


Lake Macdonald Dam Improvement Project

Prepared for: Seqwater

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1. Introduction

SMEC have been commissioned by Seqwater to assist with the update and development of a Traffic Impact Assessment (TIA) for the proposed Lake MacDonald Dam Improvement Project (LMDIP). The LMDIP is part of Seqwater's broader Dam Improvement Program, aimed at ensuring dams comply with the latest safety standards and continue to function safely during extreme weather events.

The design for the new dam wall at Lake Macdonald is a split-level concrete spillway (see **Figure 1-1**). The earth embankments will be reconstructed to their original level on either side of the spillway. Scour protection will be an addition, with rocks placed downstream of the spillway to prevent erosion. An outlet tower will be constructed to the left side of the spillway which will have mechanical pipework and electrical components to facilitate both emergency release of water, to lower the dam reservoir, and environmental flows to the downstream Six Mile Creek. At completion of the project, the new dam will have the same storage volume and full supply level as the existing dam (storage to 8,000ML).



Figure 1-1: Proposed Dam Upgrades

Source: <https://www.seqwater.com.au/project/lake-macdonald-dam-improvement-project>

1.1 History and Summary of Traffic Assessments

As part of the previous stages of the LMDIP, SMEC has completed the following specific TIA related reports:

- Traffic Impact Assessment (dated 25 January 2019) as part Impact Assessment Report for the Six Mile Creek Dam Safety Upgrade project:
 - In summary the report concluded the following:
 - The intersections assessed would operate within acceptable limits in both the AM and PM peak hour periods with the additional construction traffic. The additional traffic has minimal impact in both periods, with minimal increase in queueing and average delay in both the AM and PM peak periods.
 - Recommendation to upgrade lane markings at Noosa-Cooroy Road / Sivyers Road intersection to Channelised Right Turn (short), several minor signage upgrades and implementation of a traffic management plan.
 - The Coordinator General's report dated May 2019, resulted in several actions for further investigation:
 - Road Impact Assessment (RIA) to include a Pavement Impact Assessment (PIA) in addition to the TIA.
 - Heavy vehicles will not be permitted to utilise Sivyers Road to access the site.

- Consequently, it was recommended that the TIA be revised under the assumption that all heavy vehicles would utilise the Noosa Water Treatment Plant (NWTP) Access Road via Lake Macdonald Drive to access the site. This new RIA would form the basis of discussion with impacted stakeholders.
- Road Impact Assessment (dated 8 December 2020) to address the actions outlined in the Coordinator General’s report dated May 2019:
 - In summary the report concluded the following:
 - Construction traffic demands and distribution information supplied by Seqwater on 13 October 2020, with the following site access strategy adopted:
 - Heavy vehicles not permitted to utilise Sivyers Road to access the site as noted from the Coordinator General’s report.
 - All construction traffic turned right out of Lake Macdonald Drive onto Elm Street. Light vehicles assumed to all enter/exit the site during the assessment peak periods.
 - The study intersections of Elm Street at Lake Macdonald Drive, and Lake Macdonald Drive at Collwood Road under the most conservative traffic demand scenarios were found to have minimal traffic impacts with both intersections operating well within operational capacity limits. The assessment noted that this was subject to approval by the works contractor and conclusion of recommended transport routes.
 - Heavy vehicle traffic was expected to exceed the 5% threshold from August 2021 to August 2023, however, both intersections were predicted to operate well within operational capacity limits.
- Traffic review (dated 19 October 2023) of current traffic flows to assess if there is any change in conditions to warrant a review of the December 2020 TIA:
 - New intersection surveys were completed on Tuesday 12th September 2023, and a screen line count was conducted between 6 - 12 September 2023.
 - It concluded the traffic changes were low and traffic patterns were equivalent to the October 2020 traffic surveys, with low volumes.
 - Note, no changes to construction staff and construction vehicles were provided and thus not included in the review.
- The following information that informed the previously completed TIA has since changed:
 - Personnel and construction traffic volumes have been updated and verified by the works contractor John Holland.
 - All staff car parking is to be provided on site.
 - All staff are to travel to/from the site via private vehicle with no proposed bus shuttle.
 - Working hours and movement of associated site personnel and construction vehicles has been updated.
 - Nominated travel routes for workers and construction vehicles have been outlined.

