

Kooroowall-Undi (Peat Island) and Foreshore Development

Traffic Report

December 2024

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Darkinjung Local Aboriginal
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Kooroowall-Undi (Peat Island) and Foreshore Development

Traffic Report

December 2024

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Executive summary

This report assesses the traffic and parking aspects of the development application for Darkinjung Aboriginal Land Council at Kooroowall-Undi (Peat Island), Mooney-Mooney. The application proposes various tourism activities, including a cultural centre, café, water-based tours facilitated by a jetty, and associated parking and access infrastructure.

To assess the impact, a SIDRA analysis was undertaken based on background traffic counts with additional traffic generation from the proposed activities derived by first principles. Both day-to-day operation and an event scenario are considered. Overall, minimal traffic impact is expected at the four relevant intersections analysed and no traffic upgrades were identified as required within the surrounding local road network.

A parking assessment found that the parking proposed exceeds the requirements of the *Central Coast Development Control Plan* (Central Coast Council, 2022) ("the DCP") and staff operational requirements. The DCP requirements only related to some aspects of the proposal; the additional provision is considered suitable to service the tourism activities (e.g. water-based tours) which are not addressed by the DCP. The 8 bicycle parking spaces required by the DCP are absent in the proposal, but easily incorporated within the detailed design phase. The swept path analysis and parking geometry were generally satisfactory, noting that the loading area is limited to a Small Rigid Vehicle size, and two blind aisles are to be resolved in detailed design.

1 Introduction

Mott MacDonald has been engaged by Darkinjung Aboriginal Land Council to provide multi-disciplinary services supporting the Development Application (DA) for the Kooroowall-Undi (Peat Island) site at Mooney Mooney. As part of those services, this report assesses the development proposal for parking suitability and traffic impact on the surrounding external road network.

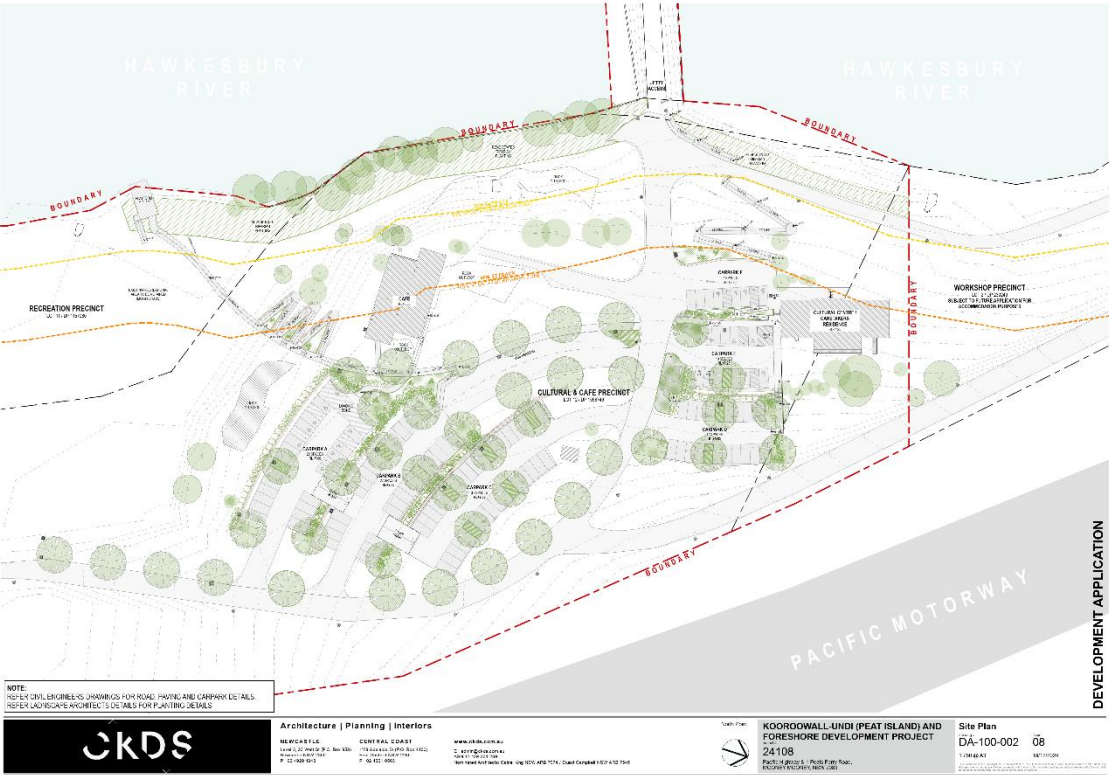
The DA seeks approval for a new tourism and visitor facility, including cultural facility, café, jetty and caretaker's accommodation. Specifically, it seeks approval for:

- Adaptive reuse of the former Burrumbilla office/administration building into an information and education facility and caretaker's accommodation.
- Adaptive reuse of the former dairy and secondary store buildings as a café with indoor and outdoor seating.
- A new jetty.
- Vehicular access and car parking.
- Stormwater and drainage works.
- Construction of utility services.
- Landscape works.

The activities on the site are proposed to include:

- Information and education facilities operating between 8:30am and 10pm, 7 days a week, although 9am to 5pm is likely more typical.
- The café with up to 80 seats, operating between 8am and 8pm, 7 days a week.
- Water-tours operating from the jetty, including oyster tours, Peat Island tours and a river cruise.
- Vehicular access and car parking areas – including required road upgrades, associated site landscaping and signage. 112 car parking spaces are proposed in 5 new bays and 1 existing bay retained. A total of 16 of the 112 car parking spaces will be accessible.

The proposed layout is shown in Figure 1.1.



2 Traffic Impact Assessment

The development site is located on the western site of the M1 Pacific Motorway, with direct access from the Pacific Highway. On- and off-ramps from the Pacific Motorway to the Pacific Highway to the south provide broader access, while the Pacific Highway provides access to the rest of Mooney Mooney and adjacent village of Brooklyn. While Peats Ferry Road not directly involved in accessing the site, its intersection with the Pacific Highway to the south of the site is relevant.

The following sites are considered relevant to access for the site and have been assessed for potential traffic impacts:

- Pacific Highway / Old Pacific Highway: a priority intersection with give-way signs controlling the western approach.
- Peats Ferry Road / Pacific Highway: a roundabout.
- Pacific Highway / M1 SB Ramps: usually a priority intersection controlled by a stop-sign on its western off-ramp approach. Signals are present here but only activated during times of high demand.
- Pacific Highway / Site Access Road – a priority intersection between the existing unnamed internal road within the site and the Pacific Highway.

The road network and relevant intersections are illustrated in Figure 2.1. Detailed intersection layouts are presented in Section 2.1.3.



Figure 2.1: Surrounding road network and assessed intersections.

Aerial Source: [SIX Maps](#)

2.1 Methodology

The traffic impact assessment has been undertaken in SIDRA 9.1 to estimate intersection performance. Background traffic has been estimated using counts undertaken in September 2018. These traffic counts were increased by 2% p.a. compounding growth, to conservatively estimate 2024 flows as the basis of assessment, presented in Attachment A with the original traffic counts. The following peak periods were modelled:

- AM weekday peak hour: 06:30 – 07:30.
- PM weekday peak hour: 15:00 – 16:00
- Sunday weekend peak hour: 11:30 – 12:30.

While the AM peak does not coincide with the proposed operating hours, it was assessed along with the PM and Sunday peaks as a conservative approach. The assessment considers three scenarios:

- 2024 Base, with only background traffic, for AM, PM and Sunday peak hours.
- 2024 with Development, representing day-to-day operation with traffic related to the proposed formal parking, for AM, PM and Sunday peak hours; and
- 2024 Event Egress sensitivity test, representing the end of a small music festival held on site, unbound by the amount of formal parking.

2.1.1 Traffic Generation

The additional traffic from day-to-day operation of the development has been estimated by first principles, based on the proposed formal parking, with the following assumptions:

- 112 parking spaces as per the development proposal, assuming full occupancy:
- A maximum 2-hour duration of stay, averaging about 1-hour duration of stay, given the proposed land uses and activities proposed for the site.
- Thus, 50% of the formal 112 parking spaces are expected to turnover within the hour.

This results in 56 movements in and 56 movements out, to be applied additional to the background traffic within the observed peak hours.

For the event egress sensitivity, a theoretical event involving 250 vehicles was tested. It is assumed that these vehicles will egress across the hour after the conclusion of an event. The event traffic replaces the day-to-day demand, rather than being additional to it.

Both scenarios are assumed to have the same distribution of generated traffic across the considered road network, as assumed in the *Mooney Mooney Planning Proposal Appendix J: Traffic and Transport Assessment (Mott MacDonald, 2021)*, as follows:

- 30% to/from the North
- 70% to/from the South
- 70% use the M1
- 30% use the Pacific Highway

The resulting paths and traffic movements are shown Figure 2.2 and Figure 2.3.



Figure 2.2: Development Traffic Distribution – Ingress

Aerial Source: SIX Maps



Figure 2.3: Development Traffic Distribution – Egress

Aerial Source: SIX Maps

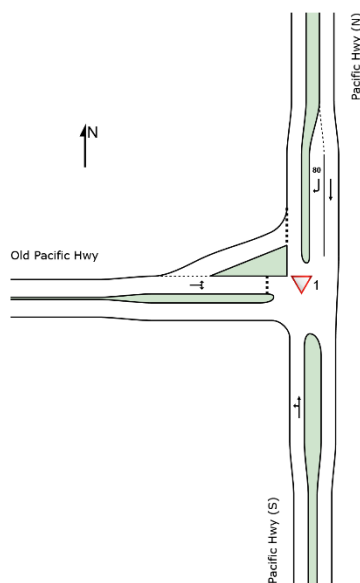
2.1.2 Performance Measures

The key performance measures from the SIDRA analysis for comparison across the scenarios are as follows:

- Average Vehicle Delay (seconds) for each movement, which are summarised to the intersection level:
 - For priority intersections (stop, give way and roundabouts) by the worst performing movement.
 - For signalised intersections, by the average across all movements
- Level of Service (LoS) categorises the average delay into thresholds from LoS A (good performance) through to LoS F (poor performance), at both the movement and intersection levels.
- 95th percentile queue lengths, which should be less than the approach length to avoid queues impacting upstream intersections or impeding motorway operation.

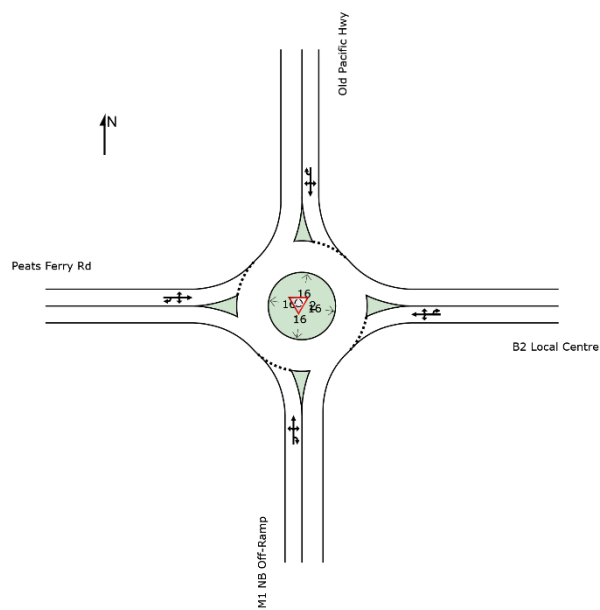
2.1.3 Modelled Layouts

The SIDRA models were configured to resemble the existing arrangement across all scenarios. The modelled layouts are presented below in Figure 2.4 through Figure 2.7, with commentary.



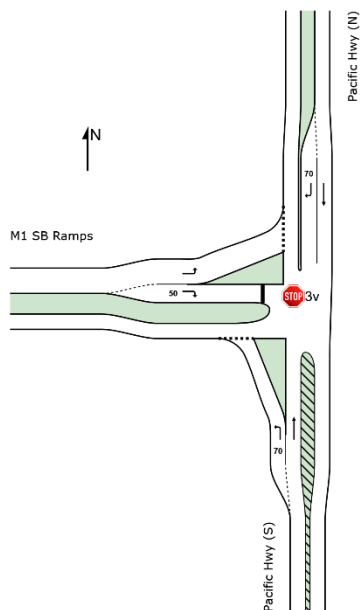
- Give-way controlled t-intersection.
- Right of way for north-south traffic, with the western approach right turn controlled by a give way sign, and the left turn operating as a merge.

Figure 2.4: Intersection 1 – Old Pacific Highway / Pacific Highway



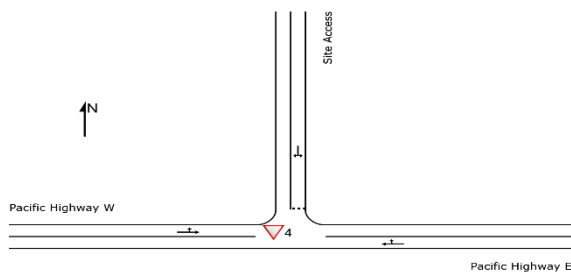
- Simple 4-way roundabout.
- Western approach serves as access to existing parkland, jetties, and car parking at Deerubbun Reserve.
- Eastern approach serves as site access to Hawkesbury River Ambulance Station

Figure 2.5: Intersection 2 – Peats Ferry Road / Old Pacific Highway



- This intersection generally operates under priority, with the western right turn controlled by a stop sign and the western left turn controlled by a give-way sign.
- Otherwise, the northern and southern approaches have right of way.
- Western approach connects directly to the M1 Pacific Motorway via a long on-ramp.
- Although signals are installed, they only operate occasionally. Given the low volumes and good performance of the site under priority control, only the priority control case is presented.

Figure 2.6: Intersection 3: Pacific Highway / M1 Southbound Ramps.



- This intersection provides the access point to the site from the external road network.
- The northern approach currently operates as a driveway, giving way without being controlled by a give-way sign.
- The eastern and western approaches have right of way.

Figure 2.7: Pacific Highway / Site Access

2.2 SIDRA Results

The results of the SIDRA analysis are compared below for each peak across the scenarios at the intersection level. Detailed results are provided in Attachment B. Given the minimal pedestrian flows recorded by the traffic counts at intersections and the general road environment of the network, only vehicle movement results are presented.

2.2.1 2024 AM Weekday Peak

Table 2.1 compares the performance of the four assessed intersections during the AM Weekday Peak Hour across the three scenarios tested. All the intersections considered are unsignalized, so the intersection performance is determined by the worst movement. All intersections (and therefore all movements) operate at LoS A, with only minor worsening impacts from the development during day-to-day and event egress scenarios. Additionally, queue lengths are minimal and well within the approach lengths.

Table 2.1: AM Weekday Peak Hour intersection performance – all scenarios.

AM Peak Hour		2024 Base			2024 w/ Development			2024 Event Egress		
Site Name		Max Avg. Delay	LoS	Max 95th% Queue	Max Avg. Delay	LoS	Max 95th% Queue	Max Avg. Delay	LoS	Max 95th% Queue
1 Pacific Highway / Old Pacific Highway Priority		6.7s	A	0.3m	6.6s	A	3.7m	6.5s	A	9m
2 Peats Ferry Road / Pacific Highway Roundabout		11.7s	A	2.3m	11.7s	A	3m	11.7s	A	2.8m
3 Pacific Highway / M1 SB Ramps Priority		10.2s	A	2.4m	10.8s	A	0.9m	12.2s	A	3.6m
4 Pacific Highway / Site Access		5.8s	A	0.1m	6s	A	1.3m	5.9s	A	5.6m

2.2.2 2024 PM Weekday Peak

Table 2.2 compares the performance of the four assessed intersections during the PM Weekday Peak Hour across the three scenarios tested. All intersections (and therefore all movements) operate at LoS A, with only minor worsening impacts from the development during day-to-day and event egress scenarios. Additionally, queue lengths are minimal and well within the approach lengths.

Table 2.2: PM Weekday Peak Hour intersection performance – all scenarios.

