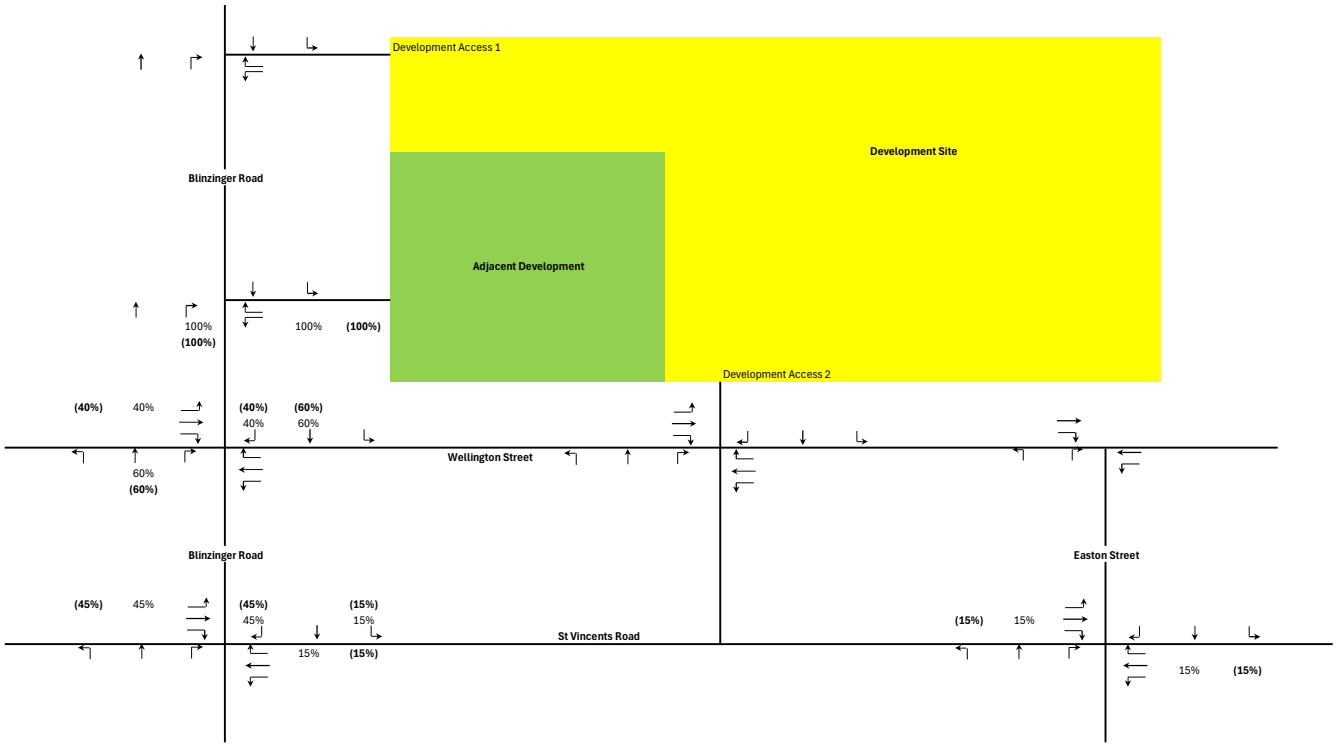
Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

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Project Name:	Proposed Townhouse Development						
Address:	56 Blinzinger Road, Banyo					A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:	



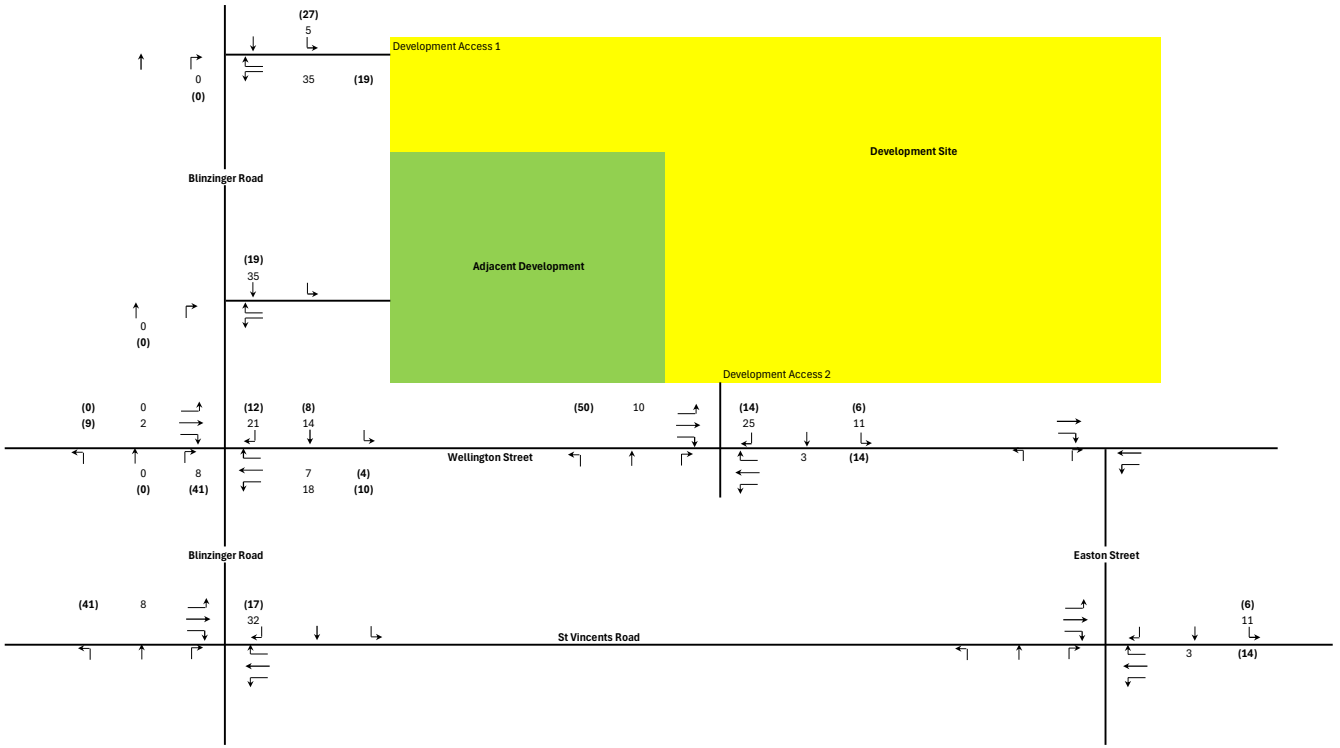
Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:	**Proposed Development Traffic Distribution**	L+R ENGINEERS MANAGERS SCIENTISTS			Figure Number:
Project Name:	Proposed Townhouse Development						C4
Address:	56 Blinzinger Road, Banyo					A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:	



Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:	**Adjacent Development Traffic Distribution**	L+R ENGINEERS MANAGERS SCIENTISTS			Figure Number:
Project Name:	Proposed Townhouse Development						C5
Address:	56 Blinzinger Road, Banyo					A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:	



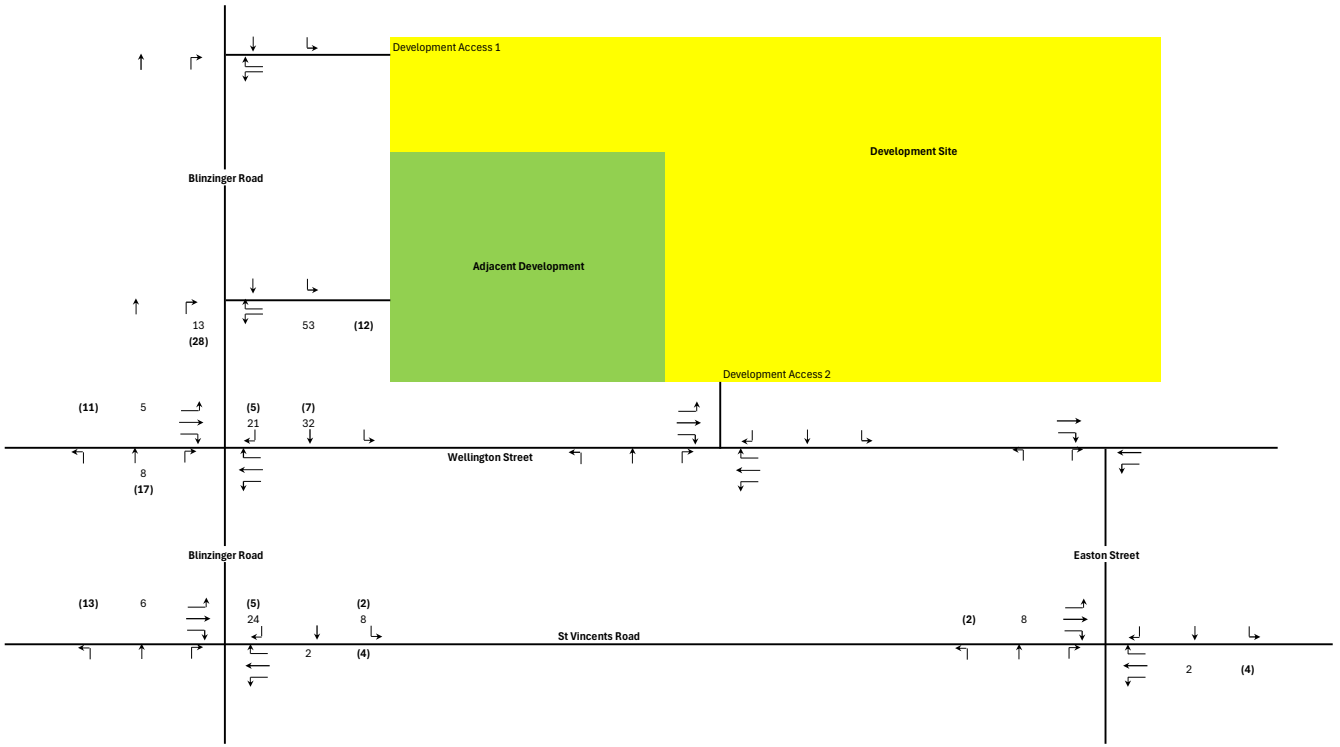
Weekday AM

Peak Period Within 7:30 AM to 8:30 AM

(Weekday PM)

Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:				Figure Number:
Project Name:	Proposed Townhouse Development	**Proposed Development Traffic Trips**				C6
Address:	56 Blinzinger Road, Banyo					
Client:	AR Developments Pty Ltd	Prepared: ZN	Approved: AG	Rev: A	Date: 29/09/2026	



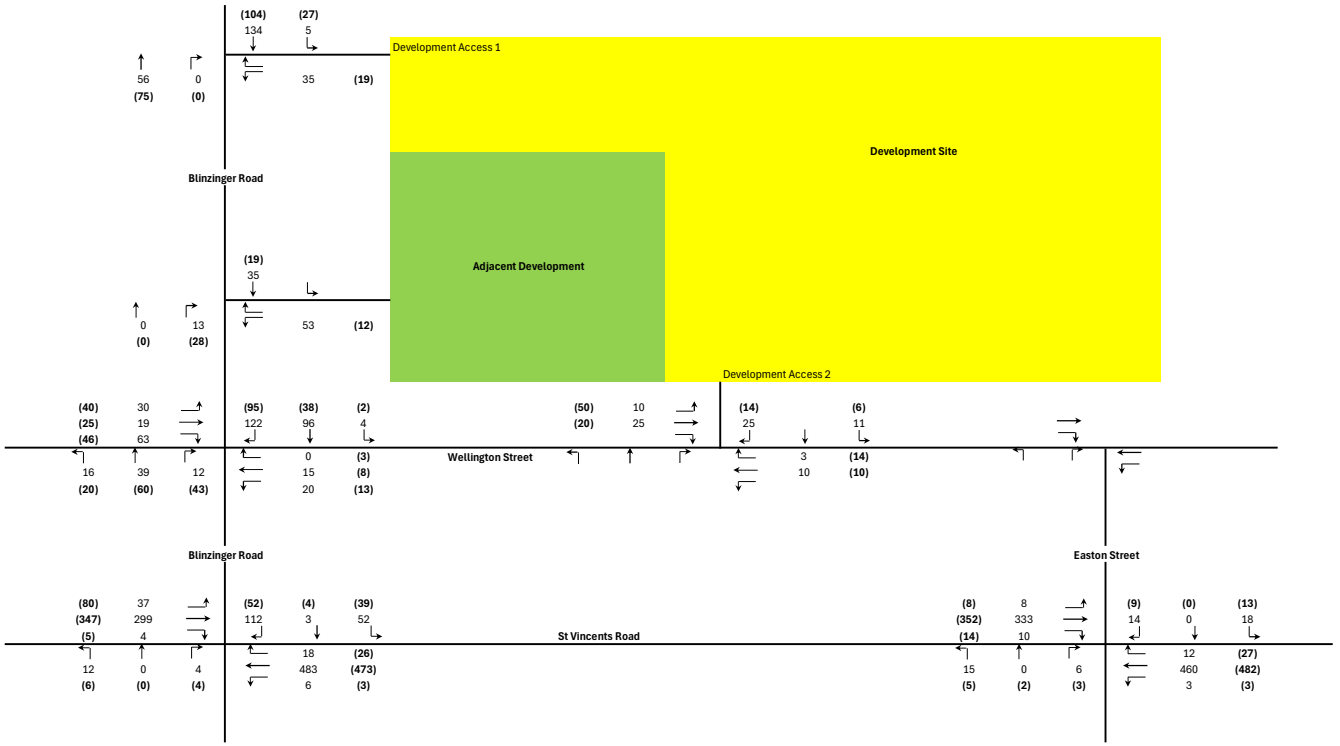
Weekday AM

Peak Period Within 7:30 AM to 8:30 AM

(Weekday PM)