1.2 Scope of Assessment

Given the time lapse and latest information, an updated TIA has been completed with reference to the Department of Transport and Main Roads (TMR) *Guide to Traffic Impact Assessments*. The TIA includes the following sections:

- Section 2: Subject Site and Locality.
- Section 3: Construction Staging and Site Access.
- Section 4: Construction Traffic Impacts.
- Section 5: Site Access Review and Mitigation.
- Section 6: Summary and Next Steps.

The inputs and assessment findings will inform part of the Traffic Management Plan (TMP) and identify any local road network capacity impacts (if any) and any required mitigation measure to facilitate a safe means of access to and from the site during both construction and operational phases.

2. Subject Site and Locality

2.1 Overview

Lake Macdonald is located in Noosa Shire Council (NSC) local government area, approximately 4.5km north of Cooroy town centre. LMDIP is on the north-western side of Lake Macdonald with public access from Collwood Road (also known as Noosa Water Treatment Plant (NWTP) Access Road) / Lake Macdonald Drive intersection.

The focus of the TIA is of the following three sections as shown in **Figure 2-1** that will be used by construction heavy vehicles during the project:

1. 4.3km section of Lake Macdonald Drive controlled by NSC from Elm Street to the site i.e. Collwood Road.
2. 5.6km section of State Controlled Road 145 consisting of Elm Street / Cooroy Connection Road from Lake Macdonald Drive to the Bruce Highway (10A) Exit 237 (Cooroy Bypass northern interchange).
3. 5.6km section State Controlled Road 142 consisting of Diamond Street / Tewanin Road / Cooroy - Noosa Road from Elm Street to Sivyers Road.

Note, as outlined in **Section 3.3**, contracts for supply of bulk materials in particular quarried rock and concrete including on site batching material are still in negotiations. As such, the above routes are the most reasonable assumption at the time of undertaking this TIA.

Construction workers (light vehicles) will also use the above routes, as well as the following additional two traffic routes:

1. Southern route via Elm Street and Myall Street to the Bruce Highway Exit 230 (Cooroy Bypass southern interchange) a length of 2.5km.
2. Eastern route for workers to/from Cooroy - Noosa Road includes a 4.9km section of Sivyers Road, Gumboil Road, and Collwood Road (noted as gated and restricted from the public on the eastern side of the NWTP). An alternative to this route from the east is via Swift Drive which is an additional 3km. The Swift Drive route has not been included in this assessment as whilst it is signed as a route to the Noosa Botanic Gardens, it may raise community concerns if used to access the Project site.

Based on the above routes, four intersections have been assessed, as outlined below and shown in **Figure 2-1**:

1. Lake Macdonald Drive / Collwood Road.
2. Elm Street / Lake Macdonald Drive.
3. Cooroy - Noosa Road / Sivyers Road.
4. Elm Street / Diamond Street.

The immediate surroundings of the project include low-density rural residential, state forests and parks and gardens, including the Noosa Botanic Gardens. This area provides a range of recreational activities including fishing, rowing / watercrafts, trail walking and maintain biking, as shown in **Figure 2-2**. Paths along Lake Macdonald Drive interfacing with the Project area are expected to be disrupted during construction. Alternative paths and traffic controls measures will be provided as part of the projects TMP and associated Traffic Guidance Schemes (TGS). Access to Collwood Road to/from Cooroy - Noosa Road will be maintained for the public and not impacted by any construction vehicles or activities.