PM Peak Hour		2024 Base			2024 w/ Development			2024 Event Egress		
Site Name		Max. Avg. Delay	LoS	Max. 95th% Queue	Max. Avg. Delay	LoS	Max. 95th% Queue	Max. Avg. Delay	LoS	Max. 95th% Queue
1 Pacific Highway / Old Pacific Highway Priority		7s	A	2.8m	7s	A	4.5m	7s	A	1.4m
2 Peats Ferry Road / Pacific Highway Roundabout		10.8s	A	3.4m	10.8s	A	4.2m	10.8s	A	4.6m
3 Pacific Highway / M1 SB Ramps Priority		10.3s	A	1.3m	10.9s	A	1.7m	12.3s	A	3.8m
4 Pacific Highway / Site Access		6s	A	0.1m	6.3s	A	1.5m	6.2s	A	5.7m

2.2.3 2024 Sunday Weekend Peak

Table 2.3 compares the performance of the four assessed intersections during the Sunday Peak Hour across the three scenarios tested. All intersections (and therefore all movements) operate at LoS A, with only minor worsening impacts from the development during day-to-day and event egress scenarios. Generally, queue lengths are minimal and well within the approach lengths.

One exception is the Pacific Highway / Old Pacific Highway queue length, which extends to 29m on the western approach during the Sunday Event Egress. However, the approach length here is ~180m (between this intersection and the site access intersection), indicating that this queue length is not problematic.

Table 2.3: Sunday Peak Hour intersection performance – all scenarios.

Sunday Peak Hour		2024 Base			2024 w/ Development			2024 Event Egress		
Site Name		Max. Avg. Delay	LoS	Max. 95th% Queue	Max. Avg. Delay	LoS	Max. 95th% Queue	Max. Avg. Delay	LoS	Max. 95th% Queue
1 Pacific Highway / Old Pacific Highway Priority		8.5s	A	8.2m	9.1s	A	11.6m	10.6s	A	29m
2 Peats Ferry Road / Pacific Highway Roundabout		11.2s	A	7.1m	11.3s	A	8.1m	11.2s	A	7.1m
3 Pacific Highway / M1 SB Ramps Priority		13.9s	A	5.4m	14.9s	B	6m	17.7s	B	1.1m
4 Pacific Highway / Site Access		6.6s	A	0.1m	7.3s	A	1.7m	7s	A	6.4m

2.3 Assessment Summary

The SIDRA analysis indicates that the combination of the parking quantum and activities proposed would have minimal impact on the surrounding road network, noting the traffic counts and assumptions that produce this outcome. Consequently, no intersection upgrades are expected to be required.

3 Parking

This section discusses the car parking, bicycle parking and other parking arrangements proposed by the development application. The following parking facilities:

- 112 car parking spaces in 5 new bays and 1 retained existing bay
 - Of these, 16 spaces are arranged for universal access.
- An approximately 50m long bus parking bay.
- A loading zone in the parking bay adjacent to the Cafe
- Various circulation roads.

Additional details informing the parking assessment include:

- The café is ~160m² GFA, as measured from built form in the provided plans, and could have up to 80 seats, as advised.
- The cultural centre building is ~360m² GFA, measured from plans. This building is partially occupied by the caretaker's accommodation. The area related to the cultural centre explicitly has been estimated at ~240m².
- Staffing numbers have been advised by ADW Johnson.

3.1 Parking Requirements

3.1.1 Car Parking

The proposed parking provision has been compared with the Central Coast Development Control Plan 2022 (Central Coast DCP) chapter 2.13, setting out Council's car and bicycle parking requirements. The DCP does not address the requirements of the tourism activities proposed, but the following aspects of the development have been assessed for parking requirements:

- Caretaker's Residence, considered a dwelling;
- The Café, considered as a restaurant; and
- The cultural centre, considered as a community centre.

The requirements associated with the above parts of the development are summarised in Table 3.1.

Table 3.1: DCP car parking requirements.

Land Use	Rate	Scale	Parking Requirement
Caretaker's Residence	Dwellings - 1 space per dwelling for dwellings with 3 or fewer bedrooms	1 dwelling	1 space
Cafe	Restaurant – the greater of: 15 spaces per 100m ² 1 space per 3 seats	~160m ² GFA 80 seats.	30 spaces 27 spaces
Cultural Centre	Community Centre – 1 space per 20m ²	~360m ² GFA minus caretaker accommodation: ~240m ² estimated	12 spaces.

Additionally, the following staff numbers are expected, likely requiring a parking space given the location of the site:

- 1 caretaker – already assigned a parking space as in Table 3.1.
- 3 information/ office workers associated with the cultural centre.
- 5 café staff.
- Up to 8 staff for water-based tours.

Thus, a further 16 spaces are required for staff parking. This allocates 59 spaces in total, from either the relevant DCP requirements or expected staff operations, leaving 53 spaces to accommodate additional demand from the water-based tours. Overall, the parking provision is seen as appropriate because:

- It fulfils the DCP and staff requirements.
- It provides additional parking for the water-based tour activities which are unspecified by the DCP.
- Visitors are likely to link trips between the water-based tours.
- As demonstrated by the traffic impact assessment, it is not expected to adversely affect the external road network.

Further detail on the scale of the water tours and vehicle occupancy assumptions would allow provide another sense check on the suitability of the car parking provision. However, this was not available at the time of assessment.

3.1.2 Accessible parking rates

The Central Coast DCP refers to the Building Code of Australia (BCA) for the required provision of accessible parking. Considering the proposed spaces as primarily Class 6, for car parks up to 1000 spaces, 1 accessible space for every 50 spaces is required. The proposed provision of 16 accessible spaces exceeds this requirement.

3.2 Bicycle Parking

The Central Coast DCP also sets out minimum bicycle parking requirements for short- and long-term use, as summarised in Table 3.2.

Table 3.2: Short- and long-term bicycle parking requirements – Central Coast DCP.

Land Use	Short Term		Long-Term	
	Rate	Requirement	Rate	Requirement
Community Facility	1 space per 200m ²	2	1 space per 200m ² . Min 2 spaces.	2
Restaurants	2	2	1 space per 100m ² of public area.	2

To meet the requirements of the Central Coast DCP, 4 short-term and 4 long-term bicycle parking spaces. These are currently not included within the design, but could easily be incorporated at the detailed design stage, as a condition of consent.

3.3 Parking Geometry Check

A parking geometry check was undertaken against AS2890.1 for general parking and AS2890.6 for accessible parking, finding the following:

- All general spaces are designed at 2500mm x 5500m, compliant with AS2890.2. This is consistent with Class 2 parking allowing for full opening of doors and single manoeuvre entry and exit. This is generally used for long-term public parking (e.g. town centres, entertainment centres) and considered is suitable given the expected duration of stay.
- Aisle widths are ~6m, exceeding the 5.8m aisle width required for Class 2 parking.
- The blind aisle extension required in AS2890.1 Clause 2.4.2. However, the length of the blind aisles does exceed the 6 space-length maximum for car parking open to the public (Clause 2.4.2c). A turnaround facility is recommended to allow vehicles to exit the blind aisle section, to be incorporated at the detailed design stage.
- Accessible parking spaces are compliant with AS2890.6, with a shared space for unloading between each pair of parking spaces. Accessible paths are provided between the parking, the café and the cultural centre. Currently an accessible path down to the jetty has not been achieved.
- The bus parking bay provided is suitable for 2 buses, although they will not be able to move independently of each other.

3.4 Swept Paths

Swept path assessments were undertaken, with the drawings presented in Attachment C. The exercised assessed:

- B99 passenger vehicles (defined in AS2890.1) manoeuvring through the car park;
- 12.5m bus manoeuvring to the bus parking.
- Medium Rigid and Short Rigid Vehicles (defined in AS2890.2) manoeuvring to loading spaces.

The swept paths were generally satisfactory with most identified issues resolved in the design process. However, the loading area proposed in front of the café cannot fit an MRV, while an SRV works. This limits the size of servicing vehicles, which should be considered against their likely size.

4 Conclusion

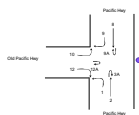
The SIDRA results, informed by the increased background traffic counts and first-principles parking-based traffic generation, indicates the proposed development will have minimal impact on the surrounding road network. All intersections and movements operated within LoS A, and the impacts of the day-to-day operation and the event egress sensitivity test were minor, maintaining good performance in LoS A. 95th percentile queue lengths also were unproblematic.

The parking assessment found some relevant requirements within the Central Coast DCP and identified that the proposed car parking provision meets the DCP and operational requirements. The proposal exceeds the requirements for car parking, providing additional parking capacity for the tourism activities, which are difficult to derive parking demand for. The proposal lacks 8 bicycle parking spaces required by the DCP, but easily incorporated within detailed design. A swept path analysis and parking geometry check were generally satisfactory, although there is a non-compliance with the blind aisle length in two parking bays to be resolved in detailed design and the loading area is limited to an SRV vehicle size.

Attachment A: 2018 Observed and 2024 Estimated Traffic Counts

[illegible]

TIME PERIOD	1		1		1		1		1		2		2		2		2		2		2		3a		3a		3a		3a		3a		8		8		8		8		8		9		9		9		9		9a		9a		9a		9a		9a		10		10		10		10		10		12		12		12		12		12		12a		12a		12a		12a		12a		Grand Total		Grand Total		Grand Y		Grand Y		Grand Y		Grand Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy	Bus	Cyc	Total	Light	Light Towing Boat	Heavy



Period	Light	Light			Light			Light			Light			Light			Light			Light			Light			Total of all Periods
		Heavy	Bus	Cen	Total	Light	Heavy	Bus	Cen	Total	Light	Heavy	Bus	Cen	Total	Light	Heavy	Bus	Cen	Total	Light	Heavy	Bus	Cen	Total	
0000-0010	0	0	0	0	15	10	0	0	5	25	0	0	0	0	10	10	0	0	0	20	0	0	0	0	5	50
010-020	0	0	0	0	3	17	0	0	13	20	0	0	0	0	12	0	0	0	0	10	0	0	0	0	5	40
030-040	7	1	0	0	8	20	0	0	1	29	0	0	0	0	17	0	0	0	0	23	1	0	0	0	5	40
050-060	0	0	0	0	2	24	0	0	1	26	0	0	0	0	16	0	0	0	0	16	0	0	0	0	5	37
070-080	0	0	0	0	0	26	0	0	0	26	0	0	0	0	14	0	0	0	0	14	0	0	0	0	5	35
090-100	12	0	0	0	10	20	0	0	0	40	0	0	0	0	10	0	0	0	0	10	0	0	0	0	5	50
110-120	0	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
130-140	0	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
150-160	0	0	0	0	0	24	0	0	1	25	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
170-180	13	0	0	0	10	20	0	0	1	30	0	0	0	0	22	0	0	0	0	22	0	0	0	0	5	57
190-200	10	1	0	0	10	20	0	0	0	30	0	0	0	0	20	1	0	0	0	21	0	0	0	0	5	50
210-220	10	1	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
230-240	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
250-260	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
270-280	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
290-300	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
310-320	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
330-340	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
350-360	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
370-380	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
390-400	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
410-420	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
430-440	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
450-460	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
470-480	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
490-500	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
510-520	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
530-540	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
550-560	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
570-580	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
590-600	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
610-620	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
630-640	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
650-660	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
670-680	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
690-700	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
710-720	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
730-740	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
750-760	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
770-780	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
790-800	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
810-820	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
830-840	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
850-860	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
870-880	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
890-900	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
910-920	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
930-940	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
950-960	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
970-980	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
990-1000	10	0	0	0	10	20	0	0	0	30	0	0	0	0	20	0	0	0	0	20	0	0	0	0	5	50
Total	660	12	0	1	663	1040	0	2	97	1664	2	0	0	0	1662	0	0	0	0	1664	164	0	0	0	0	1665
Heavy	660	12	0	1	663	1040	0	2	97	1664	2	0	0	0	1662	0	0	0	0	1664	164	0	0	0	0	1665
Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	660	12	0	1	663	1040	0	2	97	1664	2	0	0	0	1662	0	0	0	0	1664	164	0	0	0	0	1665

TABLE 1: FLOW				TABLE 2: FLOW				TABLE 3: FLOW				TABLE 4: FLOW				TABLE 5: FLOW				TABLE 6: FLOW				TABLE 7: FLOW				TABLE 8: FLOW				TABLE 9: FLOW				TABLE 10: FLOW				TABLE 11: FLOW				TABLE 12: FLOW				TABLE 13: FLOW				TABLE 14: FLOW				TABLE 15: FLOW				TABLE 16: FLOW				TABLE 17: FLOW				TABLE 18: FLOW				TABLE 19: FLOW				TABLE 20: FLOW				TABLE 21: FLOW				TABLE 22: FLOW				TABLE 23: FLOW				TABLE 24: FLOW				TABLE 25: FLOW				TABLE 26: FLOW				TABLE 27: FLOW				TABLE 28: FLOW				TABLE 29: FLOW				TABLE 30: FLOW				TABLE 31: FLOW				TABLE 32: FLOW				TABLE 33: FLOW				TABLE 34: FLOW				TABLE 35: FLOW				TABLE 36: FLOW				TABLE 37: FLOW				TABLE 38: FLOW				TABLE 39: FLOW				TABLE 40: FLOW				TABLE 41: FLOW				TABLE 42: FLOW				TABLE 43: FLOW				TABLE 44: FLOW				TABLE 45: FLOW				TABLE 46: FLOW				TABLE 47: FLOW				TABLE 48: FLOW				TABLE 49: FLOW				TABLE 50: FLOW				TABLE 51: FLOW				TABLE 52: FLOW				TABLE 53: FLOW				TABLE 54: FLOW				TABLE 55: FLOW				TABLE 56: FLOW				TABLE 57: FLOW				TABLE 58: FLOW				TABLE 59: FLOW				TABLE 60: FLOW				TABLE 61: FLOW				TABLE 62: FLOW				TABLE 63: FLOW				TABLE 64: FLOW				TABLE 65: FLOW				TABLE 66: FLOW				TABLE 67: FLOW				TABLE 68: FLOW				TABLE 69: FLOW				TABLE 70: FLOW				TABLE 71: FLOW				TABLE 72: FLOW				TABLE 73: FLOW				TABLE 74: FLOW				TABLE 75: FLOW				TABLE 76: FLOW				TABLE 77: FLOW				TABLE 78: FLOW				TABLE 79: FLOW				TABLE 80: FLOW				TABLE 81: FLOW				TABLE 82: FLOW				TABLE 83: FLOW				TABLE 84: FLOW				TABLE 85: FLOW				TABLE 86: FLOW				TABLE 87: FLOW				TABLE 88: FLOW				TABLE 89: FLOW			
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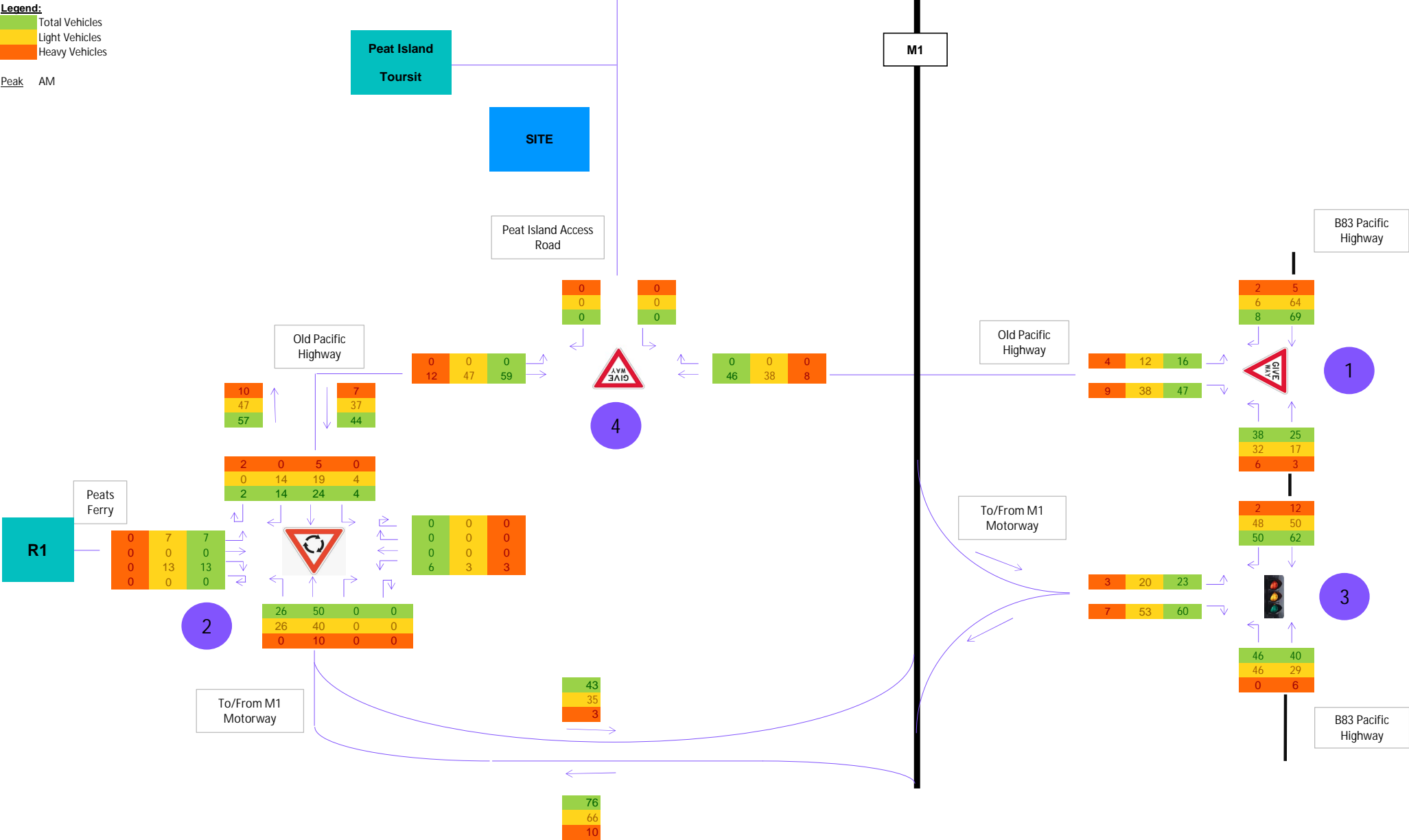
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2024 Modelled Traffic - Base