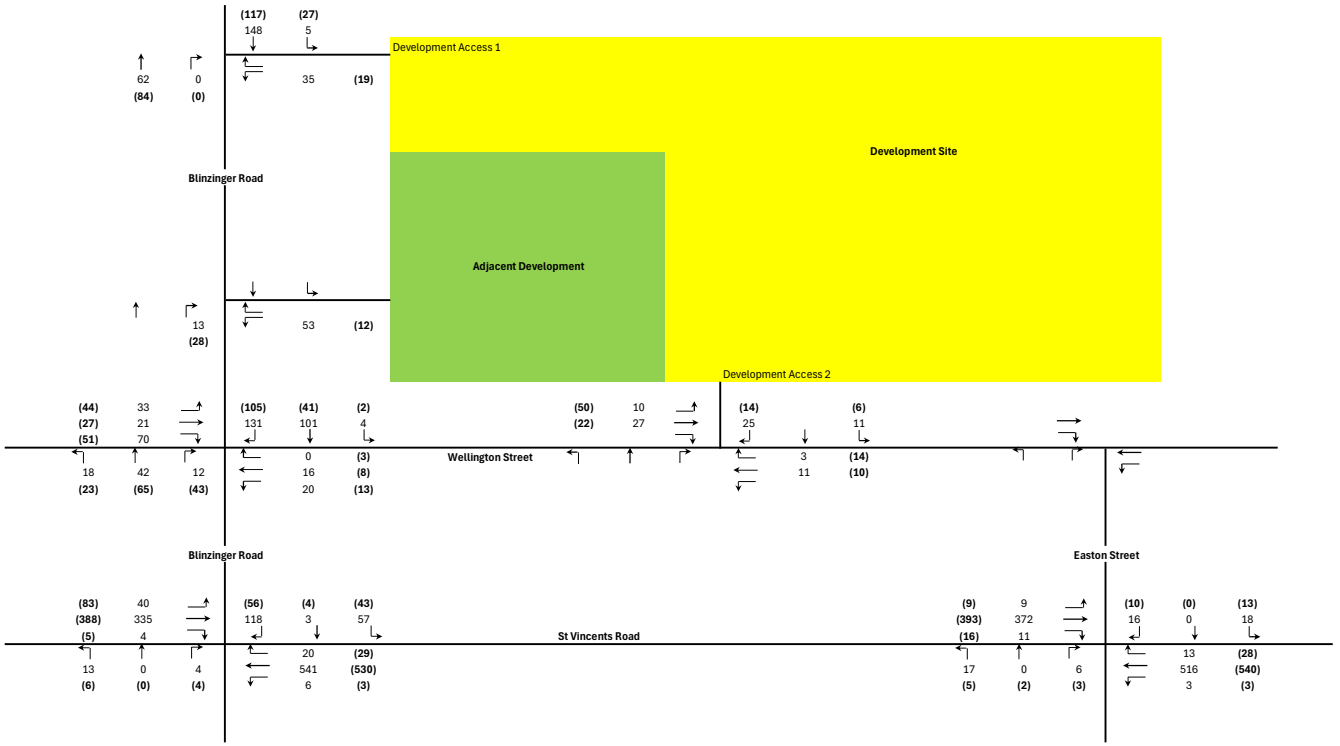
Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:	**Adjacent Development Traffic Trips**	L+R ENGINEERS MANAGERS SCIENTISTS		Figure Number:
Project Name:	Proposed Townhouse Development					C7
Address:	56 Blinzinger Road, Banyo				A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:



Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:	**Design Traffic 2028**	ENGINEERS MANAGERS SCIENTISTS			Figure Number:
Project Name:	Proposed Townhouse Development						C8
Address:	56 Blinzinger Road, Banyo					A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:	



Weekday AM
Peak Period Within 7:30 AM to 8:30 AM
(Weekday PM)
Peak Period Within 4:00 PM to 5:15 PM

Project Number:	B26299	Title:	**Design Traffic 2038**				Figure Number:
Project Name:	Proposed Townhouse Development			L+R ENGINEERS MANAGERS SCIENTISTS			C9
Address:	56 Blinzinger Road, Banyo					A 29/09/2026	
Client:	AR Developments Pty Ltd			Prepared: ZN	Approved: AG	Rev: Date:	