Figure 2-1: Site location and local road network

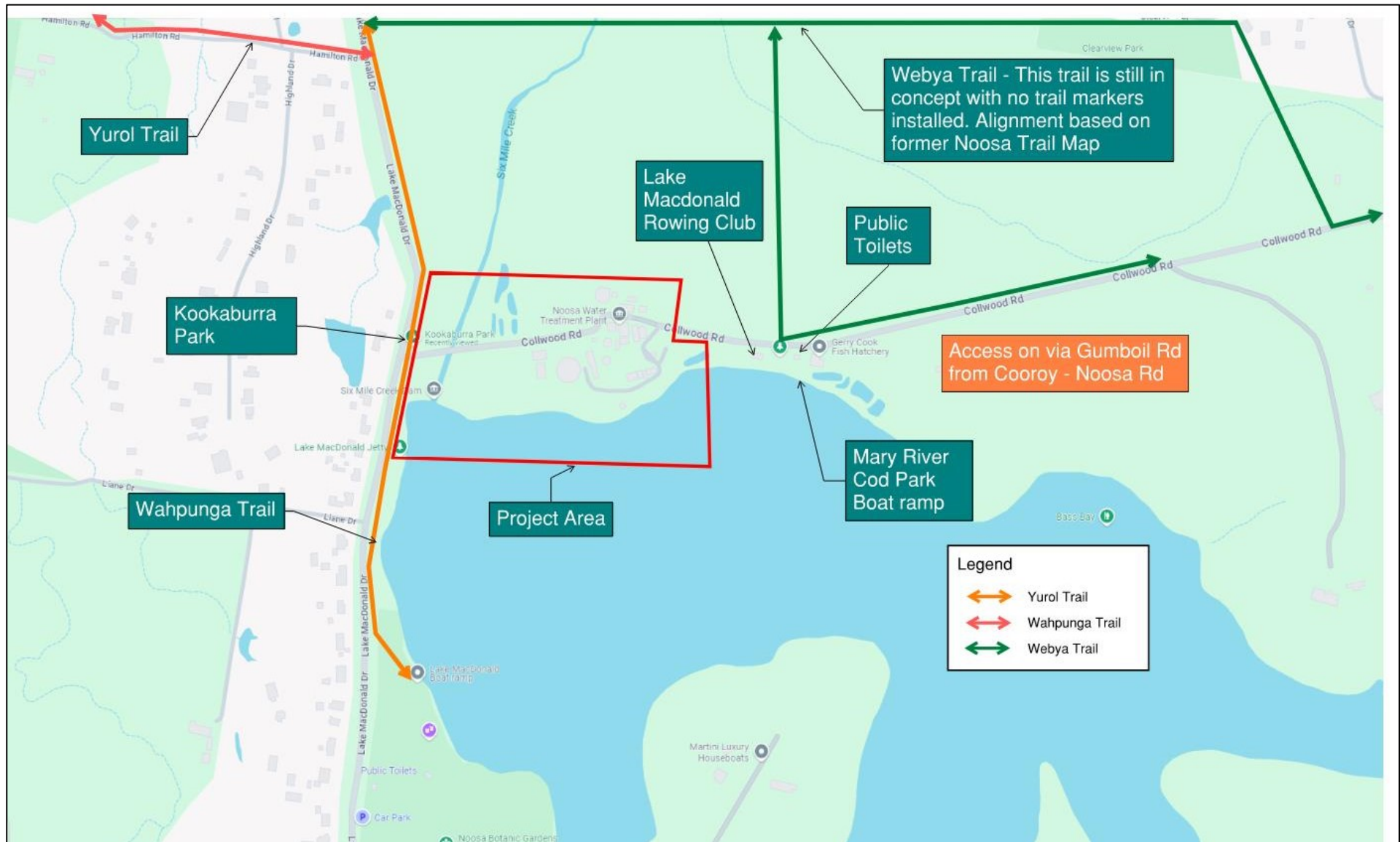


Figure 2-2: Site location and immediate surroundings

2.2 Public Transport

Cooroy is within Zone 8 of Translink network and serviced by two routes namely 631 and 632 as illustrated in **Figure 2-3**. Route 631 services Noosa to Nambour via Cooroy and Eumundi servicing Noosa Junction, Tewantin, Cooroy, Eumundi, Yandina, and Nambour. Route 632 Noosa to Cooran via Cooroy and Pomona servicing Noosa Junction, Noosa Civic, Tewantin, Cooroy, Pomona, and Cooran.