Legend:

	Total Vehicles
	Light Vehicles
	Heavy Vehicles

Peak AM

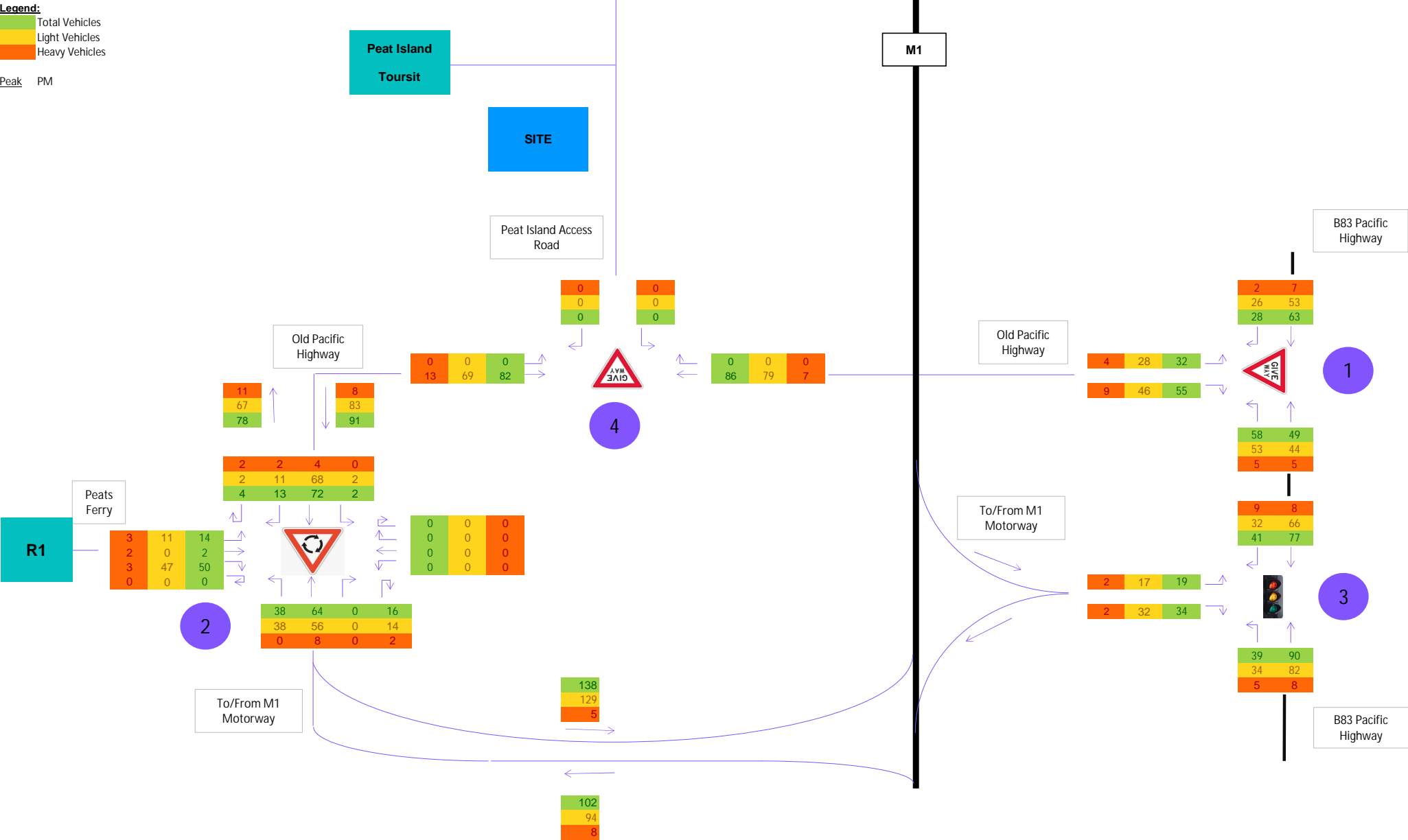


2024 Modelled Traffic - Base

Legend:




	Total Vehicles
	Light Vehicles
	Heavy Vehicles

Peak PM

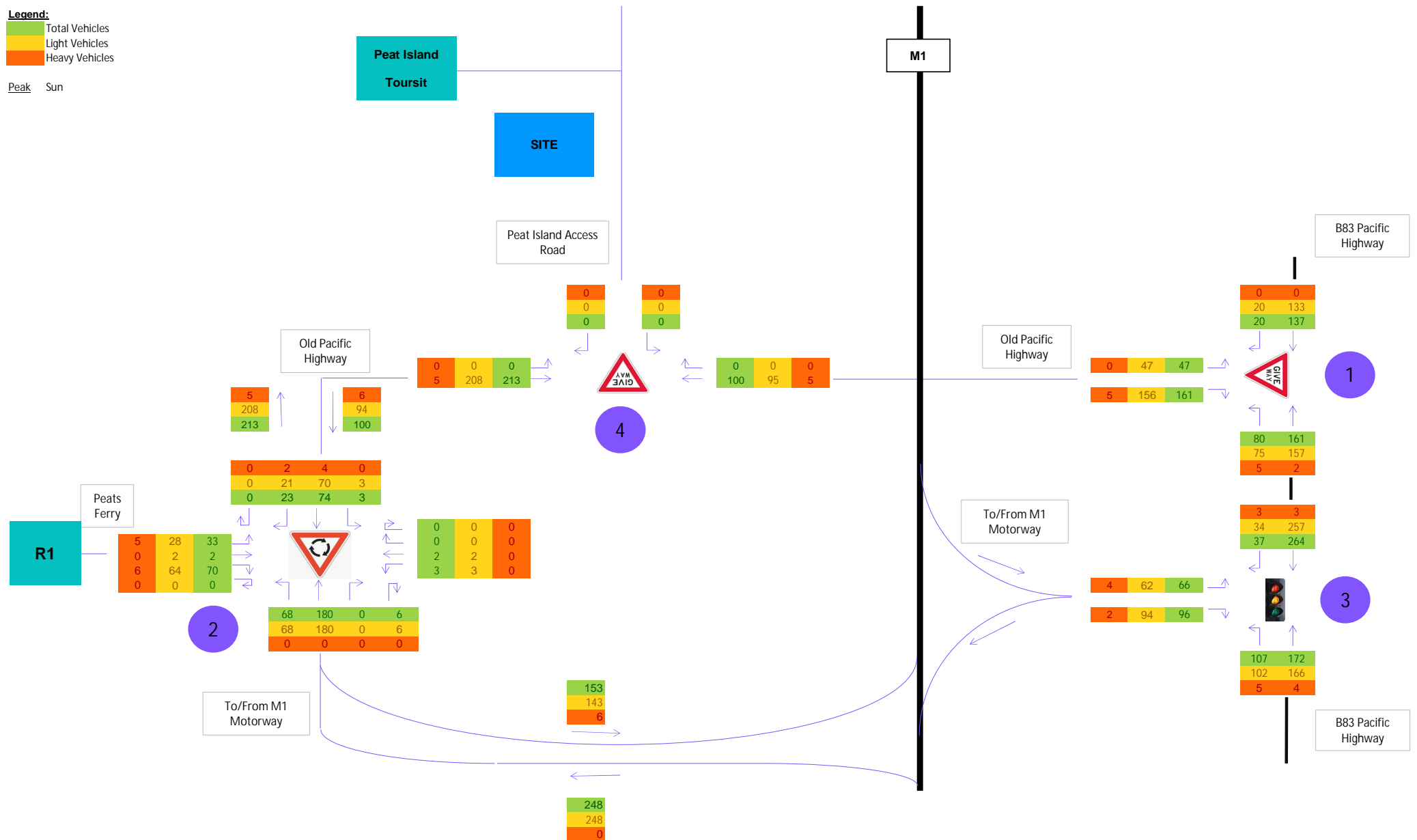


Legend:

- Total Vehicles
- Light Vehicles
- Heavy Vehicles

 Total Vehicles
 Light Vehicles
 Heavy Vehicles

Peak Sun

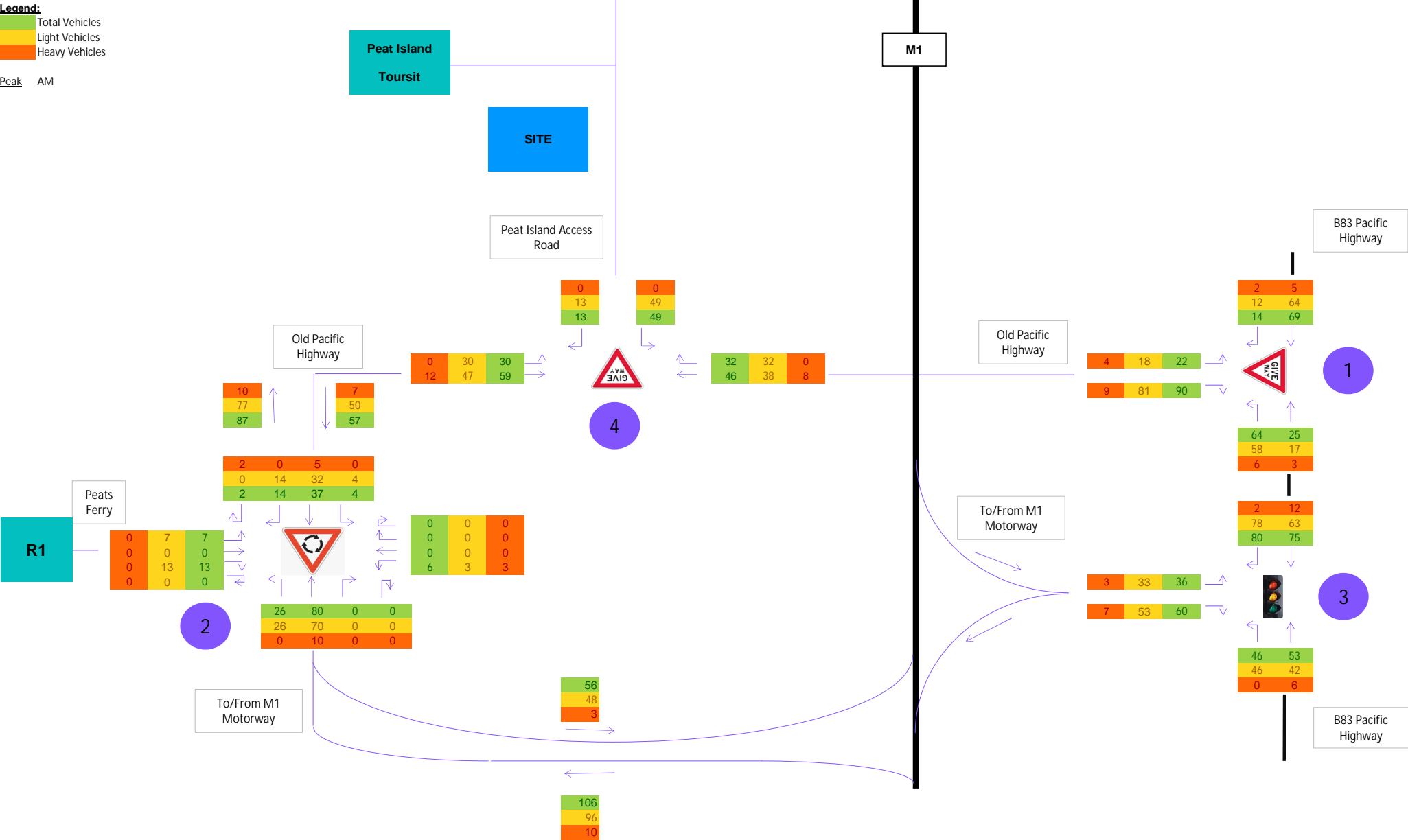


2024 Modelled Traffic - Development

Legend:

	Total Vehicles
	Light Vehicles
	Heavy Vehicles

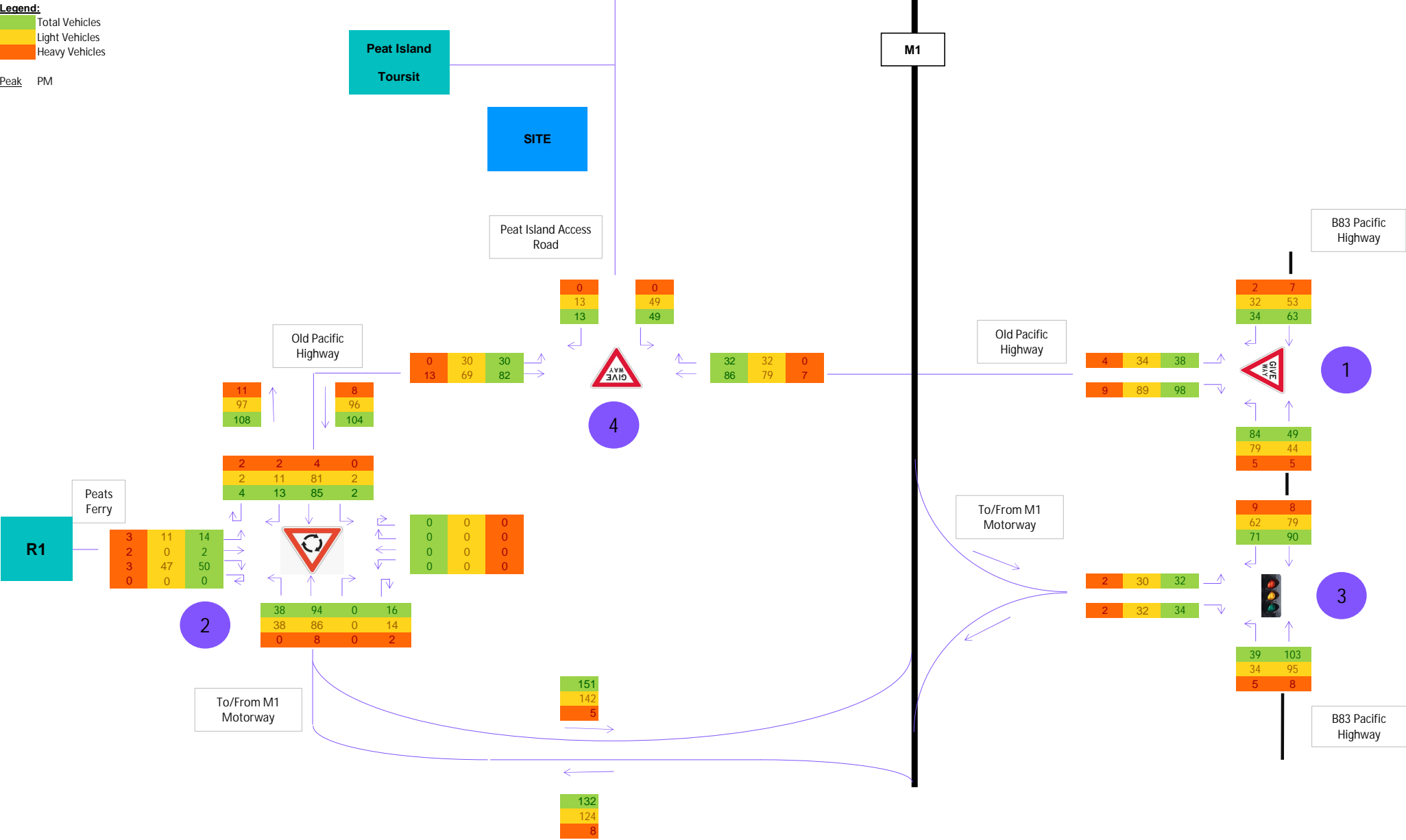
Peak AM



2024 Modelled Traffic - Development

- Legend:
- Total Vehicles
 - Light Vehicles
 - Heavy Vehicles

Peak PM

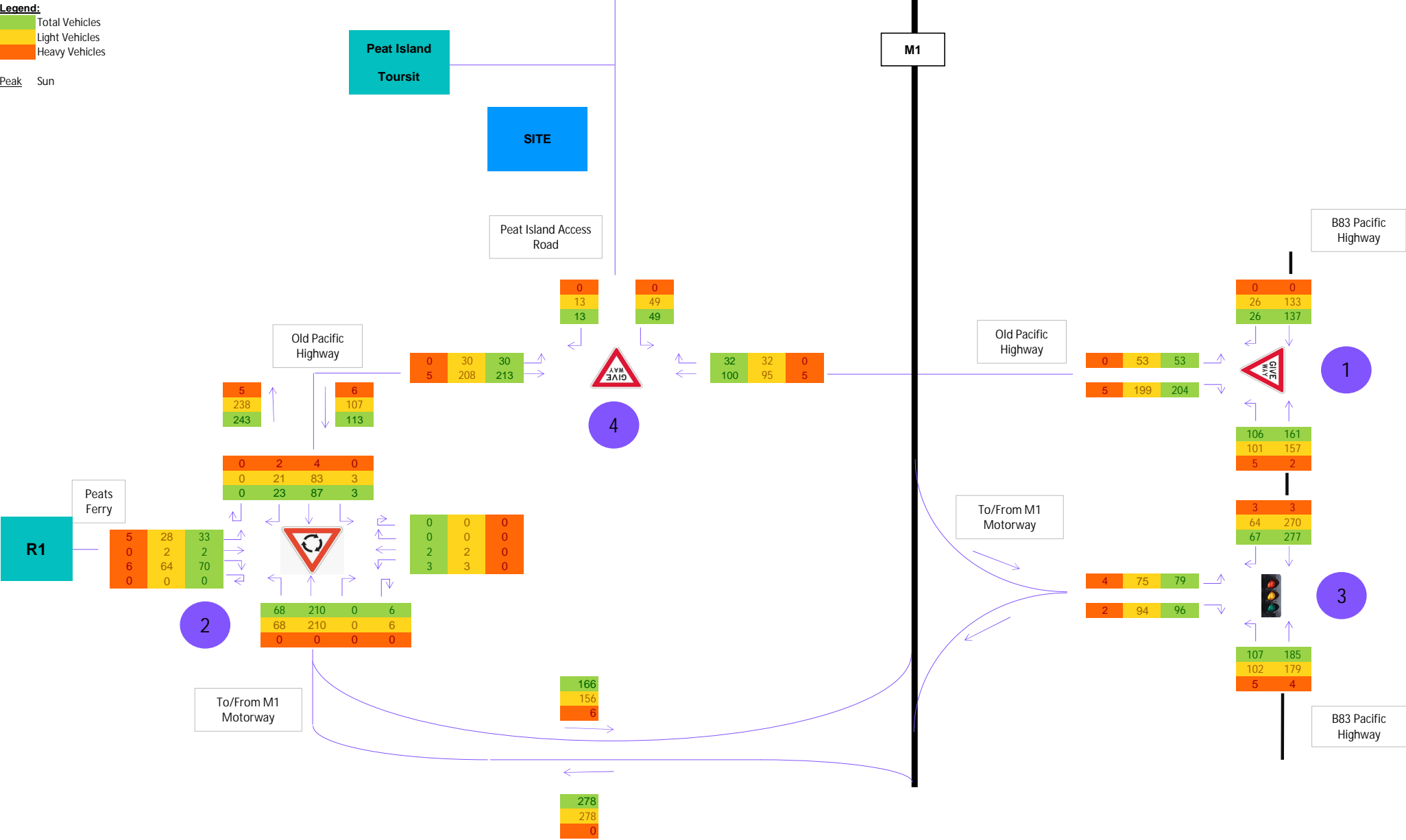


2024 Modelled Traffic - Development

Legend:

	Total Vehicles
	Light Vehicles
	Heavy Vehicles

Peak Sun

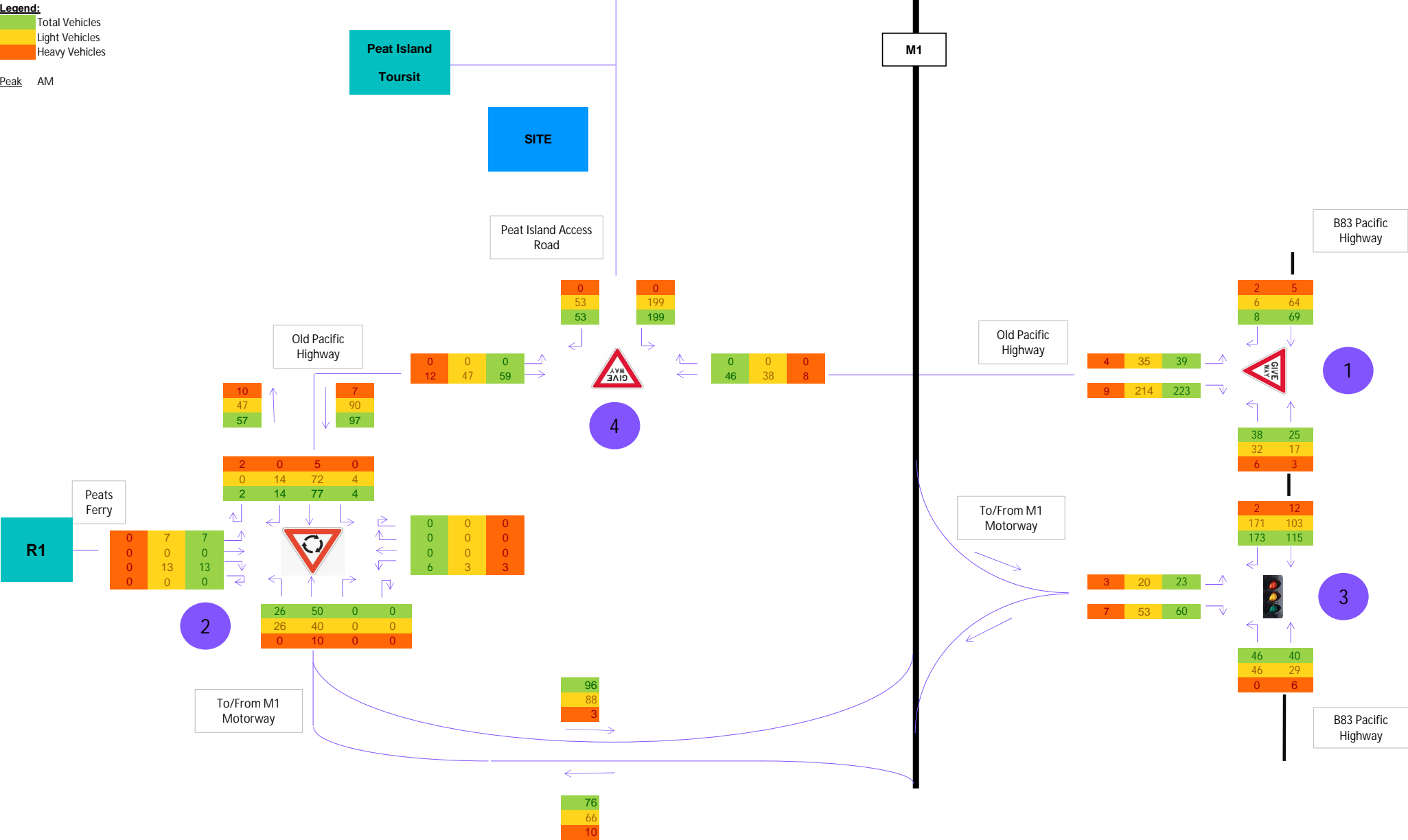


2024 Modelled Traffic - Egress

Legend:

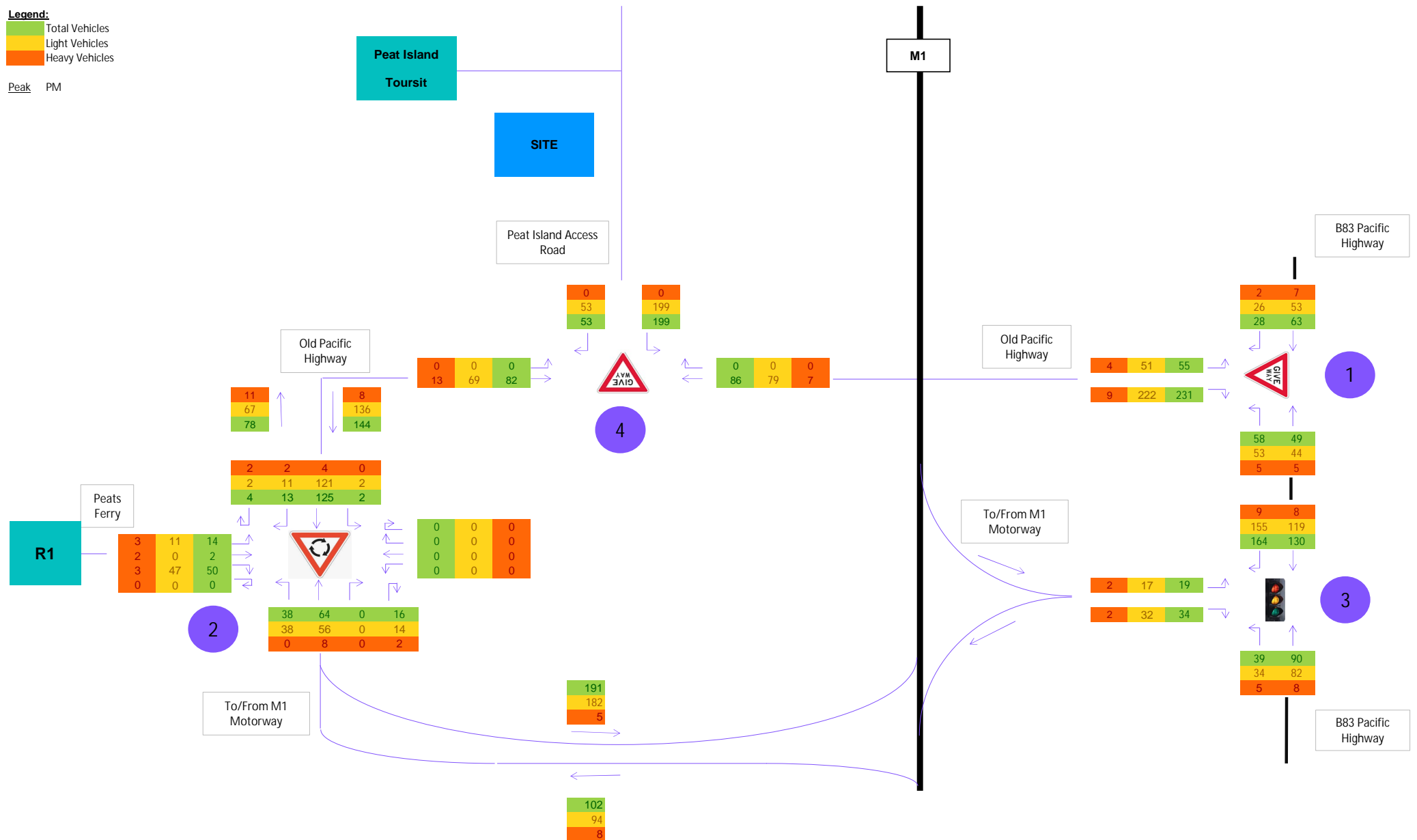
	Total Vehicles
	Light Vehicles
	Heavy Vehicles

Peak AM



Legend:

- Total Vehicles
- Light Vehicles
- Heavy Vehicles

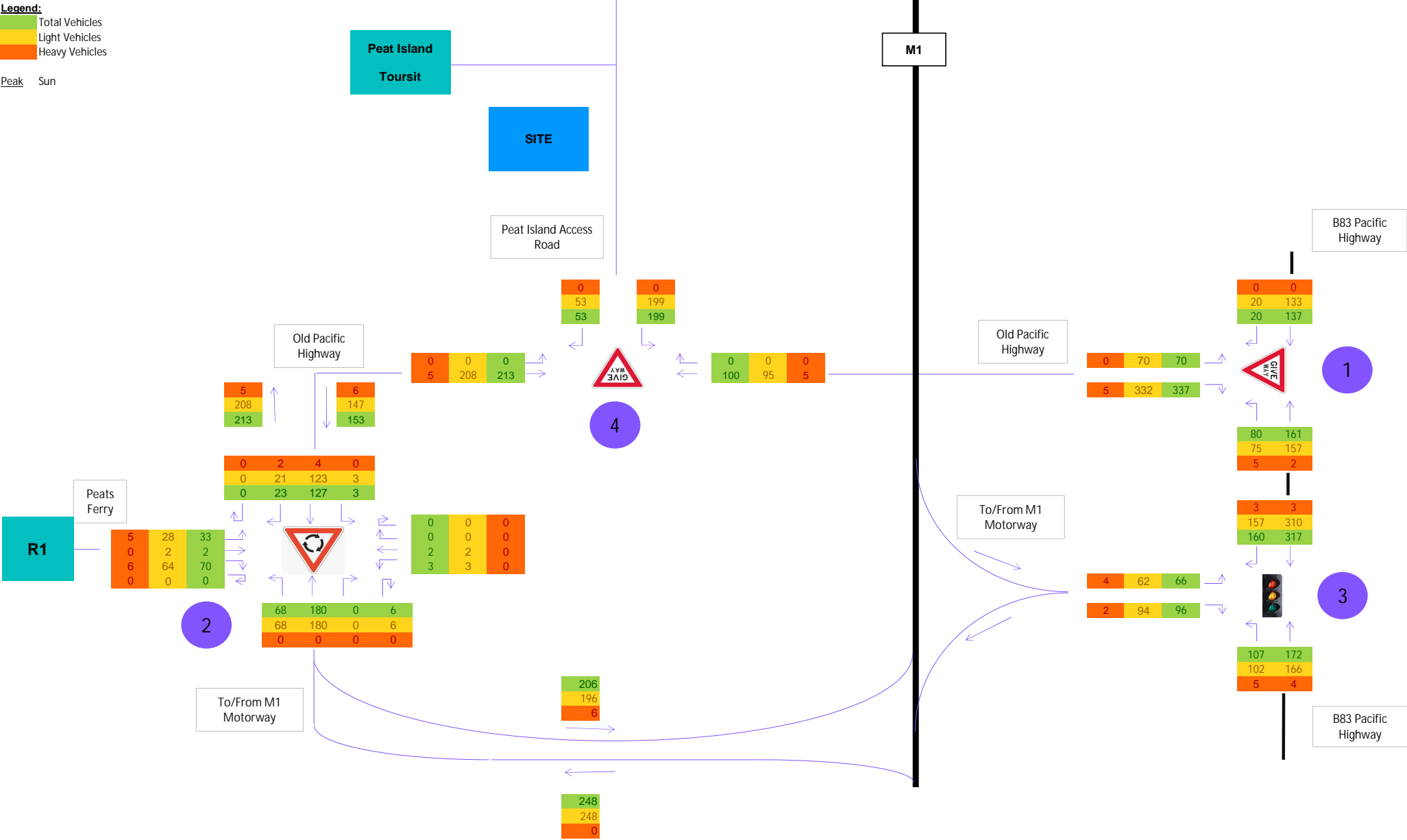


2024 Modelled Traffic - Egress

Legend:

	Total Vehicles
	Light Vehicles
	Heavy Vehicles

Peak Sun



Attachment B: SIDRA Results

MOVEMENT SUMMARY

▼ Site: 1 [2024 AM (Weekday) Pacific Hwy / Old Pacific Hwy - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Pacific Hwy (S)															
1	L2	All MCs	37	8.6	37	8.6	0.037	5.6	LOS A	0.0	0.0	0.00	0.33	0.00	53.2
2	T1	All MCs	28	11.1	28	11.1	0.037	0.0	LOS A	0.0	0.0	0.00	0.33	0.00	57.0
Approach			65	9.7	65	9.7	0.037	3.2	NA	0.0	0.0	0.00	0.33	0.00	55.0
North: Pacific Hwy (N)															
8	T1	All MCs	73	7.2	73	7.2	0.039	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	8	25.0	8	25.0	0.006	6.0	LOS A	0.0	0.2	0.17	0.53	0.17	49.6
Approach			81	9.1	81	9.1	0.039	0.6	NA	0.0	0.2	0.02	0.05	0.02	58.9
West: Old Pacific Hwy															
10	L2	All MCs	17	25.0	17	25.0	0.065	6.0	LOS A	0.3	2.1	0.20	0.53	0.20	49.9
12	R2	All MCs	49	19.1	49	19.1	0.065	6.7	LOS A	0.3	2.1	0.20	0.53	0.20	49.8
Approach			66	20.6	66	20.6	0.065	6.5	LOS A	0.3	2.1	0.20	0.53	0.20	49.8
All Vehicles			213	12.9	213	12.9	0.065	3.2	NA	0.3	2.1	0.07	0.29	0.07	54.9

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 PM (Weekday) Pacific Hwy / Old Pacific Hwy - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	61	8.6	61	8.6	0.063	5.7	LOS A	0.0	0.0	0.00	0.32	0.00	53.3
2	T1	All MCs	52	10.2	52	10.2	0.063	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	57.1
Approach			113	9.3	113	9.3	0.063	3.1	NA	0.0	0.0	0.00	0.32	0.00	55.2
North: Pacific Hwy (N)															
8	T1	All MCs	61	8.6	61	8.6	0.033	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	29	7.1	29	7.1	0.019	6.0	LOS A	0.1	0.6	0.22	0.54	0.22	50.2
Approach			91	8.1	91	8.1	0.033	1.9	NA	0.1	0.6	0.07	0.17	0.07	56.9
West: Old Pacific Hwy															
10	L2	All MCs	34	12.5	34	12.5	0.088	5.9	LOS A	0.4	2.8	0.23	0.54	0.23	50.3
12	R2	All MCs	58	16.4	58	16.4	0.088	7.0	LOS A	0.4	2.8	0.23	0.54	0.23	49.8
Approach			92	14.9	92	14.9	0.088	6.6	LOS A	0.4	2.8	0.23	0.54	0.23	50.0
All Vehicles			295	10.7	295	10.7	0.088	3.8	NA	0.4	2.8	0.09	0.34	0.09	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 Peak Hour (Sunday) Pacific Hwy / Old Pacific Hwy - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	84	6.3	84	6.3	0.134	5.6	LOS A	0.0	0.0	0.00	0.20	0.00	54.6
2	T1	All MCs	167	1.3	167	1.3	0.134	0.0	LOS A	0.0	0.0	0.00	0.20	0.00	58.2
Approach			252	2.9	252	2.9	0.134	1.9	NA	0.0	0.0	0.00	0.20	0.00	57.1
North: Pacific Hwy (N)															
8	T1	All MCs	140	0.0	140	0.0	0.072	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	21	0.0	21	0.0	0.015	6.3	LOS A	0.1	0.4	0.34	0.55	0.34	50.2
Approach			161	0.0	161	0.0	0.072	0.8	NA	0.1	0.4	0.04	0.07	0.04	58.7
West: Old Pacific Hwy															
10	L2	All MCs	49	0.0	49	0.0	0.259	6.2	LOS A	1.1	8.2	0.47	0.65	0.47	49.6
12	R2	All MCs	169	3.1	169	3.1	0.259	8.5	LOS A	1.1	8.2	0.47	0.65	0.47	49.2
Approach			219	2.4	219	2.4	0.259	8.0	LOS A	1.1	8.2	0.47	0.65	0.47	49.3
All Vehicles			632	2.0	632	2.0	0.259	3.8	NA	1.1	8.2	0.18	0.32	0.18	54.8

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 AM (Weekday) Peats Ferry Rd / Pacific Hwy - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	27	0.0	27	0.0	0.062	4.2	LOS A	0.3	2.3	0.10	0.45	0.10	53.4
2	T1	All MCs	53	20.0	53	20.0	0.062	4.6	LOS A	0.3	2.3	0.10	0.45	0.10	52.5
3	R2	All MCs	1	0.0	1	0.0	0.062	8.5	LOS A	0.3	2.3	0.10	0.45	0.10	30.8
3u	U	All MCs	1	0.0	1	0.0	0.062	10.5	LOS A	0.3	2.3	0.10	0.45	0.10	53.5
Approach			82	12.8	82	12.8	0.062	4.6	LOS A	0.3	2.3	0.10	0.45	0.10	52.5
East: B2 Local Centre															
4	L2	All MCs	6	50.0	6	50.0	0.009	2.4	LOS A	0.0	0.4	0.20	0.49	0.20	48.0
5	T1	All MCs	1	0.0	1	0.0	0.009	2.7	LOS A	0.0	0.4	0.20	0.49	0.20	49.7
6	R2	All MCs	1	0.0	1	0.0	0.009	6.3	LOS A	0.0	0.4	0.20	0.49	0.20	45.6
6u	U	All MCs	1	0.0	1	0.0	0.009	8.2	LOS A	0.0	0.4	0.20	0.49	0.20	12.6
Approach			9	33.3	9	33.3	0.009	3.5	LOS A	0.0	0.4	0.20	0.49	0.20	45.4
North: Old Pacific Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.038	4.2	LOS A	0.2	1.4	0.10	0.52	0.10	29.6
8	T1	All MCs	25	20.8	25	20.8	0.038	4.6	LOS A	0.2	1.4	0.10	0.52	0.10	51.0
9	R2	All MCs	15	0.0	15	0.0	0.038	8.5	LOS A	0.2	1.4	0.10	0.52	0.10	49.7
9u	U	All MCs	2	100.0	2	100.0	0.038	11.7	LOS A	0.2	1.4	0.10	0.52	0.10	34.0
Approach			46	15.9	46	15.9	0.038	6.1	LOS A	0.2	1.4	0.10	0.52	0.10	48.2
West: Peats Ferry Rd															
10	L2	All MCs	7	0.0	7	0.0	0.016	4.3	LOS A	0.1	0.5	0.18	0.57	0.18	49.3
11	T1	All MCs	1	0.0	1	0.0	0.016	4.6	LOS A	0.1	0.5	0.18	0.57	0.18	27.2
12	R2	All MCs	14	0.0	14	0.0	0.016	8.7	LOS A	0.1	0.5	0.18	0.57	0.18	50.8
12u	U	All MCs	1	0.0	1	0.0	0.016	10.6	LOS A	0.1	0.5	0.18	0.57	0.18	49.8
Approach			23	0.0	23	0.0	0.016	7.2	LOS A	0.1	0.5	0.18	0.57	0.18	49.2
All Vehicles			161	13.1	161	13.1	0.062	5.3	LOS A	0.3	2.3	0.12	0.49	0.12	50.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 PM (Weekday) Peats Ferry Rd / Pacific Hwy - Base (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	40	0.0	40	0.0	0.090	4.2	LOS A	0.5	3.4	0.10	0.49	0.10	52.9
2	T1	All MCs	67	12.5	67	12.5	0.090	4.5	LOS A	0.5	3.4	0.10	0.49	0.10	52.2
3	R2	All MCs	1	0.0	1	0.0	0.090	8.5	LOS A	0.5	3.4	0.10	0.49	0.10	37.1
3u	U	All MCs	17	12.5	17	12.5	0.090	10.6	LOS A	0.5	3.4	0.10	0.49	0.10	52.5
Approach			125	8.4	125	8.4	0.090	5.3	LOS A	0.5	3.4	0.10	0.49	0.10	52.4
East: B2 Local Centre															
4	L2	All MCs	1	0.0	1	0.0	0.004	2.7	LOS A	0.0	0.1	0.32	0.55	0.32	49.2
5	T1	All MCs	1	0.0	1	0.0	0.004	3.2	LOS A	0.0	0.1	0.32	0.55	0.32	48.0
6	R2	All MCs	1	0.0	1	0.0	0.004	6.8	LOS A	0.0	0.1	0.32	0.55	0.32	43.9
6u	U	All MCs	1	0.0	1	0.0	0.004	8.8	LOS A	0.0	0.1	0.32	0.55	0.32	9.0
Approach			4	0.0	4	0.0	0.004	5.4	LOS A	0.0	0.1	0.32	0.55	0.32	37.2
North: Old Pacific Hwy															
7	L2	All MCs	2	0.0	2	0.0	0.082	4.5	LOS A	0.4	3.0	0.23	0.47	0.23	29.8
8	T1	All MCs	76	5.6	76	5.6	0.082	4.8	LOS A	0.4	3.0	0.23	0.47	0.23	51.8
9	R2	All MCs	14	15.4	14	15.4	0.082	9.1	LOS A	0.4	3.0	0.23	0.47	0.23	49.2
9u	U	All MCs	2	0.0	2	0.0	0.082	10.8	LOS A	0.4	3.0	0.23	0.47	0.23	48.7
Approach			94	6.7	94	6.7	0.082	5.6	LOS A	0.4	3.0	0.23	0.47	0.23	51.0
West: Peats Ferry Rd															
10	L2	All MCs	15	21.4	15	21.4	0.054	4.7	LOS A	0.3	2.0	0.23	0.59	0.23	47.7
11	T1	All MCs	2	100.0	2	100.0	0.054	6.0	LOS A	0.3	2.0	0.23	0.59	0.23	32.9
12	R2	All MCs	53	6.0	53	6.0	0.054	8.9	LOS A	0.3	2.0	0.23	0.59	0.23	49.9
12u	U	All MCs	1	0.0	1	0.0	0.054	10.7	LOS A	0.3	2.0	0.23	0.59	0.23	49.2
Approach			71	11.9	71	11.9	0.054	8.0	LOS A	0.3	2.0	0.23	0.59	0.23	49.1
All Vehicles			294	8.6	294	8.6	0.090	6.0	LOS A	0.5	3.4	0.18	0.51	0.18	51.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 Peak Hour (Sunday) Peats Ferry Rd / Pacific Hwy - Base (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	72	0.0	72	0.0	0.183	4.2	LOS A	1.0	7.1	0.14	0.44	0.14	53.2
2	T1	All MCs	189	0.0	189	0.0	0.183	4.5	LOS A	1.0	7.1	0.14	0.44	0.14	52.9
3	R2	All MCs	1	0.0	1	0.0	0.183	8.6	LOS A	1.0	7.1	0.14	0.44	0.14	30.7
3u	U	All MCs	6	0.0	6	0.0	0.183	10.5	LOS A	1.0	7.1	0.14	0.44	0.14	53.3
Approach			268	0.0	268	0.0	0.183	4.6	LOS A	1.0	7.1	0.14	0.44	0.14	52.9
East: B2 Local Centre															
4	L2	All MCs	3	0.0	3	0.0	0.007	2.9	LOS A	0.0	0.2	0.34	0.51	0.34	50.2
5	T1	All MCs	2	0.0	2	0.0	0.007	3.4	LOS A	0.0	0.2	0.34	0.51	0.34	49.2
6	R2	All MCs	1	0.0	1	0.0	0.007	7.0	LOS A	0.0	0.2	0.34	0.51	0.34	45.1
6u	U	All MCs	1	0.0	1	0.0	0.007	8.9	LOS A	0.0	0.2	0.34	0.51	0.34	8.6
Approach			7	0.0	7	0.0	0.007	4.4	LOS A	0.0	0.2	0.34	0.51	0.34	43.3
North: Old Pacific Hwy															
7	L2	All MCs	3	0.0	3	0.0	0.093	4.6	LOS A	0.5	3.5	0.26	0.49	0.26	29.6
8	T1	All MCs	78	5.4	78	5.4	0.093	4.9	LOS A	0.5	3.5	0.26	0.49	0.26	51.5
9	R2	All MCs	24	8.7	24	8.7	0.093	9.1	LOS A	0.5	3.5	0.26	0.49	0.26	49.2
9u	U	All MCs	1	0.0	1	0.0	0.093	10.8	LOS A	0.5	3.5	0.26	0.49	0.26	48.4
Approach			106	5.9	106	5.9	0.093	5.9	LOS A	0.5	3.5	0.26	0.49	0.26	50.5
West: Peats Ferry Rd															
10	L2	All MCs	35	15.2	35	15.2	0.092	5.2	LOS A	0.5	3.5	0.35	0.60	0.35	47.9
11	T1	All MCs	2	0.0	2	0.0	0.092	5.1	LOS A	0.5	3.5	0.35	0.60	0.35	33.0
12	R2	All MCs	74	8.6	74	8.6	0.092	9.4	LOS A	0.5	3.5	0.35	0.60	0.35	49.8
12u	U	All MCs	1	0.0	1	0.0	0.092	11.2	LOS A	0.5	3.5	0.35	0.60	0.35	49.2
Approach			112	10.4	112	10.4	0.092	8.0	LOS A	0.5	3.5	0.35	0.60	0.35	49.0
All Vehicles			494	3.6	494	3.6	0.183	5.6	LOS A	1.0	7.1	0.22	0.49	0.22	51.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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: 3v [2024 AM (Weekday) Pacific Hwy / M1 SB Ramps - Base (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	48	0.0	48	0.0	0.031	5.8	LOS A	0.1	0.9	0.13	0.52	0.13	52.7
2	T1	All MCs	37	17.1	37	17.1	0.021	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			85	7.4	85	7.4	0.031	3.3	LOS A	0.1	0.9	0.07	0.29	0.07	55.6
North: Pacific Hwy (N)															
8	T1	All MCs	65	19.4	65	19.4	0.038	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	53	4.0	53	4.0	0.031	5.7	LOS A	0.1	1.0	0.12	0.52	0.12	52.2
Approach			118	12.5	118	12.5	0.038	2.6	NA	0.1	1.0	0.05	0.23	0.05	56.2
West: M1 SB Ramps															
10	L2	All MCs	24	13.0	24	13.0	0.016	5.9	LOS A	0.1	0.5	0.11	0.51	0.11	52.0
12	R2	All MCs	63	11.7	63	11.7	0.079	10.2	LOS A	0.3	2.4	0.34	0.89	0.34	50.1
Approach			87	12.0	87	12.0	0.079	9.0	LOS A	0.3	2.4	0.28	0.78	0.28	50.6
All Vehicles			291	10.9	291	10.9	0.079	4.7	NA	0.3	2.4	0.13	0.42	0.13	54.2

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 PM (Weekday) Pacific Hwy / M1 SB Ramps - Base (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	41	12.8	41	12.8	0.028	5.9	LOS A	0.1	0.9	0.13	0.51	0.13	52.3
2	T1	All MCs	95	8.9	95	8.9	0.051	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			136	10.1	136	10.1	0.051	1.8	LOS A	0.1	0.9	0.04	0.15	0.04	57.3
North: Pacific Hwy (N)															
8	T1	All MCs	78	10.8	78	10.8	0.043	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	43	22.0	43	22.0	0.029	6.2	LOS A	0.1	1.1	0.21	0.51	0.21	51.2
Approach			121	14.8	121	14.8	0.043	2.2	NA	0.1	1.1	0.08	0.18	0.08	56.5
West: M1 SB Ramps															
10	L2	All MCs	20	10.5	20	10.5	0.014	6.0	LOS A	0.1	0.4	0.19	0.51	0.19	51.8
12	R2	All MCs	36	5.9	36	5.9	0.047	10.3	LOS A	0.2	1.3	0.38	0.88	0.38	50.1
Approach			56	7.5	56	7.5	0.047	8.8	LOS A	0.2	1.3	0.31	0.74	0.31	50.7
All Vehicles			313	11.4	313	11.4	0.051	3.2	NA	0.2	1.3	0.10	0.27	0.10	55.7

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 Peak Hour (Sunday) Pacific Hwy / M1 SB Ramps Base (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	113	4.7	113	4.7	0.073	5.8	LOS A	0.3	2.2	0.12	0.52	0.12	52.6
2	T1	All MCs	179	2.4	179	2.4	0.093	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			292	3.2	292	3.2	0.093	2.2	LOS A	0.3	2.2	0.04	0.20	0.04	56.8
North: Pacific Hwy (N)															
8	T1	All MCs	274	1.2	274	1.2	0.141	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
9	R2	All MCs	39	8.1	39	8.1	0.027	6.3	LOS A	0.1	0.9	0.29	0.53	0.29	51.5
Approach			313	2.0	313	2.0	0.141	0.8	NA	0.1	0.9	0.04	0.07	0.04	58.7
West: M1 SB Ramps															
10	L2	All MCs	69	6.1	69	6.1	0.052	6.3	LOS A	0.2	1.5	0.27	0.54	0.27	51.7
12	R2	All MCs	101	2.1	101	2.1	0.198	13.9	LOS A	0.8	5.4	0.60	0.98	0.60	48.1
Approach			171	3.7	171	3.7	0.198	10.8	LOS A	0.8	5.4	0.47	0.80	0.47	49.5
All Vehicles			775	2.9	775	2.9	0.198	3.5	NA	0.8	5.4	0.13	0.28	0.13	55.7