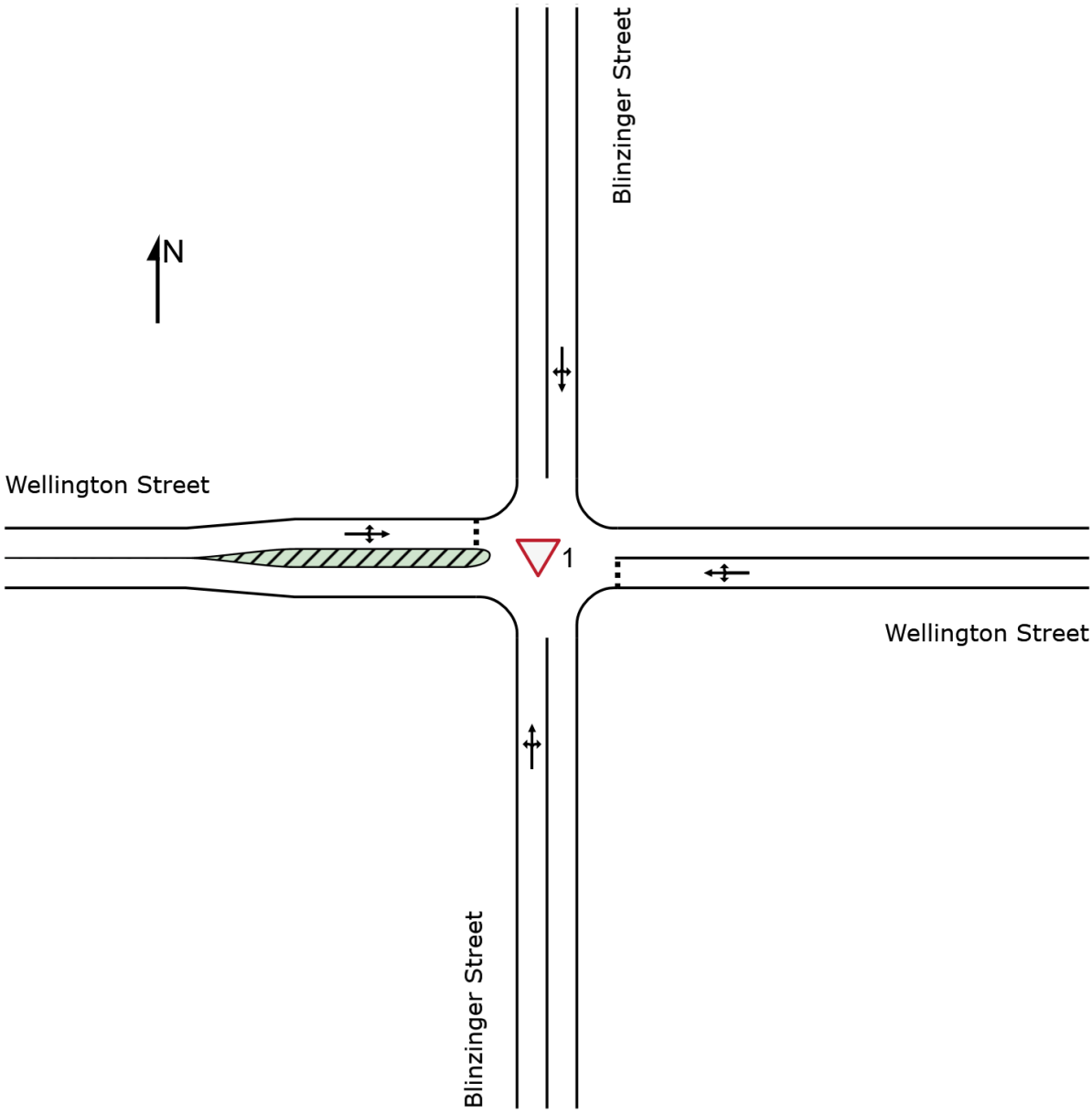
Appendix D – SIDRA Results

SITE LAYOUT

Site: [1] 2028 AM BG (Blinzinger Road / Wellington Street)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [1] 2028 AM BG (Blinzinger Road / Wellington Street)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	17	0.0	17	0.0	0.029	5.6	LOS A	0.0	0.2	0.03	0.23	0.03	55.4
2	T1	All MCs	33	6.5	33	6.5	0.029	0.0	LOS A	0.0	0.2	0.03	0.23	0.03	57.7
3	R2	All MCs	4	0.0	4	0.0	0.029	5.5	LOS A	0.0	0.2	0.03	0.23	0.03	55.1
Approach			54	3.9	54	3.9	0.029	2.2	NA	0.0	0.2	0.03	0.23	0.03	56.8
East: Wellington Street															
4	L2	All MCs	2	0.0	2	0.0	0.010	5.7	LOS A	0.0	0.2	0.23	0.52	0.23	53.0
5	T1	All MCs	8	0.0	8	0.0	0.010	4.9	LOS A	0.0	0.2	0.23	0.52	0.23	53.4
6	R2	All MCs	1	0.0	1	0.0	0.010	6.5	LOS A	0.0	0.2	0.23	0.52	0.23	52.7
Approach			12	0.0	12	0.0	0.010	5.2	LOS A	0.0	0.2	0.23	0.52	0.23	53.3
North: Blinzinger Street															
7	L2	All MCs	4	0.0	4	0.0	0.082	5.7	LOS A	0.4	2.8	0.13	0.36	0.13	54.0
8	T1	All MCs	53	12.0	53	12.0	0.082	0.1	LOS A	0.4	2.8	0.13	0.36	0.13	56.2
9	R2	All MCs	84	5.0	84	5.0	0.082	5.7	LOS A	0.4	2.8	0.13	0.36	0.13	53.6
Approach			141	7.5	141	7.5	0.082	3.6	NA	0.4	2.8	0.13	0.36	0.13	54.6
West: Wellington Street															
10	L2	All MCs	26	0.0	26	0.0	0.107	5.6	LOS A	0.4	2.8	0.21	0.56	0.21	52.5
11	T1	All MCs	18	0.0	18	0.0	0.107	4.9	LOS A	0.4	2.8	0.21	0.56	0.21	52.9
12	R2	All MCs	66	4.8	66	4.8	0.107	6.6	LOS A	0.4	2.8	0.21	0.56	0.21	52.1
Approach			111	2.9	111	2.9	0.107	6.1	LOS A	0.4	2.8	0.21	0.56	0.21	52.3
All Vehicles			317	5.0	317	5.0	0.107	4.3	NA	0.4	2.8	0.15	0.41	0.15	54.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (2)] 2028 PM BG (Blinzinger Road / Wellington Street)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	21	0.0	21	0.0	0.036	5.5	LOS A	0.0	0.1	0.01	0.20	0.01	55.8
2	T1	All MCs	45	4.7	45	4.7	0.036	0.0	LOS A	0.0	0.1	0.01	0.20	0.01	58.1
3	R2	All MCs	2	0.0	2	0.0	0.036	5.5	LOS A	0.0	0.1	0.01	0.20	0.01	55.5
Approach			68	3.1	68	3.1	0.036	1.9	NA	0.0	0.1	0.01	0.20	0.01	57.3
East: Wellington Street															
4	L2	All MCs	3	0.0	3	0.0	0.009	5.6	LOS A	0.0	0.2	0.15	0.53	0.15	52.9
5	T1	All MCs	4	0.0	4	0.0	0.009	4.8	LOS A	0.0	0.2	0.15	0.53	0.15	53.3
6	R2	All MCs	3	0.0	3	0.0	0.009	6.4	LOS A	0.0	0.2	0.15	0.53	0.15	52.6
Approach			11	0.0	11	0.0	0.009	5.5	LOS A	0.0	0.2	0.15	0.53	0.15	53.0
North: Blinzinger Street															
7	L2	All MCs	2	0.0	2	0.0	0.063	5.7	LOS A	0.3	2.1	0.16	0.44	0.16	53.4
8	T1	All MCs	24	0.0	24	0.0	0.063	0.2	LOS A	0.3	2.1	0.16	0.44	0.16	55.5
9	R2	All MCs	83	0.0	83	0.0	0.063	5.7	LOS A	0.3	2.1	0.16	0.44	0.16	53.2
Approach			109	0.0	109	0.0	0.063	4.5	NA	0.3	2.1	0.16	0.44	0.16	53.7
West: Wellington Street															
10	L2	All MCs	31	6.9	31	6.9	0.089	5.8	LOS A	0.3	2.4	0.20	0.55	0.20	52.2
11	T1	All MCs	17	12.5	17	12.5	0.089	5.1	LOS A	0.3	2.4	0.20	0.55	0.20	52.5
12	R2	All MCs	48	4.3	48	4.3	0.089	6.5	LOS A	0.3	2.4	0.20	0.55	0.20	52.1
Approach			96	6.6	96	6.6	0.089	6.0	LOS A	0.3	2.4	0.20	0.55	0.20	52.2
All Vehicles			284	3.0	284	3.0	0.089	4.4	NA	0.3	2.4	0.14	0.42	0.14	54.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (3)] 2038 AM BG (Blinzinger Road / Wellington Street)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	19	0.0	19	0.0	0.032	5.6	LOS A	0.0	0.2	0.03	0.23	0.03	55.4
2	T1	All MCs	36	5.9	36	5.9	0.032	0.0	LOS A	0.0	0.2	0.03	0.23	0.03	57.7
3	R2	All MCs	4	0.0	4	0.0	0.032	5.5	LOS A	0.0	0.2	0.03	0.23	0.03	55.1
Approach			59	3.6	59	3.6	0.032	2.2	NA	0.0	0.2	0.03	0.23	0.03	56.8
East: Wellington Street															
4	L2	All MCs	2	0.0	2	0.0	0.011	5.7	LOS A	0.0	0.3	0.25	0.52	0.25	53.0
5	T1	All MCs	9	0.0	9	0.0	0.011	4.9	LOS A	0.0	0.3	0.25	0.52	0.25	53.4
6	R2	All MCs	1	0.0	1	0.0	0.011	6.6	LOS A	0.0	0.3	0.25	0.52	0.25	52.7
Approach			13	0.0	13	0.0	0.011	5.2	LOS A	0.0	0.3	0.25	0.52	0.25	53.3
North: Blinzinger Street															
7	L2	All MCs	4	0.0	4	0.0	0.090	5.7	LOS A	0.4	3.1	0.14	0.37	0.14	54.0
8	T1	All MCs	58	10.9	58	10.9	0.090	0.1	LOS A	0.4	3.1	0.14	0.37	0.14	56.2
9	R2	All MCs	94	4.5	94	4.5	0.090	5.7	LOS A	0.4	3.1	0.14	0.37	0.14	53.6
Approach			156	6.8	156	6.8	0.090	3.6	NA	0.4	3.1	0.14	0.37	0.14	54.6
West: Wellington Street															
10	L2	All MCs	29	0.0	29	0.0	0.121	5.7	LOS A	0.4	3.2	0.22	0.56	0.22	52.4
11	T1	All MCs	20	0.0	20	0.0	0.121	5.0	LOS A	0.4	3.2	0.22	0.56	0.22	52.8
12	R2	All MCs	74	4.3	74	4.3	0.121	6.8	LOS A	0.4	3.2	0.22	0.56	0.22	52.0
Approach			123	2.6	123	2.6	0.121	6.2	LOS A	0.4	3.2	0.22	0.56	0.22	52.2
All Vehicles			351	4.5	351	4.5	0.121	4.4	NA	0.4	3.2	0.16	0.42	0.16	54.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (4)] 2038 PM BG (Blinzinger Road / Wellington Street)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	24	0.0	24	0.0	0.041	5.5	LOS A	0.0	0.1	0.01	0.20	0.01	55.8
2	T1	All MCs	51	4.2	51	4.2	0.041	0.0	LOS A	0.0	0.1	0.01	0.20	0.01	58.1
3	R2	All MCs	2	0.0	2	0.0	0.041	5.5	LOS A	0.0	0.1	0.01	0.20	0.01	55.5
Approach			77	2.7	77	2.7	0.041	1.9	NA	0.0	0.1	0.01	0.20	0.01	57.3
East: Wellington Street															
4	L2	All MCs	3	0.0	3	0.0	0.009	5.6	LOS A	0.0	0.2	0.16	0.53	0.16	52.8
5	T1	All MCs	4	0.0	4	0.0	0.009	4.9	LOS A	0.0	0.2	0.16	0.53	0.16	53.3
6	R2	All MCs	3	0.0	3	0.0	0.009	6.5	LOS A	0.0	0.2	0.16	0.53	0.16	52.6
Approach			11	0.0	11	0.0	0.009	5.6	LOS A	0.0	0.2	0.16	0.53	0.16	52.9
North: Blinzinger Street															
7	L2	All MCs	2	0.0	2	0.0	0.071	5.8	LOS A	0.3	2.4	0.18	0.44	0.18	53.3
8	T1	All MCs	27	0.0	27	0.0	0.071	0.2	LOS A	0.3	2.4	0.18	0.44	0.18	55.5
9	R2	All MCs	94	0.0	94	0.0	0.071	5.7	LOS A	0.3	2.4	0.18	0.44	0.18	53.2
Approach			123	0.0	123	0.0	0.071	4.5	NA	0.3	2.4	0.18	0.44	0.18	53.7
West: Wellington Street															
10	L2	All MCs	35	6.1	35	6.1	0.100	5.8	LOS A	0.4	2.7	0.22	0.56	0.22	52.2
11	T1	All MCs	19	11.1	19	11.1	0.100	5.1	LOS A	0.4	2.7	0.22	0.56	0.22	52.5
12	R2	All MCs	54	3.9	54	3.9	0.100	6.6	LOS A	0.4	2.7	0.22	0.56	0.22	52.1
Approach			107	5.9	107	5.9	0.100	6.1	LOS A	0.4	2.7	0.22	0.56	0.22	52.2
All Vehicles			318	2.6	318	2.6	0.100	4.4	NA	0.4	2.7	0.15	0.43	0.15	53.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (5)] 2028 AM Design (Blinzinger Road / Wellington Street)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	17	0.0	17	0.0	0.039	5.7	LOS A	0.1	0.7	0.10	0.26	0.10	55.1
2	T1	All MCs	41	5.1	41	5.1	0.039	0.1	LOS A	0.1	0.7	0.10	0.26	0.10	57.4
3	R2	All MCs	13	0.0	13	0.0	0.039	5.8	LOS A	0.1	0.7	0.10	0.26	0.10	54.8
Approach			71	3.0	71	3.0	0.039	2.4	NA	0.1	0.7	0.10	0.26	0.10	56.3
East: Wellington Street															
4	L2	All MCs	21	0.0	21	0.0	0.031	5.8	LOS A	0.1	0.8	0.25	0.54	0.25	52.6
5	T1	All MCs	16	0.0	16	0.0	0.031	5.4	LOS A	0.1	0.8	0.25	0.54	0.25	53.0
6	R2	All MCs	1	0.0	1	0.0	0.031	7.2	LOS A	0.1	0.8	0.25	0.54	0.25	52.3
Approach			38	0.0	38	0.0	0.031	5.7	LOS A	0.1	0.8	0.25	0.54	0.25	52.8
North: Blinzinger Street															
7	L2	All MCs	4	0.0	4	0.0	0.134	5.7	LOS A	0.6	4.6	0.15	0.34	0.15	54.3
8	T1	All MCs	101	6.2	101	6.2	0.134	0.2	LOS A	0.6	4.6	0.15	0.34	0.15	56.5
9	R2	All MCs	128	3.3	128	3.3	0.134	5.7	LOS A	0.6	4.6	0.15	0.34	0.15	53.9
Approach			234	4.5	234	4.5	0.134	3.3	NA	0.6	4.6	0.15	0.34	0.15	55.0
West: Wellington Street															
10	L2	All MCs	32	0.0	32	0.0	0.127	5.7	LOS A	0.5	3.4	0.26	0.56	0.26	52.0
11	T1	All MCs	20	0.0	20	0.0	0.127	5.5	LOS A	0.5	3.4	0.26	0.56	0.26	52.4
12	R2	All MCs	66	4.8	66	4.8	0.127	7.6	LOS A	0.5	3.4	0.26	0.56	0.26	51.6
Approach			118	2.7	118	2.7	0.127	6.8	LOS A	0.5	3.4	0.26	0.56	0.26	51.8
All Vehicles			460	3.4	460	3.4	0.134	4.3	NA	0.6	4.6	0.18	0.40	0.18	54.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (6)] 2028 PM Design (Blinzinger Road / Wellington Street)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	21	0.0	21	0.0	0.071	5.6	LOS A	0.3	1.9	0.10	0.30	0.10	54.7
2	T1	All MCs	63	3.3	63	3.3	0.071	0.1	LOS A	0.3	1.9	0.10	0.30	0.10	57.0
3	R2	All MCs	45	0.0	45	0.0	0.071	5.6	LOS A	0.3	1.9	0.10	0.30	0.10	54.4
Approach			129	1.6	129	1.6	0.071	2.9	NA	0.3	1.9	0.10	0.30	0.10	55.7
East: Wellington Street															
4	L2	All MCs	14	0.0	14	0.0	0.021	5.6	LOS A	0.1	0.5	0.16	0.53	0.16	52.8
5	T1	All MCs	8	0.0	8	0.0	0.021	5.2	LOS A	0.1	0.5	0.16	0.53	0.16	53.2
6	R2	All MCs	3	0.0	3	0.0	0.021	7.0	LOS A	0.1	0.5	0.16	0.53	0.16	52.5
Approach			25	0.0	25	0.0	0.021	5.7	LOS A	0.1	0.5	0.16	0.53	0.16	52.9
North: Blinzinger Street															
7	L2	All MCs	2	0.0	2	0.0	0.082	5.8	LOS A	0.4	2.7	0.19	0.42	0.19	53.5
8	T1	All MCs	40	0.0	40	0.0	0.082	0.2	LOS A	0.4	2.7	0.19	0.42	0.19	55.7
9	R2	All MCs	100	0.0	100	0.0	0.082	5.7	LOS A	0.4	2.7	0.19	0.42	0.19	53.4
Approach			142	0.0	142	0.0	0.082	4.2	NA	0.4	2.7	0.19	0.42	0.19	54.0
West: Wellington Street															
10	L2	All MCs	42	5.0	42	5.0	0.114	5.8	LOS A	0.4	3.1	0.25	0.56	0.25	52.1
11	T1	All MCs	26	8.0	26	8.0	0.114	5.5	LOS A	0.4	3.1	0.25	0.56	0.25	52.5
12	R2	All MCs	48	4.3	48	4.3	0.114	7.2	LOS A	0.4	3.1	0.25	0.56	0.25	52.0
Approach			117	5.4	117	5.4	0.114	6.3	LOS A	0.4	3.1	0.25	0.56	0.25	52.1
All Vehicles			414	2.0	414	2.0	0.114	4.5	NA	0.4	3.1	0.18	0.43	0.18	53.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (7)] 2038 AM Design (Blinzinger Road / Wellington Street)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	19	0.0	19	0.0	0.041	5.7	LOS A	0.1	0.7	0.10	0.26	0.10	55.1
2	T1	All MCs	44	4.8	44	4.8	0.041	0.1	LOS A	0.1	0.7	0.10	0.26	0.10	57.4
3	R2	All MCs	13	0.0	13	0.0	0.041	5.8	LOS A	0.1	0.7	0.10	0.26	0.10	54.8
Approach			76	2.8	76	2.8	0.041	2.4	NA	0.1	0.7	0.10	0.26	0.10	56.3
East: Wellington Street															
4	L2	All MCs	21	0.0	21	0.0	0.033	5.9	LOS A	0.1	0.9	0.26	0.54	0.26	52.6
5	T1	All MCs	17	0.0	17	0.0	0.033	5.5	LOS A	0.1	0.9	0.26	0.54	0.26	53.0
6	R2	All MCs	1	0.0	1	0.0	0.033	7.4	LOS A	0.1	0.9	0.26	0.54	0.26	52.3
Approach			39	0.0	39	0.0	0.033	5.7	LOS A	0.1	0.9	0.26	0.54	0.26	52.8
North: Blinzinger Street															
7	L2	All MCs	4	0.0	4	0.0	0.142	5.8	LOS A	0.7	4.9	0.16	0.34	0.16	54.2
8	T1	All MCs	106	5.9	106	5.9	0.142	0.2	LOS A	0.7	4.9	0.16	0.34	0.16	56.5
9	R2	All MCs	138	3.1	138	3.1	0.142	5.7	LOS A	0.7	4.9	0.16	0.34	0.16	53.9
Approach			248	4.2	248	4.2	0.142	3.4	NA	0.7	4.9	0.16	0.34	0.16	55.0
West: Wellington Street															
10	L2	All MCs	35	0.0	35	0.0	0.143	5.7	LOS A	0.5	3.8	0.28	0.57	0.28	51.9
11	T1	All MCs	22	0.0	22	0.0	0.143	5.7	LOS A	0.5	3.8	0.28	0.57	0.28	52.3
12	R2	All MCs	74	4.3	74	4.3	0.143	7.8	LOS A	0.5	3.8	0.28	0.57	0.28	51.5
Approach			131	2.4	131	2.4	0.143	6.9	LOS A	0.5	3.8	0.28	0.57	0.28	51.8
All Vehicles			494	3.2	494	3.2	0.143	4.3	NA	0.7	4.9	0.19	0.40	0.19	54.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [1 (8)] 2038 PM Design (Blinzinger Road / Wellington Street)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Street															
1	L2	All MCs	24	0.0	24	0.0	0.075	5.6	LOS A	0.3	2.0	0.10	0.30	0.10	54.7
2	T1	All MCs	68	3.1	68	3.1	0.075	0.1	LOS A	0.3	2.0	0.10	0.30	0.10	57.0
3	R2	All MCs	45	0.0	45	0.0	0.075	5.6	LOS A	0.3	2.0	0.10	0.30	0.10	54.4
Approach			138	1.5	138	1.5	0.075	2.9	NA	0.3	2.0	0.10	0.30	0.10	55.7
East: Wellington Street															
4	L2	All MCs	14	0.0	14	0.0	0.021	5.7	LOS A	0.1	0.5	0.17	0.53	0.17	52.7
5	T1	All MCs	8	0.0	8	0.0	0.021	5.3	LOS A	0.1	0.5	0.17	0.53	0.17	53.2
6	R2	All MCs	3	0.0	3	0.0	0.021	7.2	LOS A	0.1	0.5	0.17	0.53	0.17	52.5
Approach			25	0.0	25	0.0	0.021	5.7	LOS A	0.1	0.5	0.17	0.53	0.17	52.8
North: Blinzinger Street															
7	L2	All MCs	2	0.0	2	0.0	0.091	5.8	LOS A	0.4	3.1	0.20	0.42	0.20	53.5
8	T1	All MCs	43	0.0	43	0.0	0.091	0.3	LOS A	0.4	3.1	0.20	0.42	0.20	55.7
9	R2	All MCs	111	0.0	111	0.0	0.091	5.8	LOS A	0.4	3.1	0.20	0.42	0.20	53.3
Approach			156	0.0	156	0.0	0.091	4.2	NA	0.4	3.1	0.20	0.42	0.20	53.9
West: Wellington Street															
10	L2	All MCs	46	4.5	46	4.5	0.127	5.8	LOS A	0.5	3.5	0.27	0.57	0.27	52.1
11	T1	All MCs	28	7.4	28	7.4	0.127	5.6	LOS A	0.5	3.5	0.27	0.57	0.27	52.4
12	R2	All MCs	54	3.9	54	3.9	0.127	7.3	LOS A	0.5	3.5	0.27	0.57	0.27	51.9
Approach			128	4.9	128	4.9	0.127	6.4	LOS A	0.5	3.5	0.27	0.57	0.27	52.1
All Vehicles			447	1.9	447	1.9	0.127	4.5	NA	0.5	3.5	0.19	0.43	0.19	53.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