Both routes operate 7 days a week, however, only service 631 has two services in the AM period which arrives at Cooroy Train Station before or close to construction work times with regards to the project. Therefore, it is not expected that any construction workers will use public transport for this project.

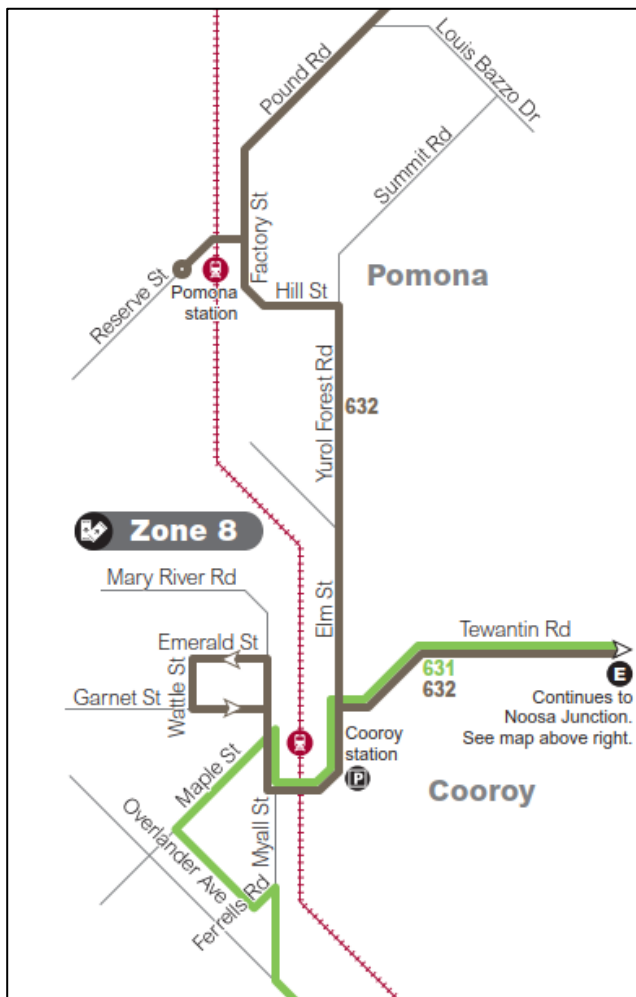


Figure 2-3: Public Transport Services

2.2.1 School Bus Routes

A school bus route travels along Lake Macdonald Drive, locally known as Route S731 (referred to as 792 on Translink’s website), with two services per day between 7:20 - 8:05am and between 3:05 - 3:40pm. There are bus stops located at the following locations along the section of interest as shown on **Figure 2-4**:

- Blue Wren Pace
- Racehorse Lane
- Liane Drive
- North of Collwood Road
- Hamilton Road.

This service travels further north and south on Myall Street and Elm Street. It is noted a bus stop with significant school student transfers is located on the western side of Elm Street (northbound) opposite Pearl Street which is

within the 40km/hr school zone. A turn-around facility used by buses is located immediately north of the mid-block signalised crossing at Sapphire Street.

The route extends goes past Noosa District State High School which is on Myall Street south of Tulip Street. Based on Education Queensland ([Noosa District State High School | Department of Education \(eq.edu.au\)](http://Noosa District State High School | Department of Education (eq.edu.au))) it has 961 students from years 7 to 12 with 57 classrooms.