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 AM (Weekday) Pacific Highway / Site Access - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Pacific Highway E															
5	T1	All MCs	48	17.4	48	17.4	0.028	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.8
6	R2	All MCs	1	0.0	1	0.0	0.028	5.5	LOS A	0.0	0.1	0.01	0.01	0.01	57.0
Approach			49	17.0	49	17.0	0.028	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.8
North: Site Access															
7	L2	All MCs	1	0.0	1	0.0	0.002	5.7	LOS A	0.0	0.0	0.16	0.54	0.16	52.4
9	R2	All MCs	1	0.0	1	0.0	0.002	5.8	LOS A	0.0	0.0	0.16	0.54	0.16	52.2
Approach			2	0.0	2	0.0	0.002	5.8	LOS A	0.0	0.0	0.16	0.54	0.16	52.3
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.037	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
11	T1	All MCs	62	20.3	62	20.3	0.037	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			63	20.0	63	20.0	0.037	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles			115	18.3	115	18.3	0.037	0.2	NA	0.0	0.1	0.01	0.02	0.01	59.6

Site Level of Service (LOS) Method: Delay (RTA NSW). 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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Transport\SIDRA\Peats Island SIDRA Models_2024 Base.sip9

MOVEMENT SUMMARY

▼ Site: 4 [2024 PM (Weekday) Pacific Highway / Site Access - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Pacific Highway E															
5	T1	All MCs	91	8.1	91	8.1	0.050	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
6	R2	All MCs	1	0.0	1	0.0	0.050	5.5	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			92	8.0	92	8.0	0.050	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
North: Site Access															
7	L2	All MCs	1	0.0	1	0.0	0.002	5.8	LOS A	0.0	0.0	0.20	0.54	0.20	52.3
9	R2	All MCs	1	0.0	1	0.0	0.002	6.0	LOS A	0.0	0.0	0.20	0.54	0.20	52.1
Approach			2	0.0	2	0.0	0.002	5.9	LOS A	0.0	0.0	0.20	0.54	0.20	52.2
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.049	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
11	T1	All MCs	86	15.9	86	15.9	0.049	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			87	15.7	87	15.7	0.049	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
All Vehicles			181	11.6	181	11.6	0.050	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.8

Site Level of Service (LOS) Method: Delay (RTA NSW). 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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Transport\SIDRA\Peats Island SIDRA Models_2024 Base.sip9

MOVEMENT SUMMARY

▼ Site: 4 [2024 Peak Hour (Sunday) Pacific Highway / Site Access - Base (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	105	5.0	105	5.0	0.056	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
6	R2	All MCs	1	0.0	1	0.0	0.056	5.8	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			106	5.0	106	5.0	0.056	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
North: Site Access															
7	L2	All MCs	1	0.0	1	0.0	0.002	6.2	LOS A	0.0	0.0	0.32	0.54	0.32	52.0
9	R2	All MCs	1	0.0	1	0.0	0.002	6.6	LOS A	0.0	0.0	0.32	0.54	0.32	51.7
Approach			2	0.0	2	0.0	0.002	6.4	LOS A	0.0	0.0	0.32	0.54	0.32	51.9
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.4
11	T1	All MCs	224	2.3	224	2.3	0.117	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			225	2.3	225	2.3	0.117	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			334	3.2	334	3.2	0.117	0.1	NA	0.0	0.1	0.00	0.01	0.00	59.8

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 AM (Weekday) Pacific Hwy / Old Pacific Hwy - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	64	4.9	64	4.9	0.048	5.6	LOS A	0.0	0.0	0.00	0.44	0.00	52.3
2	T1	All MCs	21	15.0	21	15.0	0.048	0.0	LOS A	0.0	0.0	0.00	0.44	0.00	56.0
Approach			85	7.4	85	7.4	0.048	4.2	NA	0.0	0.0	0.00	0.44	0.00	53.3
North: Pacific Hwy (N)															
8	T1	All MCs	73	7.2	73	7.2	0.039	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	15	14.3	15	14.3	0.010	6.0	LOS A	0.0	0.3	0.19	0.53	0.19	50.0
Approach			87	8.4	87	8.4	0.039	1.0	NA	0.0	0.3	0.03	0.09	0.03	58.3
West: Old Pacific Hwy															
10	L2	All MCs	23	18.2	23	18.2	0.114	5.9	LOS A	0.5	3.7	0.20	0.54	0.20	50.2
12	R2	All MCs	95	10.0	95	10.0	0.114	6.6	LOS A	0.5	3.7	0.20	0.54	0.20	50.2
Approach			118	11.6	118	11.6	0.114	6.5	LOS A	0.5	3.7	0.20	0.54	0.20	50.2
All Vehicles			291	9.4	291	9.4	0.114	4.2	NA	0.5	3.7	0.09	0.37	0.09	53.6

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 PM (Weekday) Pacific Hwy / Old Pacific Hwy - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	88	6.0	88	6.0	0.078	5.6	LOS A	0.0	0.0	0.00	0.37	0.00	52.9
2	T1	All MCs	52	10.2	52	10.2	0.078	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	56.7
Approach			140	7.5	140	7.5	0.078	3.6	NA	0.0	0.0	0.00	0.37	0.00	54.4
North: Pacific Hwy (N)															
8	T1	All MCs	61	8.6	61	8.6	0.033	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	36	5.9	36	5.9	0.023	6.0	LOS A	0.1	0.8	0.25	0.54	0.25	50.2
Approach			97	7.6	97	7.6	0.033	2.2	NA	0.1	0.8	0.09	0.20	0.09	56.4
West: Old Pacific Hwy															
10	L2	All MCs	40	10.5	40	10.5	0.141	5.9	LOS A	0.6	4.5	0.27	0.55	0.27	50.3
12	R2	All MCs	103	9.2	103	9.2	0.141	7.0	LOS A	0.6	4.5	0.27	0.55	0.27	50.0
Approach			143	9.6	143	9.6	0.141	6.7	LOS A	0.6	4.5	0.27	0.55	0.27	50.1
All Vehicles			380	8.3	380	8.3	0.141	4.4	NA	0.6	4.5	0.12	0.40	0.12	53.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 Peak Hour (Sunday) Pacific Hwy / Old Pacific Hwy - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	112	4.7	112	4.7	0.149	5.6	LOS A	0.0	0.0	0.00	0.24	0.00	54.3
2	T1	All MCs	167	1.3	167	1.3	0.149	0.0	LOS A	0.0	0.0	0.00	0.24	0.00	57.9
Approach			279	2.6	279	2.6	0.149	2.3	NA	0.0	0.0	0.00	0.24	0.00	56.6
North: Pacific Hwy (N)															
8	T1	All MCs	140	0.0	140	0.0	0.072	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	27	0.0	27	0.0	0.020	6.4	LOS A	0.1	0.6	0.36	0.57	0.36	50.1
Approach			167	0.0	167	0.0	0.072	1.1	NA	0.1	0.6	0.06	0.09	0.06	58.4
West: Old Pacific Hwy															
10	L2	All MCs	56	0.0	56	0.0	0.329	6.4	LOS A	1.6	11.6	0.51	0.68	0.54	49.2
12	R2	All MCs	215	2.5	215	2.5	0.329	9.1	LOS A	1.6	11.6	0.51	0.68	0.54	48.8
Approach			271	1.9	271	1.9	0.329	8.5	LOS A	1.6	11.6	0.51	0.68	0.54	48.9
All Vehicles			717	1.8	717	1.8	0.329	4.4	NA	1.6	11.6	0.21	0.37	0.22	54.1

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 AM (Weekday) Peats Ferry Rd / Pacific Hwy - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	27	0.0	27	0.0	0.083	4.2	LOS A	0.4	3.0	0.10	0.44	0.10	53.4
2	T1	All MCs	84	12.5	84	12.5	0.083	4.5	LOS A	0.4	3.0	0.10	0.44	0.10	52.7
3	R2	All MCs	1	0.0	1	0.0	0.083	8.5	LOS A	0.4	3.0	0.10	0.44	0.10	30.9
3u	U	All MCs	1	0.0	1	0.0	0.083	10.5	LOS A	0.4	3.0	0.10	0.44	0.10	53.5
Approach			114	9.3	114	9.3	0.083	4.5	LOS A	0.4	3.0	0.10	0.44	0.10	52.7
East: B2 Local Centre															
4	L2	All MCs	6	50.0	6	50.0	0.010	2.5	LOS A	0.0	0.4	0.22	0.49	0.22	47.9
5	T1	All MCs	1	0.0	1	0.0	0.010	2.8	LOS A	0.0	0.4	0.22	0.49	0.22	49.6
6	R2	All MCs	1	0.0	1	0.0	0.010	6.4	LOS A	0.0	0.4	0.22	0.49	0.22	45.5
6u	U	All MCs	1	0.0	1	0.0	0.010	8.3	LOS A	0.0	0.4	0.22	0.49	0.22	12.6
Approach			9	33.3	9	33.3	0.010	3.6	LOS A	0.0	0.4	0.22	0.49	0.22	45.3
North: Old Pacific Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.047	4.2	LOS A	0.2	1.8	0.10	0.50	0.10	29.9
8	T1	All MCs	39	13.5	39	13.5	0.047	4.5	LOS A	0.2	1.8	0.10	0.50	0.10	51.6
9	R2	All MCs	15	0.0	15	0.0	0.047	8.5	LOS A	0.2	1.8	0.10	0.50	0.10	50.1
9u	U	All MCs	2	100.0	2	100.0	0.047	11.7	LOS A	0.2	1.8	0.10	0.50	0.10	34.2
Approach			60	12.3	60	12.3	0.047	5.7	LOS A	0.2	1.8	0.10	0.50	0.10	49.3
West: Peats Ferry Rd															
10	L2	All MCs	7	0.0	7	0.0	0.017	4.4	LOS A	0.1	0.5	0.22	0.57	0.22	49.1
11	T1	All MCs	1	0.0	1	0.0	0.017	4.7	LOS A	0.1	0.5	0.22	0.57	0.22	27.2
12	R2	All MCs	14	0.0	14	0.0	0.017	8.8	LOS A	0.1	0.5	0.22	0.57	0.22	50.6
12u	U	All MCs	1	0.0	1	0.0	0.017	10.7	LOS A	0.1	0.5	0.22	0.57	0.22	49.7
Approach			23	0.0	23	0.0	0.017	7.3	LOS A	0.1	0.5	0.22	0.57	0.22	49.1
All Vehicles			206	10.2	206	10.2	0.083	5.2	LOS A	0.4	3.0	0.12	0.47	0.12	51.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 PM (Weekday) Peats Ferry Rd / Pacific Hwy - w/ Development (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	40	0.0	40	0.0	0.110	4.2	LOS A	0.6	4.2	0.10	0.47	0.10	53.0
2	T1	All MCs	99	8.5	99	8.5	0.110	4.5	LOS A	0.6	4.2	0.10	0.47	0.10	52.4
3	R2	All MCs	1	0.0	1	0.0	0.110	8.5	LOS A	0.6	4.2	0.10	0.47	0.10	37.2
3u	U	All MCs	17	12.5	17	12.5	0.110	10.6	LOS A	0.6	4.2	0.10	0.47	0.10	52.6
Approach			157	6.7	157	6.7	0.110	5.1	LOS A	0.6	4.2	0.10	0.47	0.10	52.5
East: B2 Local Centre															
4	L2	All MCs	1	0.0	1	0.0	0.004	2.8	LOS A	0.0	0.1	0.33	0.55	0.33	49.1
5	T1	All MCs	1	0.0	1	0.0	0.004	3.3	LOS A	0.0	0.1	0.33	0.55	0.33	47.9
6	R2	All MCs	1	0.0	1	0.0	0.004	6.9	LOS A	0.0	0.1	0.33	0.55	0.33	43.8
6u	U	All MCs	1	0.0	1	0.0	0.004	8.8	LOS A	0.0	0.1	0.33	0.55	0.33	9.0
Approach			4	0.0	4	0.0	0.004	5.5	LOS A	0.0	0.1	0.33	0.55	0.33	37.2
North: Old Pacific Hwy															
7	L2	All MCs	2	0.0	2	0.0	0.092	4.5	LOS A	0.5	3.4	0.23	0.47	0.23	29.8
8	T1	All MCs	89	4.7	89	4.7	0.092	4.8	LOS A	0.5	3.4	0.23	0.47	0.23	51.9
9	R2	All MCs	14	15.4	14	15.4	0.092	9.1	LOS A	0.5	3.4	0.23	0.47	0.23	49.3
9u	U	All MCs	2	0.0	2	0.0	0.092	10.8	LOS A	0.5	3.4	0.23	0.47	0.23	48.8
Approach			107	5.9	107	5.9	0.092	5.5	LOS A	0.5	3.4	0.23	0.47	0.23	51.2
West: Peats Ferry Rd															
10	L2	All MCs	15	21.4	15	21.4	0.055	4.9	LOS A	0.3	2.0	0.27	0.59	0.27	47.6
11	T1	All MCs	2	100.0	2	100.0	0.055	6.3	LOS A	0.3	2.0	0.27	0.59	0.27	32.8
12	R2	All MCs	53	6.0	53	6.0	0.055	9.0	LOS A	0.3	2.0	0.27	0.59	0.27	49.8
12u	U	All MCs	1	0.0	1	0.0	0.055	10.8	LOS A	0.3	2.0	0.27	0.59	0.27	49.0
Approach			71	11.9	71	11.9	0.055	8.1	LOS A	0.3	2.0	0.27	0.59	0.27	49.0
All Vehicles			339	7.5	339	7.5	0.110	5.8	LOS A	0.6	4.2	0.18	0.50	0.18	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 Peak Hour (Sunday) Peats Ferry Rd / Pacific Hwy - w/ Development (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	72	0.0	72	0.0	0.203	4.2	LOS A	1.2	8.1	0.14	0.44	0.14	53.2
2	T1	All MCs	221	0.0	221	0.0	0.203	4.5	LOS A	1.2	8.1	0.14	0.44	0.14	52.9
3	R2	All MCs	1	0.0	1	0.0	0.203	8.6	LOS A	1.2	8.1	0.14	0.44	0.14	30.8
3u	U	All MCs	6	0.0	6	0.0	0.203	10.5	LOS A	1.2	8.1	0.14	0.44	0.14	53.3
Approach			300	0.0	300	0.0	0.203	4.5	LOS A	1.2	8.1	0.14	0.44	0.14	52.9
East: B2 Local Centre															
4	L2	All MCs	3	0.0	3	0.0	0.007	2.9	LOS A	0.0	0.2	0.35	0.52	0.35	50.2
5	T1	All MCs	2	0.0	2	0.0	0.007	3.4	LOS A	0.0	0.2	0.35	0.52	0.35	49.1
6	R2	All MCs	1	0.0	1	0.0	0.007	7.0	LOS A	0.0	0.2	0.35	0.52	0.35	45.0
6u	U	All MCs	1	0.0	1	0.0	0.007	8.9	LOS A	0.0	0.2	0.35	0.52	0.35	8.6
Approach			7	0.0	7	0.0	0.007	4.5	LOS A	0.0	0.2	0.35	0.52	0.35	43.3
North: Old Pacific Hwy															
7	L2	All MCs	3	0.0	3	0.0	0.104	4.6	LOS A	0.5	4.0	0.26	0.48	0.26	29.6
8	T1	All MCs	92	4.6	92	4.6	0.104	4.9	LOS A	0.5	4.0	0.26	0.48	0.26	51.6
9	R2	All MCs	24	8.7	24	8.7	0.104	9.1	LOS A	0.5	4.0	0.26	0.48	0.26	49.3
9u	U	All MCs	1	0.0	1	0.0	0.104	10.8	LOS A	0.5	4.0	0.26	0.48	0.26	48.4
Approach			120	5.3	120	5.3	0.104	5.8	LOS A	0.5	4.0	0.26	0.48	0.26	50.7
West: Peats Ferry Rd															
10	L2	All MCs	35	15.2	35	15.2	0.094	5.3	LOS A	0.5	3.6	0.38	0.61	0.38	47.8
11	T1	All MCs	2	0.0	2	0.0	0.094	5.3	LOS A	0.5	3.6	0.38	0.61	0.38	33.0
12	R2	All MCs	74	8.6	74	8.6	0.094	9.6	LOS A	0.5	3.6	0.38	0.61	0.38	49.7
12u	U	All MCs	1	0.0	1	0.0	0.094	11.3	LOS A	0.5	3.6	0.38	0.61	0.38	49.1
Approach			112	10.4	112	10.4	0.094	8.2	LOS A	0.5	3.6	0.38	0.61	0.38	49.0
All Vehicles			539	3.3	539	3.3	0.203	5.6	LOS A	1.2	8.1	0.22	0.48	0.22	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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: 3v [2024 AM (Weekday) Pacific Hwy / M1 SB Ramps - w/ Development - Conversion (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Pacific Hwy (S)															
1	L2	All MCs	48	0.0	48	0.0	0.032	5.8	LOS A	0.1	0.9	0.17	0.52	0.17	52.6
2	T1	All MCs	51	12.5	51	12.5	0.028	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			99	6.4	99	6.4	0.032	2.9	LOS A	0.1	0.9	0.08	0.25	0.08	56.0
North: Pacific Hwy (N)															
8	T1	All MCs	79	16.0	79	16.0	0.045	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	84	2.5	84	2.5	0.050	5.8	LOS A	0.2	1.6	0.14	0.52	0.14	52.2
Approach			163	9.0	163	9.0	0.050	3.0	NA	0.2	1.6	0.07	0.27	0.07	55.7
West: M1 SB Ramps															
10	L2	All MCs	38	8.3	38	8.3	0.025	5.9	LOS A	0.1	0.8	0.13	0.51	0.13	52.1
12	R2	All MCs	63	11.7	63	11.7	0.085	10.8	LOS A	0.3	2.5	0.40	0.89	0.40	49.8
Approach			101	10.4	101	10.4	0.085	8.9	LOS A	0.3	2.5	0.30	0.75	0.30	50.6
All Vehicles			363	8.7	363	8.7	0.085	4.6	NA	0.3	2.5	0.14	0.40	0.14	54.2