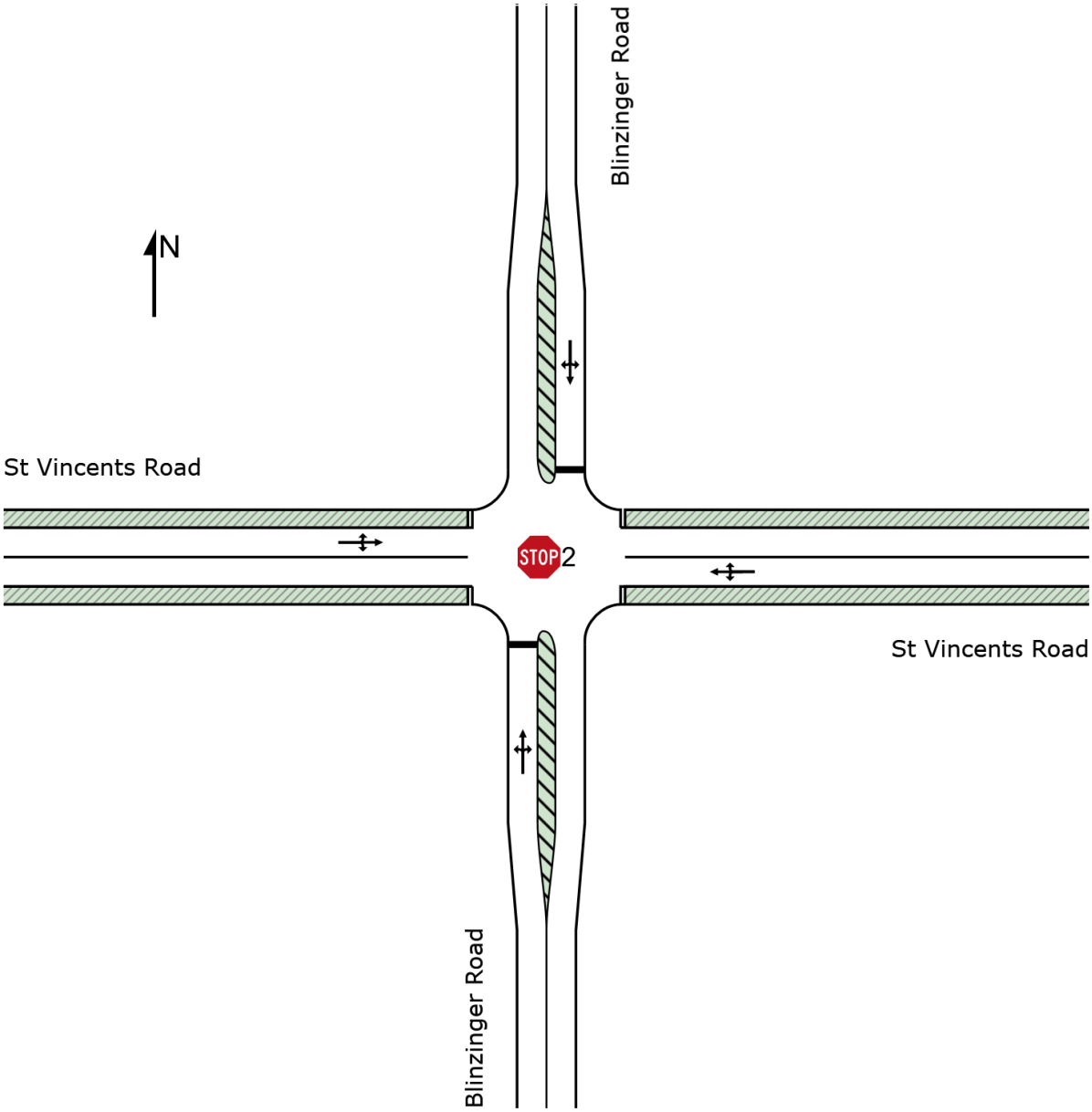
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SITE LAYOUT

Site: [2] 2028 AM BG (Blinzinger Road / St Vincents Road)

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [2] 2028 AM BG (Blinzinger Road / St Vincents Road)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	13	0.0	13	0.0	0.033	10.6	LOS B	0.1	0.8	0.57	0.91	0.57	48.7
2	T1	All MCs	1	0.0	1	0.0	0.033	15.5	LOS C	0.1	0.8	0.57	0.91	0.57	48.7
3	R2	All MCs	4	0.0	4	0.0	0.033	18.0	LOS C	0.1	0.8	0.57	0.91	0.57	48.7
Approach			18	0.0	18	0.0	0.033	12.7	LOS B	0.1	0.8	0.57	0.91	0.57	48.7
East: St Vincents Road															
4	L2	All MCs	6	0.0	6	0.0	0.286	6.8	LOS A	0.2	1.3	0.04	0.05	0.04	57.1
5	T1	All MCs	508	5.0	508	5.0	0.286	0.1	LOS A	0.2	1.3	0.04	0.05	0.04	59.6
6	R2	All MCs	17	0.0	17	0.0	0.286	7.1	LOS A	0.2	1.3	0.04	0.05	0.04	57.1
Approach			532	4.8	532	4.8	0.286	0.4	NA	0.2	1.3	0.04	0.05	0.04	59.5
North: Blinzinger Road															
7	L2	All MCs	46	4.5	46	4.5	0.288	10.6	LOS B	1.1	8.1	0.67	1.01	0.80	45.8
8	T1	All MCs	3	0.0	3	0.0	0.288	17.6	LOS C	1.1	8.1	0.67	1.01	0.80	45.9
9	R2	All MCs	59	10.7	59	10.7	0.288	23.3	LOS C	1.1	8.1	0.67	1.01	0.80	45.6
Approach			108	7.8	108	7.8	0.288	17.7	LOS C	1.1	8.1	0.67	1.01	0.80	45.7
West: St Vincents Road															
10	L2	All MCs	24	8.7	24	8.7	0.185	6.0	LOS A	0.1	0.5	0.02	0.07	0.02	56.6
11	T1	All MCs	315	5.4	315	5.4	0.185	0.1	LOS A	0.1	0.5	0.02	0.07	0.02	59.4
12	R2	All MCs	4	0.0	4	0.0	0.185	7.8	LOS A	0.1	0.5	0.02	0.07	0.02	57.0
Approach			343	5.5	343	5.5	0.185	0.6	NA	0.1	0.5	0.02	0.07	0.02	59.2
All Vehicles			1001	5.3	1001	5.3	0.288	2.5	NA	1.1	8.1	0.11	0.18	0.13	57.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (2)] 2028 PM BG (Blinzinger Road / St Vincents Road)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	6	0.0	6	0.0	0.026	10.5	LOS B	0.1	0.6	0.60	0.92	0.60	48.0
2	T1	All MCs	1	0.0	1	0.0	0.026	16.1	LOS C	0.1	0.6	0.60	0.92	0.60	47.9
3	R2	All MCs	4	0.0	4	0.0	0.026	18.4	LOS C	0.1	0.6	0.60	0.92	0.60	47.9
Approach			12	0.0	12	0.0	0.026	13.9	LOS B	0.1	0.6	0.60	0.92	0.60	48.0
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.282	7.2	LOS A	0.2	1.7	0.06	0.07	0.06	57.0
5	T1	All MCs	498	3.4	498	3.4	0.282	0.1	LOS A	0.2	1.7	0.06	0.07	0.06	59.5
6	R2	All MCs	23	0.0	23	0.0	0.282	7.3	LOS A	0.2	1.7	0.06	0.07	0.06	57.0
Approach			524	3.2	524	3.2	0.282	0.5	NA	0.2	1.7	0.06	0.07	0.06	59.3
North: Blinzinger Road															
7	L2	All MCs	39	0.0	39	0.0	0.172	9.8	LOS A	0.6	4.1	0.63	0.96	0.63	47.4
8	T1	All MCs	4	0.0	4	0.0	0.172	16.9	LOS C	0.6	4.1	0.63	0.96	0.63	47.3
9	R2	All MCs	31	6.9	31	6.9	0.172	21.5	LOS C	0.6	4.1	0.63	0.96	0.63	47.1
Approach			74	2.9	74	2.9	0.172	15.0	LOS C	0.6	4.1	0.63	0.96	0.63	47.3
West: St Vincents Road															
10	L2	All MCs	28	7.4	28	7.4	0.211	6.1	LOS A	0.1	0.6	0.03	0.07	0.03	56.6
11	T1	All MCs	365	2.3	365	2.3	0.211	0.1	LOS A	0.1	0.6	0.03	0.07	0.03	59.4
12	R2	All MCs	5	0.0	5	0.0	0.211	7.8	LOS A	0.1	0.6	0.03	0.07	0.03	57.0
Approach			399	2.6	399	2.6	0.211	0.6	NA	0.1	0.6	0.03	0.07	0.03	59.2
All Vehicles			1008	2.9	1008	2.9	0.282	1.7	NA	0.6	4.1	0.09	0.15	0.09	58.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (3)] 2038 AM BG (Blinzinger Road / St Vincents Road)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	14	0.0	14	0.0	0.040	11.2	LOS B	0.1	0.9	0.61	0.94	0.61	48.1
2	T1	All MCs	1	0.0	1	0.0	0.040	17.7	LOS C	0.1	0.9	0.61	0.94	0.61	48.1
3	R2	All MCs	4	0.0	4	0.0	0.040	20.8	LOS C	0.1	0.9	0.61	0.94	0.61	48.1
Approach			19	0.0	19	0.0	0.040	13.7	LOS B	0.1	0.9	0.61	0.94	0.61	48.1
East: St Vincents Road															
4	L2	All MCs	6	0.0	6	0.0	0.320	7.1	LOS A	0.2	1.6	0.05	0.06	0.05	57.1
5	T1	All MCs	569	5.0	569	5.0	0.320	0.1	LOS A	0.2	1.6	0.05	0.06	0.05	59.6
6	R2	All MCs	19	0.0	19	0.0	0.320	7.4	LOS A	0.2	1.6	0.05	0.06	0.05	57.1
Approach			595	4.8	595	4.8	0.320	0.4	NA	0.2	1.6	0.05	0.06	0.05	59.4
North: Blinzinger Road															
7	L2	All MCs	52	4.1	52	4.1	0.380	12.0	LOS B	1.5	11.3	0.73	1.08	0.99	43.9
8	T1	All MCs	3	0.0	3	0.0	0.380	21.3	LOS C	1.5	11.3	0.73	1.08	0.99	44.0
9	R2	All MCs	65	9.7	65	9.7	0.380	28.6	LOS D	1.5	11.3	0.73	1.08	0.99	43.7
Approach			120	7.0	120	7.0	0.380	21.3	LOS C	1.5	11.3	0.73	1.08	0.99	43.8
West: St Vincents Road															
10	L2	All MCs	27	7.7	27	7.7	0.207	6.1	LOS A	0.1	0.5	0.02	0.07	0.02	56.6
11	T1	All MCs	353	5.4	353	5.4	0.207	0.1	LOS A	0.1	0.5	0.02	0.07	0.02	59.4
12	R2	All MCs	4	0.0	4	0.0	0.207	8.4	LOS A	0.1	0.5	0.02	0.07	0.02	57.0
Approach			384	5.5	384	5.5	0.207	0.6	NA	0.1	0.5	0.02	0.07	0.02	59.2
All Vehicles			1118	5.2	1118	5.2	0.380	2.9	NA	1.5	11.3	0.12	0.19	0.15	56.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (4)] 2038 PM BG (Blinzinger Road / St Vincents Road)
Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	6	0.0	6	0.0	0.030	11.0	LOS B	0.1	0.7	0.66	0.94	0.66	47.1
2	T1	All MCs	1	0.0	1	0.0	0.030	18.4	LOS C	0.1	0.7	0.66	0.94	0.66	47.1
3	R2	All MCs	4	0.0	4	0.0	0.030	21.4	LOS C	0.1	0.7	0.66	0.94	0.66	47.1
Approach			12	0.0	12	0.0	0.030	15.4	LOS C	0.1	0.7	0.66	0.94	0.66	47.1
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.317	7.6	LOS A	0.3	2.1	0.07	0.08	0.07	57.0
5	T1	All MCs	558	3.4	558	3.4	0.317	0.2	LOS A	0.3	2.1	0.07	0.08	0.07	59.4
6	R2	All MCs	26	0.0	26	0.0	0.317	7.7	LOS A	0.3	2.1	0.07	0.08	0.07	56.9
Approach			587	3.2	587	3.2	0.317	0.5	NA	0.3	2.1	0.07	0.08	0.07	59.3
North: Blinzinger Road															
7	L2	All MCs	43	0.0	43	0.0	0.228	10.5	LOS B	0.8	5.6	0.68	1.01	0.74	46.0
8	T1	All MCs	4	0.0	4	0.0	0.228	19.9	LOS C	0.8	5.6	0.68	1.01	0.74	46.0
9	R2	All MCs	35	6.1	35	6.1	0.228	25.7	LOS D	0.8	5.6	0.68	1.01	0.74	45.8
Approach			82	2.6	82	2.6	0.228	17.4	LOS C	0.8	5.6	0.68	1.01	0.74	45.9
West: St Vincents Road															
10	L2	All MCs	32	6.7	32	6.7	0.236	6.1	LOS A	0.1	0.6	0.03	0.07	0.03	56.7
11	T1	All MCs	408	2.3	408	2.3	0.236	0.1	LOS A	0.1	0.6	0.03	0.07	0.03	59.4
12	R2	All MCs	5	0.0	5	0.0	0.236	8.3	LOS A	0.1	0.6	0.03	0.07	0.03	57.0
Approach			445	2.6	445	2.6	0.236	0.6	NA	0.1	0.6	0.03	0.07	0.03	59.2
All Vehicles			1126	2.9	1126	2.9	0.317	1.9	NA	0.8	5.6	0.10	0.15	0.10	57.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (5)] 2028 AM Design (Blinzinger Road / St Vincents Road)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	13	0.0	13	0.0	0.033	10.6	LOS B	0.1	0.8	0.57	0.91	0.57	48.7
2	T1	All MCs	1	0.0	1	0.0	0.033	15.8	LOS C	0.1	0.8	0.57	0.91	0.57	48.7
3	R2	All MCs	4	0.0	4	0.0	0.033	18.2	LOS C	0.1	0.8	0.57	0.91	0.57	48.7
Approach			18	0.0	18	0.0	0.033	12.7	LOS B	0.1	0.8	0.57	0.91	0.57	48.7
East: St Vincents Road															
4	L2	All MCs	6	0.0	6	0.0	0.288	6.9	LOS A	0.2	1.5	0.05	0.06	0.05	57.1
5	T1	All MCs	508	5.0	508	5.0	0.288	0.1	LOS A	0.2	1.5	0.05	0.06	0.05	59.5
6	R2	All MCs	19	0.0	19	0.0	0.288	7.2	LOS A	0.2	1.5	0.05	0.06	0.05	57.0
Approach			534	4.7	534	4.7	0.288	0.4	NA	0.2	1.5	0.05	0.06	0.05	59.4
North: Blinzinger Road															
7	L2	All MCs	55	3.8	55	3.8	0.496	12.8	LOS B	2.4	17.6	0.75	1.13	1.17	43.8
8	T1	All MCs	3	0.0	3	0.0	0.496	20.8	LOS C	2.4	17.6	0.75	1.13	1.17	43.9
9	R2	All MCs	118	5.4	118	5.4	0.496	25.4	LOS D	2.4	17.6	0.75	1.13	1.17	43.8
Approach			176	4.8	176	4.8	0.496	21.4	LOS C	2.4	17.6	0.75	1.13	1.17	43.8
West: St Vincents Road															
10	L2	All MCs	39	5.4	39	5.4	0.193	5.9	LOS A	0.1	0.5	0.02	0.09	0.02	56.5
11	T1	All MCs	315	5.4	315	5.4	0.193	0.0	LOS A	0.1	0.5	0.02	0.09	0.02	59.2
12	R2	All MCs	4	0.0	4	0.0	0.193	7.8	LOS A	0.1	0.5	0.02	0.09	0.02	56.8
Approach			358	5.3	358	5.3	0.193	0.8	NA	0.1	0.5	0.02	0.09	0.02	58.9
All Vehicles			1085	4.8	1085	4.8	0.496	4.1	NA	2.4	17.6	0.16	0.26	0.23	55.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (6)] 2028 PM Design (Blinzinger Road / St Vincents Road)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	6	0.0	6	0.0	0.026	10.5	LOS B	0.1	0.6	0.60	0.92	0.60	47.9
2	T1	All MCs	1	0.0	1	0.0	0.026	17.1	LOS C	0.1	0.6	0.60	0.92	0.60	47.9
3	R2	All MCs	4	0.0	4	0.0	0.026	18.6	LOS C	0.1	0.6	0.60	0.92	0.60	47.9
Approach			12	0.0	12	0.0	0.026	14.0	LOS B	0.1	0.6	0.60	0.92	0.60	47.9
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.287	7.6	LOS A	0.3	2.2	0.08	0.09	0.08	56.9
5	T1	All MCs	498	3.4	498	3.4	0.287	0.2	LOS A	0.3	2.2	0.08	0.09	0.08	59.3
6	R2	All MCs	27	0.0	27	0.0	0.287	7.7	LOS A	0.3	2.2	0.08	0.09	0.08	56.9
Approach			528	3.2	528	3.2	0.287	0.6	NA	0.3	2.2	0.08	0.09	0.08	59.2
North: Blinzinger Road															
7	L2	All MCs	41	0.0	41	0.0	0.269	10.5	LOS B	1.0	7.1	0.68	1.03	0.78	45.9
8	T1	All MCs	4	0.0	4	0.0	0.269	18.5	LOS C	1.0	7.1	0.68	1.03	0.78	45.9
9	R2	All MCs	55	3.8	55	3.8	0.269	22.6	LOS C	1.0	7.1	0.68	1.03	0.78	45.8
Approach			100	2.1	100	2.1	0.269	17.5	LOS C	1.0	7.1	0.68	1.03	0.78	45.9
West: St Vincents Road															
10	L2	All MCs	84	2.5	84	2.5	0.241	5.7	LOS A	0.1	0.6	0.02	0.13	0.02	56.3
11	T1	All MCs	365	2.3	365	2.3	0.241	0.0	LOS A	0.1	0.6	0.02	0.13	0.02	58.8
12	R2	All MCs	5	0.0	5	0.0	0.241	7.7	LOS A	0.1	0.6	0.02	0.13	0.02	56.4
Approach			455	2.3	455	2.3	0.241	1.2	NA	0.1	0.6	0.02	0.13	0.02	58.3
All Vehicles			1095	2.7	1095	2.7	0.287	2.5	NA	1.0	7.1	0.11	0.20	0.12	57.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [2 (7)] 2038 AM Design (Blinzinger Road / St Vincents Road)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	14	0.0	14	0.0	0.040	11.2	LOS B	0.1	0.9	0.61	0.94	0.61	48.1
2	T1	All MCs	1	0.0	1	0.0	0.040	18.0	LOS C	0.1	0.9	0.61	0.94	0.61	48.1
3	R2	All MCs	4	0.0	4	0.0	0.040	21.1	LOS C	0.1	0.9	0.61	0.94	0.61	48.0
Approach			19	0.0	19	0.0	0.040	13.7	LOS B	0.1	0.9	0.61	0.94	0.61	48.1
East: St Vincents Road															
4	L2	All MCs	6	0.0	6	0.0	0.322	7.2	LOS A	0.2	1.7	0.05	0.07	0.05	57.0
5	T1	All MCs	569	5.0	569	5.0	0.322	0.1	LOS A	0.2	1.7	0.05	0.07	0.05	59.5
6	R2	All MCs	21	0.0	21	0.0	0.322	7.5	LOS A	0.2	1.7	0.05	0.07	0.05	57.0
Approach			597	4.8	597	4.8	0.322	0.4	NA	0.2	1.7	0.05	0.07	0.05	59.4
North: Blinzinger Road															
7	L2	All MCs	60	3.5	60	3.5	0.632	16.1	LOS C	3.4	24.4	0.84	1.22	1.55	41.0
8	T1	All MCs	3	0.0	3	0.0	0.632	26.8	LOS D	3.4	24.4	0.84	1.22	1.55	41.0
9	R2	All MCs	124	5.1	124	5.1	0.632	32.9	LOS D	3.4	24.4	0.84	1.22	1.55	40.9
Approach			187	4.5	187	4.5	0.632	27.4	LOS D	3.4	24.4	0.84	1.22	1.55	40.9
West: St Vincents Road															
10	L2	All MCs	42	5.0	42	5.0	0.215	5.9	LOS A	0.1	0.5	0.02	0.09	0.02	56.6
11	T1	All MCs	353	5.4	353	5.4	0.215	0.1	LOS A	0.1	0.5	0.02	0.09	0.02	59.3
12	R2	All MCs	4	0.0	4	0.0	0.215	8.3	LOS A	0.1	0.5	0.02	0.09	0.02	56.8
Approach			399	5.3	399	5.3	0.215	0.8	NA	0.1	0.5	0.02	0.09	0.02	58.9
All Vehicles			1202	4.8	1202	4.8	0.632	5.0	NA	3.4	24.4	0.17	0.27	0.28	55.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (8)] 2038 PM Design (Blinzinger Road / St Vincents Road)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Blinzinger Road															
1	L2	All MCs	6	0.0	6	0.0	0.031	11.0	LOS B	0.1	0.7	0.66	0.94	0.66	47.0
2	T1	All MCs	1	0.0	1	0.0	0.031	19.7	LOS C	0.1	0.7	0.66	0.94	0.66	47.0
3	R2	All MCs	4	0.0	4	0.0	0.031	21.6	LOS C	0.1	0.7	0.66	0.94	0.66	47.0
Approach			12	0.0	12	0.0	0.031	15.6	LOS C	0.1	0.7	0.66	0.94	0.66	47.0
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.323	7.9	LOS A	0.4	2.6	0.08	0.10	0.08	56.9
5	T1	All MCs	558	3.4	558	3.4	0.323	0.2	LOS A	0.4	2.6	0.08	0.10	0.08	59.3
6	R2	All MCs	31	0.0	31	0.0	0.323	8.0	LOS A	0.4	2.6	0.08	0.10	0.08	56.8
Approach			592	3.2	592	3.2	0.323	0.7	NA	0.4	2.6	0.08	0.10	0.08	59.2
North: Blinzinger Road															
7	L2	All MCs	45	0.0	45	0.0	0.349	11.8	LOS B	1.4	9.6	0.74	1.07	0.96	44.1
8	T1	All MCs	4	0.0	4	0.0	0.349	22.5	LOS C	1.4	9.6	0.74	1.07	0.96	44.1
9	R2	All MCs	59	3.6	59	3.6	0.349	27.7	LOS D	1.4	9.6	0.74	1.07	0.96	44.0
Approach			108	1.9	108	1.9	0.349	20.9	LOS C	1.4	9.6	0.74	1.07	0.96	44.1
West: St Vincents Road															
10	L2	All MCs	87	2.4	87	2.4	0.266	5.8	LOS A	0.1	0.7	0.02	0.13	0.02	56.4
11	T1	All MCs	408	2.3	408	2.3	0.266	0.1	LOS A	0.1	0.7	0.02	0.13	0.02	58.9
12	R2	All MCs	5	0.0	5	0.0	0.266	8.2	LOS A	0.1	0.7	0.02	0.13	0.02	56.5
Approach			501	2.3	501	2.3	0.266	1.1	NA	0.1	0.7	0.02	0.13	0.02	58.4
All Vehicles			1213	2.7	1213	2.7	0.349	2.8	NA	1.4	9.6	0.12	0.21	0.14	57.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