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 PM (Weekday) Pacific Hwy / M1 SB Ramps - w/ Development - Conversion (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Pacific Hwy (S)															
1	L2	All MCs	41	12.8	41	12.8	0.029	6.0	LOS A	0.1	0.9	0.17	0.51	0.17	52.1
2	T1	All MCs	108	7.8	108	7.8	0.058	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			149	9.2	149	9.2	0.058	1.7	LOS A	0.1	0.9	0.05	0.14	0.05	57.5
North: Pacific Hwy (N)															
8	T1	All MCs	92	9.2	92	9.2	0.050	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	75	12.7	75	12.7	0.049	6.1	LOS A	0.2	1.7	0.23	0.52	0.23	51.5
Approach			166	10.8	166	10.8	0.050	2.8	NA	0.2	1.7	0.10	0.23	0.10	55.8
West: M1 SB Ramps															
10	L2	All MCs	34	6.3	34	6.3	0.023	6.0	LOS A	0.1	0.7	0.20	0.52	0.20	51.9
12	R2	All MCs	36	5.9	36	5.9	0.050	10.9	LOS A	0.2	1.4	0.43	0.88	0.43	49.8
Approach			69	6.1	69	6.1	0.050	8.5	LOS A	0.2	1.4	0.32	0.71	0.32	50.8
All Vehicles			385	9.3	385	9.3	0.058	3.4	NA	0.2	1.7	0.12	0.28	0.12	55.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 Peak Hour (Sunday) Pacific Hwy / M1 SB Ramps - w/ Development - Conversion (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	113	4.7	113	4.7	0.075	5.9	LOS A	0.3	2.3	0.16	0.52	0.16	52.4
2	T1	All MCs	193	2.2	193	2.2	0.100	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			305	3.1	305	3.1	0.100	2.2	LOS A	0.3	2.3	0.06	0.19	0.06	56.9
North: Pacific Hwy (N)															
8	T1	All MCs	287	1.1	287	1.1	0.148	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
9	R2	All MCs	71	4.5	71	4.5	0.048	6.3	LOS A	0.2	1.6	0.30	0.54	0.30	51.6
Approach			358	1.8	358	1.8	0.148	1.3	NA	0.2	1.6	0.06	0.11	0.06	58.1
West: M1 SB Ramps															
10	L2	All MCs	83	5.1	83	5.1	0.062	6.3	LOS A	0.2	1.8	0.29	0.55	0.29	51.7
12	R2	All MCs	101	2.1	101	2.1	0.217	14.9	LOS B	0.8	6.0	0.62	1.00	0.64	47.6
Approach			184	3.4	184	3.4	0.217	11.0	LOS A	0.8	6.0	0.47	0.80	0.48	49.3
All Vehicles			847	2.6	847	2.6	0.217	3.7	NA	0.8	6.0	0.15	0.29	0.15	55.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 AM (Weekday) Pacific Highway / Site Access - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	48	17.4	48	17.4	0.047	0.0	LOS A	0.2	1.3	0.15	0.27	0.15	57.1
6	R2	All MCs	34	0.0	34	0.0	0.047	6.0	LOS A	0.2	1.3	0.15	0.27	0.15	54.5
Approach			82	10.3	82	10.3	0.047	2.5	NA	0.2	1.3	0.15	0.27	0.15	56.0
North: Site Access															
7	L2	All MCs	52	0.0	52	0.0	0.046	5.7	LOS A	0.2	1.2	0.16	0.55	0.16	52.4
9	R2	All MCs	14	0.0	14	0.0	0.046	6.0	LOS A	0.2	1.2	0.16	0.55	0.16	52.1
Approach			65	0.0	65	0.0	0.046	5.8	LOS A	0.2	1.2	0.16	0.55	0.16	52.4
West: Pacific Highway W															
10	L2	All MCs	32	0.0	32	0.0	0.053	5.6	LOS A	0.0	0.0	0.00	0.20	0.00	55.6
11	T1	All MCs	62	20.3	62	20.3	0.053	0.0	LOS A	0.0	0.0	0.00	0.20	0.00	57.9
Approach			94	13.5	94	13.5	0.053	1.9	NA	0.0	0.0	0.00	0.20	0.00	57.1
All Vehicles			241	8.7	241	8.7	0.053	3.1	NA	0.2	1.3	0.10	0.32	0.10	55.4

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 PM (Weekday) Pacific Highway / Site Access - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	91	8.1	91	8.1	0.070	0.0	LOS A	0.2	1.5	0.13	0.19	0.13	58.0
6	R2	All MCs	34	0.0	34	0.0	0.070	6.2	LOS A	0.2	1.5	0.13	0.19	0.13	55.3
Approach			124	5.9	124	5.9	0.070	1.7	NA	0.2	1.5	0.13	0.19	0.13	57.2
North: Site Access															
7	L2	All MCs	52	0.0	52	0.0	0.047	5.8	LOS A	0.2	1.3	0.20	0.55	0.20	52.3
9	R2	All MCs	14	0.0	14	0.0	0.047	6.3	LOS A	0.2	1.3	0.20	0.55	0.20	52.0
Approach			65	0.0	65	0.0	0.047	5.9	LOS A	0.2	1.3	0.20	0.55	0.20	52.3
West: Pacific Highway W															
10	L2	All MCs	32	0.0	32	0.0	0.066	5.6	LOS A	0.0	0.0	0.00	0.16	0.00	56.0
11	T1	All MCs	86	15.9	86	15.9	0.066	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	58.4
Approach			118	11.6	118	11.6	0.066	1.5	NA	0.0	0.0	0.00	0.16	0.00	57.7
All Vehicles			307	6.8	307	6.8	0.070	2.5	NA	0.2	1.5	0.10	0.26	0.10	56.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 Peak Hour (Sunday) Pacific Highway / Site Access - w/ Development (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	105	5.0	105	5.0	0.080	0.0	LOS A	0.2	1.7	0.19	0.22	0.19	57.9
6	R2	All MCs	34	0.0	34	0.0	0.080	7.3	LOS A	0.2	1.7	0.19	0.22	0.19	55.3
Approach			139	3.8	139	3.8	0.080	1.8	NA	0.2	1.7	0.19	0.22	0.19	57.3
North: Site Access															
7	L2	All MCs	52	0.0	52	0.0	0.054	6.3	LOS A	0.2	1.4	0.32	0.59	0.32	51.9
9	R2	All MCs	14	0.0	14	0.0	0.054	7.0	LOS A	0.2	1.4	0.32	0.59	0.32	51.7
Approach			65	0.0	65	0.0	0.054	6.4	LOS A	0.2	1.4	0.32	0.59	0.32	51.9
West: Pacific Highway W															
10	L2	All MCs	32	0.0	32	0.0	0.134	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	56.8
11	T1	All MCs	224	2.3	224	2.3	0.134	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	59.3
Approach			256	2.1	256	2.1	0.134	0.7	NA	0.0	0.0	0.00	0.07	0.00	58.9
All Vehicles			460	2.3	460	2.3	0.134	1.8	NA	0.2	1.7	0.10	0.19	0.10	57.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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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Project: C:\Users\ROB95646\OneDrive - Mott MacDonald\Do - Peat Island Development - Mooney Mooney - Proposal Project\Develop\5.

Transport\SIDRA\Peats Island SIDRA Models_2024 with Development.sip9

MOVEMENT SUMMARY

▼ Site: 1 [2024 AM (Weekday) Pacific Hwy / Old Pacific Hwy - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	37	8.6	37	8.6	0.033	5.6	LOS A	0.0	0.0	0.00	0.37	0.00	52.7
2	T1	All MCs	21	15.0	21	15.0	0.033	0.0	LOS A	0.0	0.0	0.00	0.37	0.00	56.6
Approach			58	10.9	58	10.9	0.033	3.6	NA	0.0	0.0	0.00	0.37	0.00	54.3
North: Pacific Hwy (N)															
8	T1	All MCs	73	7.2	73	7.2	0.039	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	8	25.0	8	25.0	0.006	6.0	LOS A	0.0	0.2	0.16	0.53	0.16	49.6
Approach			81	9.1	81	9.1	0.039	0.6	NA	0.0	0.2	0.02	0.05	0.02	58.9
West: Old Pacific Hwy															
10	L2	All MCs	41	10.3	41	10.3	0.257	5.8	LOS A	1.2	9.0	0.23	0.54	0.23	50.4
12	R2	All MCs	235	4.0	235	4.0	0.257	6.5	LOS A	1.2	9.0	0.23	0.54	0.23	50.4
Approach			276	5.0	276	5.0	0.257	6.4	LOS A	1.2	9.0	0.23	0.54	0.23	50.4
All Vehicles			415	6.6	415	6.6	0.257	4.9	NA	1.2	9.0	0.16	0.42	0.16	52.6

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 PM (Weekday) Pacific Hwy / Old Pacific Hwy - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	61	8.6	61	8.6	0.063	5.7	LOS A	0.0	0.0	0.00	0.32	0.00	53.3
2	T1	All MCs	52	10.2	52	10.2	0.063	0.0	LOS A	0.0	0.0	0.00	0.32	0.00	57.1
Approach			113	9.3	113	9.3	0.063	3.1	NA	0.0	0.0	0.00	0.32	0.00	55.2
North: Pacific Hwy (N)															
8	T1	All MCs	61	8.6	61	8.6	0.033	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	29	7.1	29	7.1	0.019	6.0	LOS A	0.1	0.6	0.22	0.54	0.22	50.2
Approach			91	8.1	91	8.1	0.033	1.9	NA	0.1	0.6	0.07	0.17	0.07	56.9
West: Old Pacific Hwy															
10	L2	All MCs	58	7.3	58	7.3	0.292	5.9	LOS A	1.4	10.4	0.32	0.56	0.32	50.3
12	R2	All MCs	243	3.9	243	3.9	0.292	7.0	LOS A	1.4	10.4	0.32	0.56	0.32	50.1
Approach			301	4.5	301	4.5	0.292	6.8	LOS A	1.4	10.4	0.32	0.56	0.32	50.1
All Vehicles			504	6.3	504	6.3	0.292	5.1	NA	1.4	10.4	0.20	0.44	0.20	52.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 Peak Hour (Sunday) Pacific Hwy / Old Pacific Hwy - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	84	6.3	84	6.3	0.134	5.6	LOS A	0.0	0.0	0.00	0.20	0.00	54.6
2	T1	All MCs	167	1.3	167	1.3	0.134	0.0	LOS A	0.0	0.0	0.00	0.20	0.00	58.2
Approach			252	2.9	252	2.9	0.134	1.9	NA	0.0	0.0	0.00	0.20	0.00	57.1
North: Pacific Hwy (N)															
8	T1	All MCs	140	0.0	140	0.0	0.072	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	21	0.0	21	0.0	0.015	6.3	LOS A	0.1	0.4	0.34	0.55	0.34	50.2
Approach			161	0.0	161	0.0	0.072	0.8	NA	0.1	0.4	0.04	0.07	0.04	58.7
West: Old Pacific Hwy															
10	L2	All MCs	74	0.0	74	0.0	0.514	7.7	LOS A	4.1	29.0	0.60	0.79	0.83	47.9
12	R2	All MCs	355	1.5	355	1.5	0.514	10.6	LOS A	4.1	29.0	0.60	0.79	0.83	47.6
Approach			428	1.2	428	1.2	0.514	10.1	LOS A	4.1	29.0	0.60	0.79	0.83	47.7
All Vehicles			841	1.5	841	1.5	0.514	5.9	NA	4.1	29.0	0.31	0.48	0.43	52.5