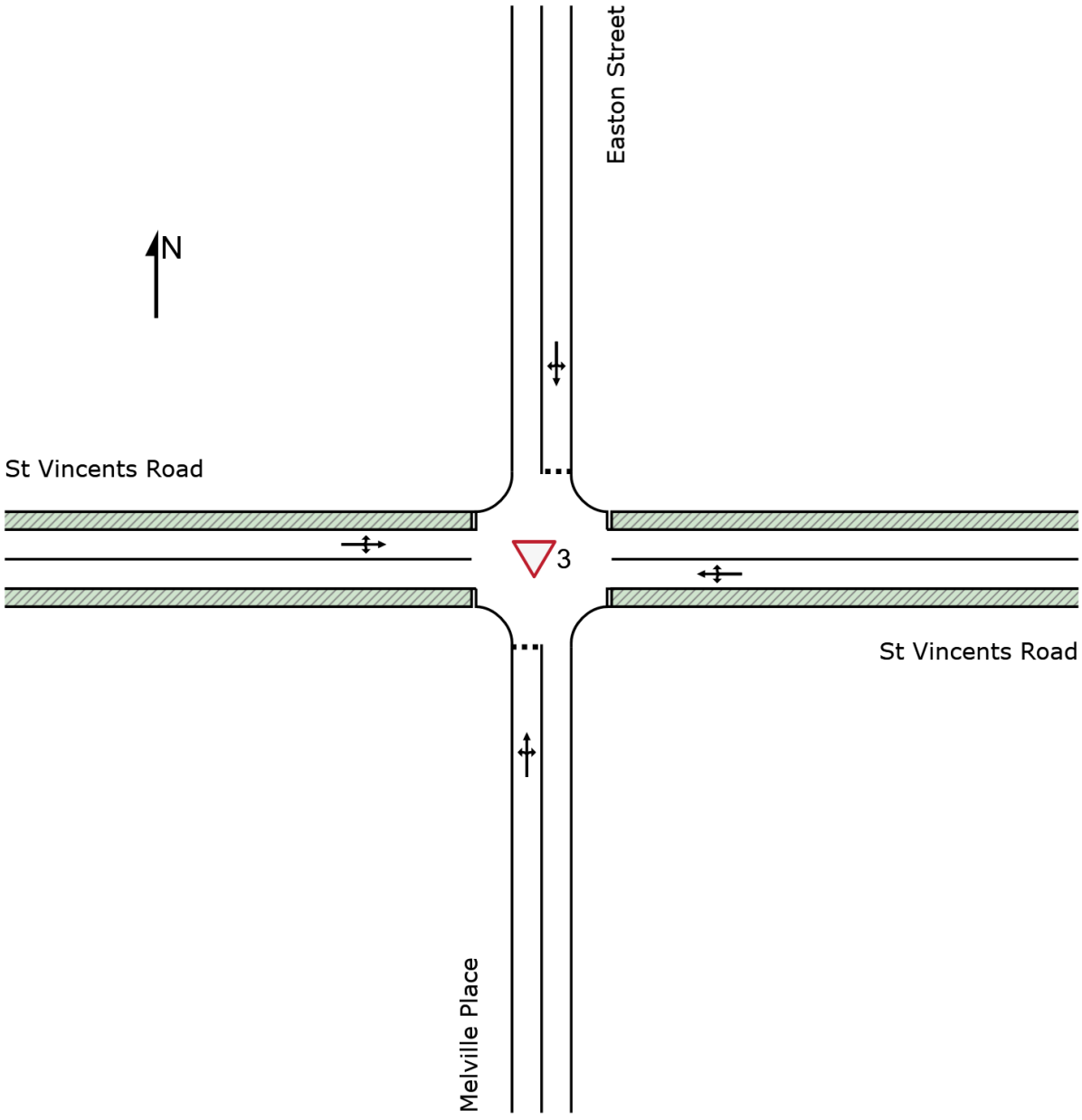
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SITE LAYOUT

Site: [3] 2028 AM BG (St Vincents Road / Easton Street / Melville Place)

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: [3] 2028 AM BG (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	16	0.0	16	0.0	0.034	7.4	LOS A	0.1	0.8	0.53	0.70	0.53	50.4
2	T1	All MCs	1	0.0	1	0.0	0.034	10.0	LOS B	0.1	0.8	0.53	0.70	0.53	50.8
3	R2	All MCs	6	0.0	6	0.0	0.034	12.6	LOS B	0.1	0.8	0.53	0.70	0.53	50.3
Approach			23	0.0	23	0.0	0.034	8.9	LOS A	0.1	0.8	0.53	0.70	0.53	50.4
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.264	6.6	LOS A	0.1	0.7	0.03	0.03	0.03	57.3
5	T1	All MCs	482	4.6	482	4.6	0.264	0.0	LOS A	0.1	0.7	0.03	0.03	0.03	59.7
6	R2	All MCs	9	0.0	9	0.0	0.264	6.7	LOS A	0.1	0.7	0.03	0.03	0.03	57.2
Approach			495	4.5	495	4.5	0.264	0.2	NA	0.1	0.7	0.03	0.03	0.03	59.7
North: Easton Street															
7	L2	All MCs	7	0.0	7	0.0	0.047	6.7	LOS A	0.2	1.1	0.58	0.75	0.58	49.2
8	T1	All MCs	1	0.0	1	0.0	0.047	10.1	LOS B	0.2	1.1	0.58	0.75	0.58	49.6
9	R2	All MCs	15	0.0	15	0.0	0.047	12.8	LOS B	0.2	1.1	0.58	0.75	0.58	49.1
Approach			23	0.0	23	0.0	0.047	10.7	LOS B	0.2	1.1	0.58	0.75	0.58	49.2
West: St Vincents Road															
10	L2	All MCs	8	0.0	8	0.0	0.195	7.1	LOS A	0.1	1.0	0.05	0.07	0.05	57.0
11	T1	All MCs	342	4.9	342	4.9	0.195	0.1	LOS A	0.1	1.0	0.05	0.07	0.05	59.5
12	R2	All MCs	11	0.0	11	0.0	0.195	7.7	LOS A	0.1	1.0	0.05	0.07	0.05	56.9
Approach			361	4.7	361	4.7	0.195	0.5	NA	0.1	1.0	0.05	0.07	0.05	59.3
All Vehicles			902	4.3	902	4.3	0.264	0.8	NA	0.2	1.1	0.06	0.08	0.06	58.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [3 (2)] 2028 PM BG (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	5	0.0	5	0.0	0.019	7.4	LOS A	0.1	0.4	0.57	0.71	0.57	49.8
2	T1	All MCs	2	0.0	2	0.0	0.019	10.5	LOS B	0.1	0.4	0.57	0.71	0.57	50.2
3	R2	All MCs	3	0.0	3	0.0	0.019	13.2	LOS B	0.1	0.4	0.57	0.71	0.57	49.8
Approach			11	0.0	11	0.0	0.019	9.8	LOS A	0.1	0.4	0.57	0.71	0.57	49.9
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.277	7.1	LOS A	0.1	1.0	0.04	0.05	0.04	57.2
5	T1	All MCs	503	3.3	503	3.3	0.277	0.1	LOS A	0.1	1.0	0.04	0.05	0.04	59.7
6	R2	All MCs	14	0.0	14	0.0	0.277	7.2	LOS A	0.1	1.0	0.04	0.05	0.04	57.1
Approach			520	3.2	520	3.2	0.277	0.3	NA	0.1	1.0	0.04	0.05	0.04	59.6
North: Easton Street															
7	L2	All MCs	7	28.6	7	28.6	0.036	7.6	LOS A	0.1	0.9	0.57	0.73	0.57	48.2
8	T1	All MCs	1	0.0	1	0.0	0.036	10.6	LOS B	0.1	0.9	0.57	0.73	0.57	49.6
9	R2	All MCs	9	0.0	9	0.0	0.036	13.4	LOS B	0.1	0.9	0.57	0.73	0.57	49.1
Approach			18	11.8	18	11.8	0.036	10.8	LOS B	0.1	0.9	0.57	0.73	0.57	48.8
West: St Vincents Road															
10	L2	All MCs	8	0.0	8	0.0	0.210	7.4	LOS A	0.2	1.3	0.06	0.09	0.06	56.9
11	T1	All MCs	368	2.0	368	2.0	0.210	0.2	LOS A	0.2	1.3	0.06	0.09	0.06	59.4
12	R2	All MCs	15	0.0	15	0.0	0.210	7.9	LOS A	0.2	1.3	0.06	0.09	0.06	56.8
Approach			392	1.9	392	1.9	0.210	0.6	NA	0.2	1.3	0.06	0.09	0.06	59.2
All Vehicles			940	2.8	940	2.8	0.277	0.7	NA	0.2	1.3	0.06	0.08	0.06	59.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [3 (3)] 2038 AM BG (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	18	0.0	18	0.0	0.041	7.7	LOS A	0.1	1.0	0.57	0.74	0.57	50.0
2	T1	All MCs	1	0.0	1	0.0	0.041	11.5	LOS B	0.1	1.0	0.57	0.74	0.57	50.4
3	R2	All MCs	6	0.0	6	0.0	0.041	14.4	LOS B	0.1	1.0	0.57	0.74	0.57	49.9
Approach			25	0.0	25	0.0	0.041	9.6	LOS A	0.1	1.0	0.57	0.74	0.57	50.0
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.296	6.9	LOS A	0.1	0.9	0.03	0.03	0.03	57.3
5	T1	All MCs	541	4.7	541	4.7	0.296	0.0	LOS A	0.1	0.9	0.03	0.03	0.03	59.7
6	R2	All MCs	11	0.0	11	0.0	0.296	7.1	LOS A	0.1	0.9	0.03	0.03	0.03	57.2
Approach			555	4.6	555	4.6	0.296	0.2	NA	0.1	0.9	0.03	0.03	0.03	59.7
North: Easton Street															
7	L2	All MCs	7	0.0	7	0.0	0.061	6.9	LOS A	0.2	1.4	0.62	0.81	0.62	48.2
8	T1	All MCs	1	0.0	1	0.0	0.061	11.5	LOS B	0.2	1.4	0.62	0.81	0.62	48.5
9	R2	All MCs	17	0.0	17	0.0	0.061	14.7	LOS B	0.2	1.4	0.62	0.81	0.62	48.1
Approach			25	0.0	25	0.0	0.061	12.3	LOS B	0.2	1.4	0.62	0.81	0.62	48.1
West: St Vincents Road															
10	L2	All MCs	9	0.0	9	0.0	0.220	7.4	LOS A	0.2	1.2	0.05	0.08	0.05	57.0
11	T1	All MCs	383	4.9	383	4.9	0.220	0.1	LOS A	0.2	1.2	0.05	0.08	0.05	59.5
12	R2	All MCs	12	0.0	12	0.0	0.220	8.2	LOS A	0.2	1.2	0.05	0.08	0.05	56.9
Approach			404	4.7	404	4.7	0.220	0.5	NA	0.2	1.2	0.05	0.08	0.05	59.3
All Vehicles			1009	4.4	1009	4.4	0.296	0.9	NA	0.2	1.4	0.07	0.09	0.07	58.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [3 (4)] 2038 PM BG (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	5	0.0	5	0.0	0.022	7.8	LOS A	0.1	0.5	0.61	0.75	0.61	49.1
2	T1	All MCs	2	0.0	2	0.0	0.022	12.0	LOS B	0.1	0.5	0.61	0.75	0.61	49.5
3	R2	All MCs	3	0.0	3	0.0	0.022	15.2	LOS C	0.1	0.5	0.61	0.75	0.61	49.0
Approach			11	0.0	11	0.0	0.022	10.9	LOS B	0.1	0.5	0.61	0.75	0.61	49.2
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.310	7.4	LOS A	0.2	1.2	0.04	0.05	0.04	57.2
5	T1	All MCs	564	3.4	564	3.4	0.310	0.1	LOS A	0.2	1.2	0.04	0.05	0.04	59.7
6	R2	All MCs	15	0.0	15	0.0	0.310	7.5	LOS A	0.2	1.2	0.04	0.05	0.04	57.1
Approach			582	3.3	582	3.3	0.310	0.3	NA	0.2	1.2	0.04	0.05	0.04	59.6
North: Easton Street															
7	L2	All MCs	7	28.6	7	28.6	0.046	8.0	LOS A	0.1	1.1	0.62	0.78	0.62	47.3
8	T1	All MCs	1	0.0	1	0.0	0.046	12.2	LOS B	0.1	1.1	0.62	0.78	0.62	48.6
9	R2	All MCs	11	0.0	11	0.0	0.046	15.4	LOS C	0.1	1.1	0.62	0.78	0.62	48.2
Approach			19	11.1	19	11.1	0.046	12.4	LOS B	0.1	1.1	0.62	0.78	0.62	47.8
West: St Vincents Road															
10	L2	All MCs	9	0.0	9	0.0	0.236	7.8	LOS A	0.2	1.7	0.07	0.10	0.07	56.9
11	T1	All MCs	412	1.8	412	1.8	0.236	0.2	LOS A	0.2	1.7	0.07	0.10	0.07	59.3
12	R2	All MCs	17	0.0	17	0.0	0.236	8.4	LOS A	0.2	1.7	0.07	0.10	0.07	56.8
Approach			438	1.7	438	1.7	0.236	0.7	NA	0.2	1.7	0.07	0.10	0.07	59.2
All Vehicles			1049	2.7	1049	2.7	0.310	0.8	NA	0.2	1.7	0.07	0.09	0.07	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: [3 (5)] 2028 AM Design (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	16	0.0	16	0.0	0.035	7.4	LOS A	0.1	0.8	0.54	0.70	0.54	50.3
2	T1	All MCs	1	0.0	1	0.0	0.035	10.2	LOS B	0.1	0.8	0.54	0.70	0.54	50.7
3	R2	All MCs	6	0.0	6	0.0	0.035	13.0	LOS B	0.1	0.8	0.54	0.70	0.54	50.3
Approach			23	0.0	23	0.0	0.035	9.0	LOS A	0.1	0.8	0.54	0.70	0.54	50.3
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.267	7.0	LOS A	0.1	1.0	0.03	0.04	0.03	57.2
5	T1	All MCs	484	4.6	484	4.6	0.267	0.1	LOS A	0.1	1.0	0.03	0.04	0.03	59.7
6	R2	All MCs	13	0.0	13	0.0	0.267	7.1	LOS A	0.1	1.0	0.03	0.04	0.03	57.1
Approach			500	4.4	500	4.4	0.267	0.3	NA	0.1	1.0	0.03	0.04	0.03	59.6
North: Easton Street															
7	L2	All MCs	19	0.0	19	0.0	0.057	6.8	LOS A	0.2	1.3	0.54	0.71	0.54	50.0
8	T1	All MCs	1	0.0	1	0.0	0.057	10.3	LOS B	0.2	1.3	0.54	0.71	0.54	50.4
9	R2	All MCs	15	0.0	15	0.0	0.057	13.1	LOS B	0.2	1.3	0.54	0.71	0.54	49.9
Approach			35	0.0	35	0.0	0.057	9.6	LOS A	0.2	1.3	0.54	0.71	0.54	50.0
West: St Vincents Road															
10	L2	All MCs	8	0.0	8	0.0	0.200	7.1	LOS A	0.1	1.0	0.05	0.07	0.05	57.0
11	T1	All MCs	351	4.8	351	4.8	0.200	0.1	LOS A	0.1	1.0	0.05	0.07	0.05	59.5
12	R2	All MCs	11	0.0	11	0.0	0.200	7.8	LOS A	0.1	1.0	0.05	0.07	0.05	56.9
Approach			369	4.6	369	4.6	0.200	0.5	NA	0.1	1.0	0.05	0.07	0.05	59.4
All Vehicles			927	4.2	927	4.2	0.267	0.9	NA	0.2	1.3	0.07	0.10	0.07	58.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [3 (6)] 2028 PM Design (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	5	0.0	5	0.0	0.019	7.5	LOS A	0.1	0.4	0.58	0.71	0.58	49.7
2	T1	All MCs	2	0.0	2	0.0	0.019	10.8	LOS B	0.1	0.4	0.58	0.71	0.58	50.1
3	R2	All MCs	3	0.0	3	0.0	0.019	13.6	LOS B	0.1	0.4	0.58	0.71	0.58	49.6
Approach			11	0.0	11	0.0	0.019	10.0	LOS A	0.1	0.4	0.58	0.71	0.58	49.8
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.291	7.2	LOS A	0.3	2.1	0.07	0.09	0.07	56.9
5	T1	All MCs	507	3.3	507	3.3	0.291	0.1	LOS A	0.3	2.1	0.07	0.09	0.07	59.4
6	R2	All MCs	28	0.0	28	0.0	0.291	7.2	LOS A	0.3	2.1	0.07	0.09	0.07	56.8
Approach			539	3.1	539	3.1	0.291	0.6	NA	0.3	2.1	0.07	0.09	0.07	59.2
North: Easton Street															
7	L2	All MCs	14	15.4	14	15.4	0.043	7.3	LOS A	0.1	1.1	0.55	0.70	0.55	49.2
8	T1	All MCs	1	0.0	1	0.0	0.043	11.0	LOS B	0.1	1.1	0.55	0.70	0.55	50.1
9	R2	All MCs	9	0.0	9	0.0	0.043	13.8	LOS B	0.1	1.1	0.55	0.70	0.55	49.7
Approach			24	8.7	24	8.7	0.043	10.0	LOS B	0.1	1.1	0.55	0.70	0.55	49.4
West: St Vincents Road															
10	L2	All MCs	8	0.0	8	0.0	0.211	7.4	LOS A	0.2	1.4	0.06	0.09	0.06	56.9
11	T1	All MCs	371	2.0	371	2.0	0.211	0.2	LOS A	0.2	1.4	0.06	0.09	0.06	59.4
12	R2	All MCs	15	0.0	15	0.0	0.211	7.9	LOS A	0.2	1.4	0.06	0.09	0.06	56.8
Approach			394	1.9	394	1.9	0.211	0.6	NA	0.2	1.4	0.06	0.09	0.06	59.2
All Vehicles			967	2.7	967	2.7	0.291	0.9	NA	0.3	2.1	0.08	0.11	0.08	58.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [3 (7)] 2038 AM Design (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	18	0.0	18	0.0	0.042	7.7	LOS A	0.1	1.0	0.57	0.74	0.57	49.9
2	T1	All MCs	1	0.0	1	0.0	0.042	11.7	LOS B	0.1	1.0	0.57	0.74	0.57	50.3
3	R2	All MCs	6	0.0	6	0.0	0.042	14.9	LOS B	0.1	1.0	0.57	0.74	0.57	49.8
Approach			25	0.0	25	0.0	0.042	9.7	LOS A	0.1	1.0	0.57	0.74	0.57	49.9
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.300	7.2	LOS A	0.2	1.1	0.04	0.05	0.04	57.2
5	T1	All MCs	543	4.7	543	4.7	0.300	0.1	LOS A	0.2	1.1	0.04	0.05	0.04	59.7
6	R2	All MCs	14	0.0	14	0.0	0.300	7.4	LOS A	0.2	1.1	0.04	0.05	0.04	57.1
Approach			560	4.5	560	4.5	0.300	0.3	NA	0.2	1.1	0.04	0.05	0.04	59.6
North: Easton Street															
7	L2	All MCs	19	0.0	19	0.0	0.073	7.0	LOS A	0.2	1.7	0.59	0.76	0.59	49.1
8	T1	All MCs	1	0.0	1	0.0	0.073	11.8	LOS B	0.2	1.7	0.59	0.76	0.59	49.5
9	R2	All MCs	17	0.0	17	0.0	0.073	15.1	LOS C	0.2	1.7	0.59	0.76	0.59	49.1
Approach			37	0.0	37	0.0	0.073	10.8	LOS B	0.2	1.7	0.59	0.76	0.59	49.1
West: St Vincents Road															
10	L2	All MCs	9	0.0	9	0.0	0.224	7.4	LOS A	0.2	1.2	0.05	0.08	0.05	57.0
11	T1	All MCs	392	4.8	392	4.8	0.224	0.1	LOS A	0.2	1.2	0.05	0.08	0.05	59.5
12	R2	All MCs	12	0.0	12	0.0	0.224	8.2	LOS A	0.2	1.2	0.05	0.08	0.05	56.9
Approach			413	4.6	413	4.6	0.224	0.5	NA	0.2	1.2	0.05	0.08	0.05	59.3
All Vehicles			1035	4.3	1035	4.3	0.300	1.0	NA	0.2	1.7	0.07	0.10	0.07	58.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [3 (8)] 2038 PM Design (St Vincents Road / Easton Street / Melville Place)