Site Level of Service (LOS) Method: Delay (RTA NSW). 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 [2024 AM (Weekday) Peats Ferry Rd / Pacific Hwy - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	27	0.0	27	0.0	0.062	4.2	LOS A	0.3	2.3	0.10	0.45	0.10	53.4
2	T1	All MCs	53	20.0	53	20.0	0.062	4.6	LOS A	0.3	2.3	0.10	0.45	0.10	52.5
3	R2	All MCs	1	0.0	1	0.0	0.062	8.5	LOS A	0.3	2.3	0.10	0.45	0.10	30.8
3u	U	All MCs	1	0.0	1	0.0	0.062	10.5	LOS A	0.3	2.3	0.10	0.45	0.10	53.5
Approach			82	12.8	82	12.8	0.062	4.6	LOS A	0.3	2.3	0.10	0.45	0.10	52.5
East: B2 Local Centre															
4	L2	All MCs	6	50.0	6	50.0	0.010	2.8	LOS A	0.0	0.4	0.28	0.50	0.28	47.6
5	T1	All MCs	1	0.0	1	0.0	0.010	3.0	LOS A	0.0	0.4	0.28	0.50	0.28	49.2
6	R2	All MCs	1	0.0	1	0.0	0.010	6.6	LOS A	0.0	0.4	0.28	0.50	0.28	45.1
6u	U	All MCs	1	0.0	1	0.0	0.010	8.5	LOS A	0.0	0.4	0.28	0.50	0.28	12.5
Approach			9	33.3	9	33.3	0.010	3.9	LOS A	0.0	0.4	0.28	0.50	0.28	44.9
North: Old Pacific Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.076	4.2	LOS A	0.4	2.8	0.10	0.47	0.10	30.2
8	T1	All MCs	81	6.5	81	6.5	0.076	4.5	LOS A	0.4	2.8	0.10	0.47	0.10	52.3
9	R2	All MCs	15	0.0	15	0.0	0.076	8.5	LOS A	0.4	2.8	0.10	0.47	0.10	50.6
9u	U	All MCs	2	100.0	2	100.0	0.076	11.7	LOS A	0.4	2.8	0.10	0.47	0.10	34.5
Approach			102	7.2	102	7.2	0.076	5.2	LOS A	0.4	2.8	0.10	0.47	0.10	51.0
West: Peats Ferry Rd															
10	L2	All MCs	7	0.0	7	0.0	0.016	4.3	LOS A	0.1	0.5	0.18	0.57	0.18	49.3
11	T1	All MCs	1	0.0	1	0.0	0.016	4.6	LOS A	0.1	0.5	0.18	0.57	0.18	27.2
12	R2	All MCs	14	0.0	14	0.0	0.016	8.7	LOS A	0.1	0.5	0.18	0.57	0.18	50.8
12u	U	All MCs	1	0.0	1	0.0	0.016	10.6	LOS A	0.1	0.5	0.18	0.57	0.18	49.8
Approach			23	0.0	23	0.0	0.016	7.2	LOS A	0.1	0.5	0.18	0.57	0.18	49.2
All Vehicles			217	9.7	217	9.7	0.076	5.1	LOS A	0.4	2.8	0.12	0.47	0.12	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 PM (Weekday) Peats Ferry Rd / Pacific Hwy - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	40	0.0	40	0.0	0.090	4.2	LOS A	0.5	3.4	0.10	0.49	0.10	52.9
2	T1	All MCs	67	12.5	67	12.5	0.090	4.5	LOS A	0.5	3.4	0.10	0.49	0.10	52.2
3	R2	All MCs	1	0.0	1	0.0	0.090	8.5	LOS A	0.5	3.4	0.10	0.49	0.10	37.1
3u	U	All MCs	17	12.5	17	12.5	0.090	10.6	LOS A	0.5	3.4	0.10	0.49	0.10	52.5
Approach			125	8.4	125	8.4	0.090	5.3	LOS A	0.5	3.4	0.10	0.49	0.10	52.4
East: B2 Local Centre															
4	L2	All MCs	1	0.0	1	0.0	0.004	3.0	LOS A	0.0	0.1	0.37	0.55	0.37	48.9
5	T1	All MCs	1	0.0	1	0.0	0.004	3.5	LOS A	0.0	0.1	0.37	0.55	0.37	47.7
6	R2	All MCs	1	0.0	1	0.0	0.004	7.1	LOS A	0.0	0.1	0.37	0.55	0.37	43.5
6u	U	All MCs	1	0.0	1	0.0	0.004	9.0	LOS A	0.0	0.1	0.37	0.55	0.37	9.0
Approach			4	0.0	4	0.0	0.004	5.7	LOS A	0.0	0.1	0.37	0.55	0.37	37.0
North: Old Pacific Hwy															
7	L2	All MCs	2	0.0	2	0.0	0.125	4.5	LOS A	0.6	4.6	0.24	0.46	0.24	29.9
8	T1	All MCs	132	3.2	132	3.2	0.125	4.8	LOS A	0.6	4.6	0.24	0.46	0.24	52.1
9	R2	All MCs	14	15.4	14	15.4	0.125	9.1	LOS A	0.6	4.6	0.24	0.46	0.24	49.4
9u	U	All MCs	2	0.0	2	0.0	0.125	10.8	LOS A	0.6	4.6	0.24	0.46	0.24	48.9
Approach			149	4.2	149	4.2	0.125	5.3	LOS A	0.6	4.6	0.24	0.46	0.24	51.6
West: Peats Ferry Rd															
10	L2	All MCs	15	21.4	15	21.4	0.054	4.7	LOS A	0.3	2.0	0.23	0.59	0.23	47.7
11	T1	All MCs	2	100.0	2	100.0	0.054	6.0	LOS A	0.3	2.0	0.23	0.59	0.23	32.9
12	R2	All MCs	53	6.0	53	6.0	0.054	8.9	LOS A	0.3	2.0	0.23	0.59	0.23	49.9
12u	U	All MCs	1	0.0	1	0.0	0.054	10.7	LOS A	0.3	2.0	0.23	0.59	0.23	49.2
Approach			71	11.9	71	11.9	0.054	8.0	LOS A	0.3	2.0	0.23	0.59	0.23	49.1
All Vehicles			349	7.2	349	7.2	0.125	5.8	LOS A	0.6	4.6	0.19	0.49	0.19	51.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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 [2024 Peak Hour (Sunday) Peats Ferry Rd / Pacific Hwy - Event Egress (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: M1 NB Off-Ramp															
1	L2	All MCs	72	0.0	72	0.0	0.183	4.2	LOS A	1.0	7.1	0.14	0.44	0.14	53.2
2	T1	All MCs	189	0.0	189	0.0	0.183	4.5	LOS A	1.0	7.1	0.14	0.44	0.14	52.9
3	R2	All MCs	1	0.0	1	0.0	0.183	8.6	LOS A	1.0	7.1	0.14	0.44	0.14	30.7
3u	U	All MCs	6	0.0	6	0.0	0.183	10.5	LOS A	1.0	7.1	0.14	0.44	0.14	53.3
Approach			268	0.0	268	0.0	0.183	4.6	LOS A	1.0	7.1	0.14	0.44	0.14	52.9
East: B2 Local Centre															
4	L2	All MCs	3	0.0	3	0.0	0.007	3.1	LOS A	0.0	0.2	0.39	0.52	0.39	49.9
5	T1	All MCs	2	0.0	2	0.0	0.007	3.6	LOS A	0.0	0.2	0.39	0.52	0.39	48.8
6	R2	All MCs	1	0.0	1	0.0	0.007	7.2	LOS A	0.0	0.2	0.39	0.52	0.39	44.7
6u	U	All MCs	1	0.0	1	0.0	0.007	9.2	LOS A	0.0	0.2	0.39	0.52	0.39	8.5
Approach			7	0.0	7	0.0	0.007	4.7	LOS A	0.0	0.2	0.39	0.52	0.39	43.0
North: Old Pacific Hwy															
7	L2	All MCs	3	0.0	3	0.0	0.137	4.6	LOS A	0.7	5.3	0.26	0.47	0.26	29.7
8	T1	All MCs	134	3.1	134	3.1	0.137	4.9	LOS A	0.7	5.3	0.26	0.47	0.26	51.8
9	R2	All MCs	24	8.7	24	8.7	0.137	9.1	LOS A	0.7	5.3	0.26	0.47	0.26	49.5
9u	U	All MCs	1	0.0	1	0.0	0.137	10.8	LOS A	0.7	5.3	0.26	0.47	0.26	48.6
Approach			162	3.9	162	3.9	0.137	5.5	LOS A	0.7	5.3	0.26	0.47	0.26	51.1
West: Peats Ferry Rd															
10	L2	All MCs	35	15.2	35	15.2	0.092	5.2	LOS A	0.5	3.5	0.35	0.60	0.35	47.9
11	T1	All MCs	2	0.0	2	0.0	0.092	5.1	LOS A	0.5	3.5	0.35	0.60	0.35	33.0
12	R2	All MCs	74	8.6	74	8.6	0.092	9.4	LOS A	0.5	3.5	0.35	0.60	0.35	49.8
12u	U	All MCs	1	0.0	1	0.0	0.092	11.2	LOS A	0.5	3.5	0.35	0.60	0.35	49.2
Approach			112	10.4	112	10.4	0.092	8.0	LOS A	0.5	3.5	0.35	0.60	0.35	49.0
All Vehicles			549	3.3	549	3.3	0.183	5.5	LOS A	1.0	7.1	0.22	0.48	0.22	51.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout 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: 3v [2024 AM (Weekday) Pacific Hwy / M1 SB Ramps - Event Egress (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	48	0.0	48	0.0	0.035	6.2	LOS A	0.1	1.0	0.27	0.53	0.27	52.3
2	T1	All MCs	37	17.1	37	17.1	0.021	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			85	7.4	85	7.4	0.035	3.5	LOS A	0.1	1.0	0.15	0.30	0.15	55.2
North: Pacific Hwy (N)															
8	T1	All MCs	121	10.4	121	10.4	0.066	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	182	1.2	182	1.2	0.105	5.7	LOS A	0.5	3.6	0.12	0.52	0.12	52.3
Approach			303	4.9	303	4.9	0.105	3.4	NA	0.5	3.6	0.08	0.31	0.08	55.1
West: M1 SB Ramps															
10	L2	All MCs	24	13.0	24	13.0	0.016	5.9	LOS A	0.1	0.5	0.11	0.51	0.11	52.0
12	R2	All MCs	63	11.7	63	11.7	0.103	12.2	LOS A	0.4	3.0	0.49	0.93	0.49	49.0
Approach			87	12.0	87	12.0	0.103	10.5	LOS A	0.4	3.0	0.39	0.81	0.39	49.8
All Vehicles			476	6.6	476	6.6	0.105	4.7	NA	0.5	3.6	0.15	0.40	0.15	54.0

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 PM (Weekday) Pacific Hwy / M1 SB Ramps - Event Egress (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	41	12.8	41	12.8	0.032	6.4	LOS A	0.1	1.0	0.27	0.53	0.27	51.8
2	T1	All MCs	102	8.2	102	8.2	0.055	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			143	9.6	143	9.6	0.055	1.8	LOS A	0.1	1.0	0.08	0.15	0.08	57.3
North: Pacific Hwy (N)															
8	T1	All MCs	134	6.3	134	6.3	0.071	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
9	R2	All MCs	173	5.5	173	5.5	0.108	6.0	LOS A	0.5	3.8	0.23	0.53	0.23	51.8
Approach			306	5.8	306	5.8	0.108	3.4	NA	0.5	3.8	0.13	0.30	0.13	55.1
West: M1 SB Ramps															
10	L2	All MCs	20	10.5	20	10.5	0.014	6.0	LOS A	0.1	0.4	0.20	0.51	0.20	51.8
12	R2	All MCs	36	5.9	36	5.9	0.061	12.3	LOS A	0.2	1.7	0.51	0.92	0.51	49.0
Approach			56	7.5	56	7.5	0.061	10.1	LOS A	0.2	1.7	0.40	0.77	0.40	49.9
All Vehicles			505	7.1	505	7.1	0.108	3.7	NA	0.5	3.8	0.14	0.31	0.14	55.0

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 3v [2024 Peak Hour (Sunday) Pacific Hwy / M1 SB Ramps - Event Egress (Site Folder: General)]**

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Pacific Hwy (S)															
1	L2	All MCs	113	4.7	113	4.7	0.082	6.2	LOS A	0.3	2.4	0.27	0.54	0.27	52.1
2	T1	All MCs	179	2.4	179	2.4	0.093	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			292	3.2	292	3.2	0.093	2.4	LOS A	0.3	2.4	0.10	0.21	0.10	56.5
North: Pacific Hwy (N)															
8	T1	All MCs	329	1.0	329	1.0	0.170	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
9	R2	All MCs	168	1.9	168	1.9	0.111	6.2	LOS A	0.5	3.7	0.30	0.55	0.30	51.7
Approach			498	1.3	498	1.3	0.170	2.1	NA	0.5	3.7	0.10	0.19	0.10	56.8
West: M1 SB Ramps															
10	L2	All MCs	69	6.1	69	6.1	0.052	6.3	LOS A	0.2	1.5	0.27	0.54	0.27	51.7
12	R2	All MCs	101	2.1	101	2.1	0.264	17.7	LOS B	1.1	7.5	0.71	1.03	0.80	46.0
Approach			171	3.7	171	3.7	0.264	13.0	LOS A	1.1	7.5	0.53	0.83	0.59	48.1
All Vehicles			960	2.3	960	2.3	0.264	4.2	NA	1.1	7.5	0.18	0.31	0.19	54.9

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 AM (Weekday) Pacific Highway / Site Access - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. Dist] veh m		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Pacific Highway E															
5	T1	All MCs	48	17.4	48	17.4	0.028	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.8
6	R2	All MCs	1	0.0	1	0.0	0.028	5.5	LOS A	0.0	0.1	0.01	0.01	0.01	57.0
Approach			49	17.0	49	17.0	0.028	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.8
North: Site Access															
7	L2	All MCs	209	0.0	209	0.0	0.184	5.8	LOS A	0.8	5.6	0.18	0.55	0.18	52.4
9	R2	All MCs	56	0.0	56	0.0	0.184	5.9	LOS A	0.8	5.6	0.18	0.55	0.18	52.1
Approach			265	0.0	265	0.0	0.184	5.8	LOS A	0.8	5.6	0.18	0.55	0.18	52.3
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.037	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
11	T1	All MCs	62	20.3	62	20.3	0.037	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			63	20.0	63	20.0	0.037	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
All Vehicles			378	5.6	378	5.6	0.184	4.1	NA	0.8	5.6	0.13	0.39	0.13	54.3

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 PM (Weekday) Pacific Highway / Site Access - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	91	8.1	91	8.1	0.050	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
6	R2	All MCs	1	0.0	1	0.0	0.050	5.5	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			92	8.0	92	8.0	0.050	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
North: Site Access															
7	L2	All MCs	209	0.0	209	0.0	0.189	5.9	LOS A	0.8	5.7	0.22	0.56	0.22	52.2
9	R2	All MCs	56	0.0	56	0.0	0.189	6.2	LOS A	0.8	5.7	0.22	0.56	0.22	52.0
Approach			265	0.0	265	0.0	0.189	5.9	LOS A	0.8	5.7	0.22	0.56	0.22	52.2
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.049	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.4
11	T1	All MCs	86	15.9	86	15.9	0.049	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.9
Approach			87	15.7	87	15.7	0.049	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.9
All Vehicles			444	4.7	444	4.7	0.189	3.6	NA	0.8	5.7	0.13	0.34	0.13	55.0

Site Level of Service (LOS) Method: Delay (RTA NSW). 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: 4 [2024 Peak Hour (Sunday) Pacific Highway / Site Access - Event Egress (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Pacific Highway / Site Access
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Pacific Highway E															
5	T1	All MCs	105	5.0	105	5.0	0.056	0.0	LOS A	0.0	0.1	0.01	0.01	0.01	59.9
6	R2	All MCs	1	0.0	1	0.0	0.056	5.8	LOS A	0.0	0.1	0.01	0.01	0.01	57.1
Approach			106	5.0	106	5.0	0.056	0.1	NA	0.0	0.1	0.01	0.01	0.01	59.9
North: Site Access															
7	L2	All MCs	209	0.0	209	0.0	0.215	6.4	LOS A	0.9	6.4	0.36	0.61	0.36	51.8
9	R2	All MCs	56	0.0	56	0.0	0.215	7.0	LOS A	0.9	6.4	0.36	0.61	0.36	51.6
Approach			265	0.0	265	0.0	0.215	6.5	LOS A	0.9	6.4	0.36	0.61	0.36	51.8
West: Pacific Highway W															
10	L2	All MCs	1	0.0	1	0.0	0.117	5.6	LOS A	0.0	0.0	0.00	0.00	0.00	57.4
11	T1	All MCs	224	2.3	224	2.3	0.117	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			225	2.3	225	2.3	0.117	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			597	1.8	597	1.8	0.215	2.9	NA	0.9	6.4	0.16	0.27	0.16	56.0

Site Level of Service (LOS) Method: Delay (RTA NSW). 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).

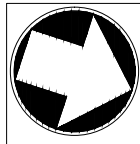
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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.

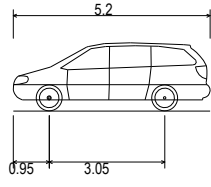
Attachment C: Swept Path Analysis



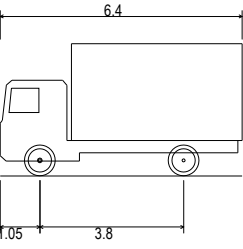
HAWKESBURY RIVER

PACIFIC MOTORWAY

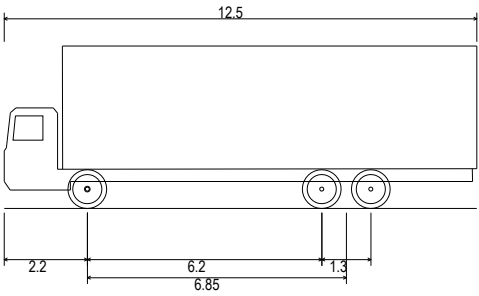
LEGEND



Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 6.300m



SRV - Small Rigid Vehicle
Overall Length 6.400m
Overall Width 2.330m
Overall Body Height 3.500m
Min Body Ground Clearance 0.398m
Track Width 2.330m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.100m



Single Unit Truck/Bus (12.5 m)
Overall Length 12.500m
Overall Width 2.500m
Overall Body Height 4.300m
Min Body Ground Clearance 0.490m
Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 12.500m

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DEVELOPMENT APPLICATION

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	Rev	Date	Description	Ch'k'd	App'd	
	01	17.12.24	ISSUE FOR DEVELOPMENT APPLICATION	FK	BS	
SCALE 1:500 0 25m 50m			CLIENT DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL 168 PACIFIC HWY, WATANOBBI NSW, 2259 e: darkinjung@dlalc.org.au			TITLE KOOROO WALL-UNDI (PEAT ISLAND) & FORESHORE DEVELOPMENT VEHICLE SWEEP PATH PLAN
DRAWING INFORMATION			DRAWING NUMBER MMD-102257-C-DR-01-DA-0701			
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ISO A1 594mm x 841mm