Output produced by SIDRA INTERSECTION Version: 10.0.6.236

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Melville Place															
1	L2	All MCs	5	0.0	5	0.0	0.022	7.8	LOS A	0.1	0.5	0.62	0.75	0.62	48.9
2	T1	All MCs	2	0.0	2	0.0	0.022	12.4	LOS B	0.1	0.5	0.62	0.75	0.62	49.3
3	R2	All MCs	3	0.0	3	0.0	0.022	15.8	LOS C	0.1	0.5	0.62	0.75	0.62	48.9
Approach			11	0.0	11	0.0	0.022	11.1	LOS B	0.1	0.5	0.62	0.75	0.62	49.0
East: St Vincents Road															
4	L2	All MCs	3	0.0	3	0.0	0.325	7.5	LOS A	0.3	2.3	0.07	0.09	0.07	56.9
5	T1	All MCs	568	3.3	568	3.3	0.325	0.2	LOS A	0.3	2.3	0.07	0.09	0.07	59.4
6	R2	All MCs	29	0.0	29	0.0	0.325	7.6	LOS A	0.3	2.3	0.07	0.09	0.07	56.8
Approach			601	3.2	601	3.2	0.325	0.6	NA	0.3	2.3	0.07	0.09	0.07	59.2
North: Easton Street															
7	L2	All MCs	14	15.4	14	15.4	0.053	7.5	LOS A	0.2	1.3	0.60	0.75	0.60	48.3
8	T1	All MCs	1	0.0	1	0.0	0.053	12.6	LOS B	0.2	1.3	0.60	0.75	0.60	49.2
9	R2	All MCs	11	0.0	11	0.0	0.053	16.1	LOS C	0.2	1.3	0.60	0.75	0.60	48.8
Approach			25	8.3	25	8.3	0.053	11.3	LOS B	0.2	1.3	0.60	0.75	0.60	48.6
West: St Vincents Road															
10	L2	All MCs	9	0.0	9	0.0	0.237	7.8	LOS A	0.2	1.7	0.07	0.10	0.07	56.9
11	T1	All MCs	414	1.8	414	1.8	0.237	0.2	LOS A	0.2	1.7	0.07	0.10	0.07	59.3
12	R2	All MCs	17	0.0	17	0.0	0.237	8.4	LOS A	0.2	1.7	0.07	0.10	0.07	56.8
Approach			440	1.7	440	1.7	0.237	0.7	NA	0.2	1.7	0.07	0.10	0.07	59.2
All Vehicles			1077	2.6	1077	2.6	0.325	1.0	NA	0.3	2.3	0.09	0.11	0.09	58.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Appendix E – TAPS Code Response

9.4.11 Transport, access, parking and servicing code

9.4.11.1 Application

1. This code applies to assessing:
    a. operational work which is assessable development if this code is identified as a prescribed secondary code in the assessment benchmarks column of a table of assessment for operational work (section 5.8); or
    b. a material change of use or reconfiguring a lot if:
        i. assessable development where this code is identified as a prescribed secondary code in the assessment benchmarks column of a table of assessment for a material change of use (section 5.5) reconfiguring a lot (section 5.6), or an overlay (section 5.10); or
        ii. impact assessable development, to the extent relevant.
2. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code contains performance outcomes or acceptable outcomes that relate to:

- crime prevention through environmental design principles, guidance is included in the Crime prevention through environmental design planning scheme policy;
- design for the reduction of graffiti, guidance is provided and the Graffiti prevention planning scheme policy;
- infrastructure design and construction works, guidance is provided in the Infrastructure design planning scheme policy;
- refuse and recycling, guidance is provided in the Refuse planning scheme policy;
- transport, access, parking and servicing standards and guidelines are contained in the Transport, access, parking and servicing planning scheme policy and the Infrastructure design planning scheme policy.

Note—If involving a standard format lot with common property such as requiring a community management scheme under the *Body Corporate and Community Management Act 1997*, the development contains a reconfiguring a lot aspect of development and the Subdivision code will apply.

9.4.11.2 Purpose

1. The purpose of the Transport, access, parking and servicing code is to assess the suitability of the transport, access, parking and servicing aspects of development.
2. The purpose of the code will be achieved through the following overall outcomes:
    a. Development provides for access, circulation, parking and vehicle-based services for all relevant transport modes, including walking, cycling and public transport relevant to the nature of the proposed development and its location in relation to the transport network and surrounding existing and future land uses.
    b. Development enhances the potential for trip making other than by private vehicle.
    c. Development provides safe access for all transport modes that does not impact adversely on the efficiency and safety of the transport network or diminish the amenity of nearby land uses.
    d. Development ensures that impacts on amenity caused by traffic generation is consistent with the community's reasonable expectations for the intended use.
    e. Development provides site access arrangements to ensure that any adverse impacts on other development, the transport network and those who use it, are

minimised to maintain amenity of the area and the safety and efficiency of the transport system.

f. Development ensures that access, parking and servicing arrangements and impacts such as noise, are consistent with the community's reasonable expectations and avoid risk of damage to people, property and vehicles.
g. Development maximises safety in the use of the transport network, particularly for the most vulnerable users (children, pedestrians, persons with disabilities and cyclists) so that all transport modes are safe and convenient.
h. Development provides for walking and cycling routes and end-of-trip facilities for pedestrians and cyclists, designed and located to make walking and cycling attractive and viable transport options.
i. Development envisaged by the planning scheme, which will potentially have an adverse impact on the operation of the transport network, is designed and of a scale that maintains the safety and efficiency of the transport network.
j. Development provides for on-site parking and manoeuvring areas for cars, motorcycles, bicycles and service vehicles which:
    i. are safe and convenient to use;
    ii. if outside the City core and the City frame identified in Figure a are adequate to meet the design peak-parking demands without significant overflow to adjacent premises or the generation of excessive on-street car parking demand, taking into account the requirements of other road users.
k. Development provides for on-site servicing that is safe, convenient to use, but discrete, and adequate to meet the reasonably expected demands generated by the development, without significant adverse impacts on the external road system or adjacent premises.
l. Development accommodates future road upgrades and widenings ensuring the ongoing capacity, efficiency and safety of the transport network.

9.4.11.3 Performance outcomes and acceptable outcomes

Table 9.4.11.3—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
PO1 Development is designed: a. to include a technically competent and accurate response to the transport and traffic elements of the development; b. in accordance with the standards in the Transport, access, parking and servicing planning scheme policy; c. to ensure the efficient operation and safety of the development and its surrounds. Note—The acceptable outcome and performance outcome can be	**AO1** Development complies with the standards in the Transport, access, parking and servicing planning scheme policy.	Refer to Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.

demonstrated through a development application that: • is accompanied by sufficient information, including computer modelling input and output data, to allow the proposed development to be properly assessed against the requirements of this code and the standards and guidelines of the Transport, access, parking and servicing planning scheme policy; • is certified by a Registered Professional Engineer Queensland that all plans, documents and dimensioned drawings comply with the requirements of this code and the standards and guidelines of the Transport, access, parking and servicing planning scheme policy; • ensures that any computer modelling input and output data are accurate, reasonable and carried out in accordance with sound traffic engineering practices.		
PO2 Development of a major size incorporates on-site provision for integration with the public transport network and the management of vehicles, public transport, pedestrians and cyclists, including providing appropriate pedestrian and cyclist linkages to adjoining uses, public areas and the transport network consistent with the planning by the Queensland Government and Council.	**AO2** No acceptable outcome is prescribed.	N/A
PO3 Development provides vehicle access that is located and designed so as to have no significant impact on the safety, efficiency, function, convenience of use or capacity of the road network.	**AO3.1** Development provides site access that is located and designed in compliance with the standards in the Transport, access, parking and servicing planning scheme policy. **AO3.2** Development provides an easement for a vehicular access benefiting all adjoining landowners and the Council if the vehicular access services more than an individual development or premises.	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO4 Development provides walking and cycle routes through	**AO4.1** Development provides walking and cycle routes which are	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.

the site which: a. link to the external network and pedestrian and cyclist destinations such as schools, shopping centres, open space, public transport stations, shops and local activity centres along the safest, most direct and convenient routes; b. encourage walking and cycling; c. ensure pedestrian and cyclist safety; d. provide a direct and legible network. Note—The Infrastructure design planning scheme policy provides additional guidance on how to comply with this performance outcome.	constructed on the carriageway or through the site to: a. create a walking or cycle route along the full frontage of the site; b. connect to public transport and existing cycle and walking routes at the frontage or boundary of the site. **AO4.2** Development provides walking and cycle routes that are constructed in compliance with the standards in the Transport, access, parking and servicing planning scheme policy and the Infrastructure design planning scheme policy.	
	AO4.3 Development provides walking and cycle routes which do not include a potential entrapment area, blind corner or sudden change in level that restrict sightlines.	
PO5 Development provides secure and convenient bicycle parking which: a. for visitors is obvious and located close to the building's main entrance; b. for employees is conveniently located to provide secure and convenient access between the bicycle storage area, end-of-trip facilities and the main area of the building; c. is easily and safely accessible from outside the site; d. does not impact adversely on visual amenity; e. does not impede the movement of pedestrians or other vehicles; f. is designed to comply with a recognised standard for the construction of bicycle facilities. Note—For a performance outcome relating to the number of bicycle	**AO5.1** Development provides on-site bicycle parking spaces in compliance with the standards in the Transport, access, parking and servicing planning scheme policy. **AO5.2** Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers) in compliance with the Transport, access, parking and servicing planning scheme policy and AS 2890.3-1993 Bicycle parking facilities.	Refer to **Section 3.5** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
	AO5.3 Development ensures that the location of visitor bicycle parking is discernible either by direct view or using signs from the street.	
	AO5.4	

parking spaces provided, the application must demonstrate how the needs of the intended users of the site differ from the standard rates in the Transport, access, parking and servicing planning scheme policy.	Development provides visitor bicycle parking which does not impede pedestrian movement. **AO5.5** Development provides bicycle parking which is constructed in compliance with the standards in the Transport, access, parking and servicing planning scheme policy.	
PO6 Development provides shower cubicles and lockers in sufficient numbers to meet the needs and volume of predicted pedestrian and cyclist users. Note—For a performance outcome the application must demonstrate how the needs of the intended users of the site differ from the standard rates in the Transport, access, parking and servicing planning scheme policy.	**AO6** Development provides shower cubicles and lockers for pedestrians and cyclists in compliance with the standards in the Transport, access, parking and servicing planning scheme policy.	N/A
PO7 Development provides pedestrian and cyclist access to the site which is designed to provide safe movement and avoid unnecessary conflict between pedestrians, cyclists and motor vehicles.	**AO7** Development provides pedestrian and cycle access that is designed and constructed in compliance with the site access design guidelines, pedestrian facilities standards and cyclist facilities standards in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO8 Development provides pedestrian and cyclist access to and from the site which is located to take advantage of safe crossing points of the adjacent road system, key destinations and public transport facilities.	**AO8** No acceptable outcome is prescribed.	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO9 Development provides access driveways in the road area that are located, designed and controlled to: a. minimise adverse impacts on the safety and operation of the transport network, including the	**AO9.1** No acceptable outcome for access is prescribed, for a major development (as described in the Transport, access, parking and servicing planning scheme policy). **AO9.2**	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.

movement of pedestrians and cyclists; b. ensure the amenity of adjacent premises, from impacts such as noise and light.	Development which is not a major development (as described in the Transport, access, parking and servicing planning scheme policy) provides a single site access driveway in the road area to the lowest order road to which the site has frontage.	
	AO9.3 Development ensures that sight distances to and from all proposed access driveways in the road area and intersections are in compliance with the standards in the Transport, access, parking and servicing planning scheme policy.	
	AO9.4 Development provides access driveways in the road area which: a. are located, designed and controlled in compliance with the standards in the Transport, access, parking and servicing planning scheme policy; b. are not provided through a bus stop, taxi rank or pedestrian crossing or refuge.	
	AO9.5 Development makes provision for shared access arrangements particularly where it is necessary to limit access points to a major road.	
PO10 Redevelopment provides for: a. the closure of all access driveways in the road area that no longer comply with the standards in the Transport, access, parking and servicing planning scheme policy; b. the reinstatement of adjacent footpaths.	**AO10** No acceptable outcome is prescribed.	N/A

PO11 Development provides that an internal approach to an access driveway in the road area is designed and located to provide for the safety of pedestrians and cyclists using paths adjacent to the frontage of the site, and motorists.	**AO11.1** Development provides sight distances to and from all proposed access driveways in the road area and intersections which are in compliance with the standards in the Transport, access, parking and servicing planning scheme policy. **AO11.2** Development ensures that convex mirrors are only used in a site: a. as a secondary support at access driveways; b. in addition to acceptable sight splays that comply with the sight distances standards in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.2** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO12 Development in the City core and City frame as identified in Figure a provides car parking spaces at rates to discourage private car use and encourage walking, cycling and the use of public transport.	**AO12** Development in the City core and City frame as identified in Figure a provides maximum car-parking rates in compliance with the standards in the Transport, access, parking and servicing planning scheme policy. Note—For accepted development subject to compliance with identified requirements including an existing premises, no reduction to existing car parking is required to comply with a maximum car-parking rate in the Transport, access, parking and servicing planning scheme policy.	N/A
PO13 Development outside of the City core and City frame as identified in Figure a provides on-site car parking spaces to accommodate the design peak parking demand without any overflow of car parking to an adjacent premises or adjacent street.	**AO13** Development outside of the City core and City frame as identified in Figure a: a. provides on-site car parking spaces in compliance with the standards in the Transport, access, parking and servicing planning scheme policy; or b. for accepted development subject to compliance with identified requirements, does not result in on-street car parking if no parking standard is identified in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.4** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.

	Note—For accepted development subject to compliance with identified requirements including an existing premises, no reduction to existing car parking is required to comply with a maximum car-parking rate in the Transport, access, parking and servicing planning scheme policy.	
PO14 Development ensures that the number of car parking spaces and design of the car parking area: a. meet the combined design peak parking demand for residential, visitor and business parking; b. allow for the temporal sharing of car-parking spaces for uses with different peak parking demands. Note—In order to demonstrate that adequate car parking is provided, a traffic impact assessment prepared in compliance with the Transport, access, parking and servicing planning scheme policy is to identify the appropriate number of car parking spaces to be provided.	**AO14.1** Development provides a number of car parking spaces on site equalling the sum of the maximum design peak parking demand for the individual uses at any point in time. **AO14.2** Development involving mixed use provides a non-residential car parking area with shared parking for all the businesses in the development.	Refer to **Section 3.4** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO15 Development provides a car park layout which allows for on-site vehicle parking that: a. is clearly defined, safe and easily accessible; b. is designed to contain potential adverse impacts within the site; c. does not detract from the aesthetics or amenity of an area; d. discourages on-street parking if parking has an adverse traffic management safety or amenity impact; e. is consistent with safe and convenient pedestrian and cyclist movement.	**AO15** Development provides parking bays, queue areas and manoeuvring areas which are designed for the design service vehicle to the standards in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.4** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO16 Development creates a safe environment by incorporating the key elements of crime prevention through environmental design.	**AO16** Development incorporates the key elements of crime prevention through environmental design in its layout, building and structure design and landscaping by:	N/A

	a. facilitating casual surveillance opportunities and including good sightlines to publicly accessible areas such as car parks, pathways, public toilets and communal areas; b. defining different uses and ownerships through design and restricting access from non-residential uses into private residential dwellings; c. promoting safety and minimising opportunities for graffiti and vandalism through exterior building design and orientation of buildings and use of active frontages; d. ensuring publicly accessible areas such as car parks, pathways, public toilets and communal areas are well lit; e. including way-finding cues; f. minimising predictable routes and entrapment locations near public spaces such as car parks, public toilets, ATMs and communal areas. Note—For guidance in achieving the key elements of crime prevention through environmental design, refer to the Crime prevention through environmental design planning scheme policy.	
PO17 Development minimises the potential for graffiti and vandalism through access control, canvas reduction and easy maintenance selection.	**AO17** Development incorporates graffiti and vandalism prevention techniques in its layout, building and structure design and landscaping, by: a. denying access to potential canvases through access control techniques; b. reducing potential canvases through canvas reduction techniques; c. ensuring graffiti can be readily and quickly removed through easy maintenance selection techniques. Note—For guidance on graffiti and vandalism prevention techniques, refer to the Graffiti prevention planning scheme policy.	N/A

PO18 Development is serviced by an adequate number and size of service vehicles.	**AO18** Development ensures that the number and size of design service vehicles selected for the site is in compliance with the standards in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.3** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO19 Development layout provides for services which: a. are wholly within the site, other than service vehicle manoeuvring areas which may overhang the verge on a minor road where use of the footpath is not adversely affected; b. are clearly defined, safe and easily accessible; c. are designed to contain potential adverse impacts of servicing within the site; d. do not detract from the aesthetics or amenity of the surrounding area.	**AO19.1** Development ensures that a service bay provided on site: a. is provided and designed to comply with the design vehicle table and service area design standards in the Transport, access, parking and servicing planning scheme policy; b. is located away from street frontages and screened from adjoining premises. **AO19.2** Development provides on-site servicing facilities and associated on-site vehicle manoeuvring areas which are designed in compliance with the service area design standards in the Transport, access, parking and servicing planning scheme policy. **AO19.3** Development provides service areas for refuse collection in compliance with the standards in the Refuse planning scheme policy, Transport, access, parking and servicing planning scheme policy and the Infrastructure design planning scheme policy.	Refer to **Section 3.3** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.
PO20 Development provides service vehicle access routes to and from the site which minimise the impact on: a. amenity and safety in residential areas; b. streets not constructed to a standard that accommodate increased heavy vehicle movements.	**AO20** Development ensures that service vehicles use the shortest and most direct route to the major road network in compliance with the heavy vehicle standards in the Transport, access, parking and servicing planning scheme policy.	Refer to **Section 3.3** of the Traffic Impact Assessment report prepared by L+R titled B26299TR001_RevA.

If for development which is required to be serviced by a b-double (Austroad class 10 vehicle), multi-combination vehicle, over-dimensioned vehicle or any other vehicle identified by the Queensland Government as requiring a permit to operate on the road (freight-dependent development)		
PO21 Development which is freight-dependent development ensures that the traffic generated by the development does not impact on: a. the operation of the transport network; b. the safety and amenity of a residential area; c. a road not constructed to accommodate a non-standard vehicle such as a road only constructed to accommodate a vehicle that has a legal right of access to all roads including Austroads vehicles classes 1—9.	**AO21.1** Development which is freight-dependent development is located on a site which: a. has frontage to or direct access to the freight network in the Road hierarchy overlay via roads in a zone in the Industry zones category; or b. can be serviced by a route that can act as a primary freight access route and connect to an existing primary freight route without impacting on the safe operation of the road network in compliance with the heavy vehicle standards in the Transport, access, parking and servicing planning scheme policy. **AO21.2** Development which is freight-dependent development provides any necessary upgrade to a road used as an access route in compliance with the Infrastructure design planning scheme policy.	N/A

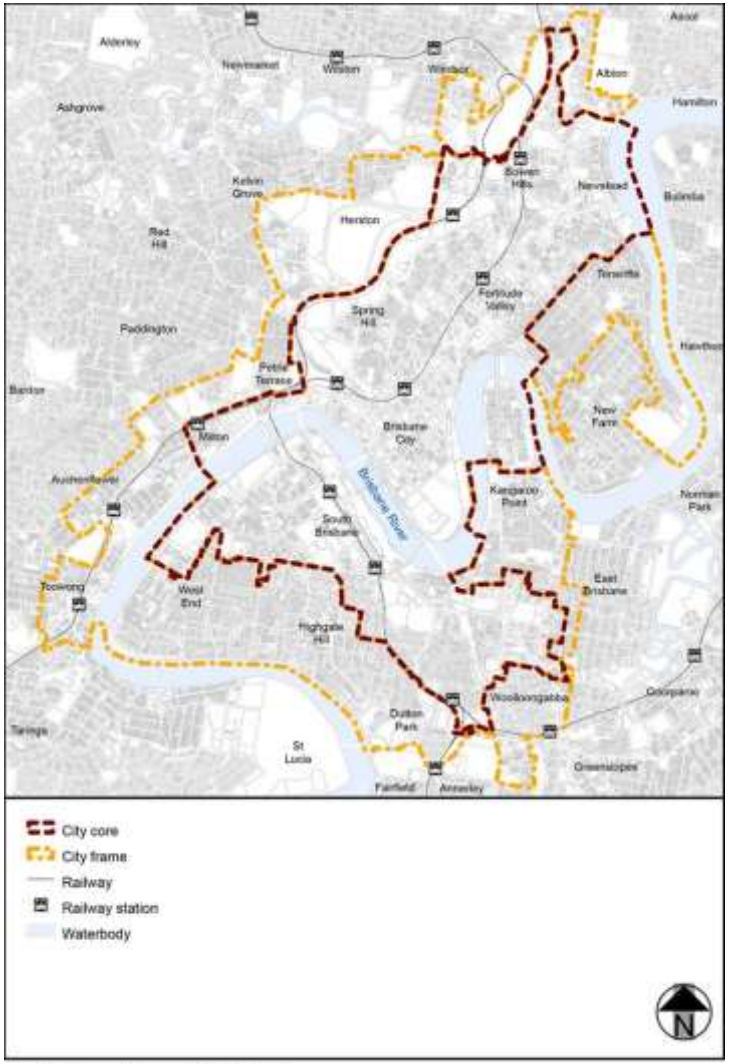


Figure a—City core and City frame

View the high resolution of Figure a-City core and City frame