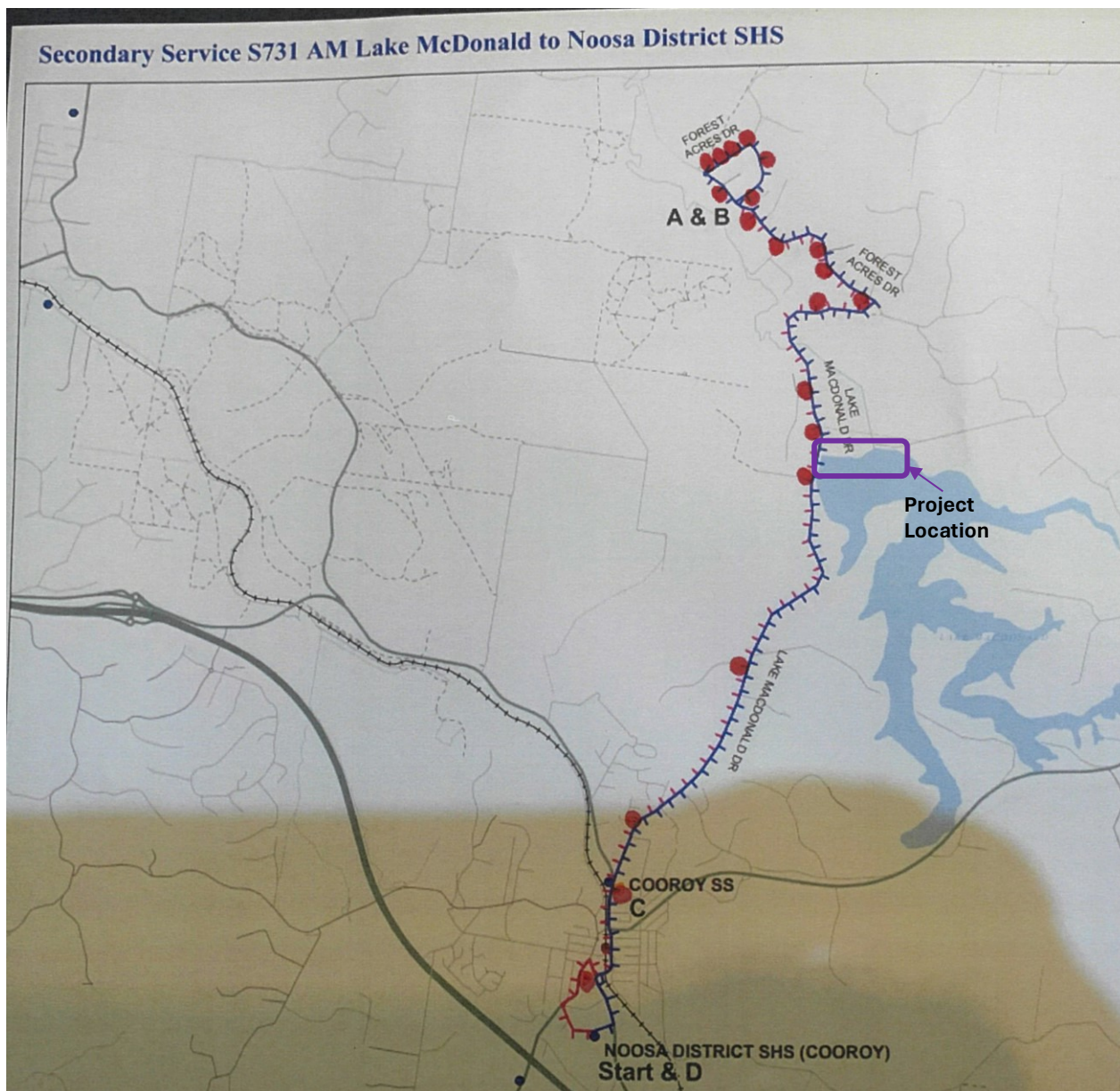


Figure 2-4: Bus Service S731 Route and Stops

2.2.2 Active Transport

The road network has been reviewed for cycling and walking hierarchy and existing infrastructure. In terms of hierarchy, TMR Principal Cycle Network Planning (PNPC) is illustrated in **Figure 2-5** which shows the following PNCP routes:

- Lake Macdonald Drive – Elm Street to Liane Drive (noted as just south of the Project extents in particular Hard strand area 3).
- Elm Street – entire length.
- Cooroy – Noosa Road and Tewantin Road – entire length.
- Myall Street – entire length.

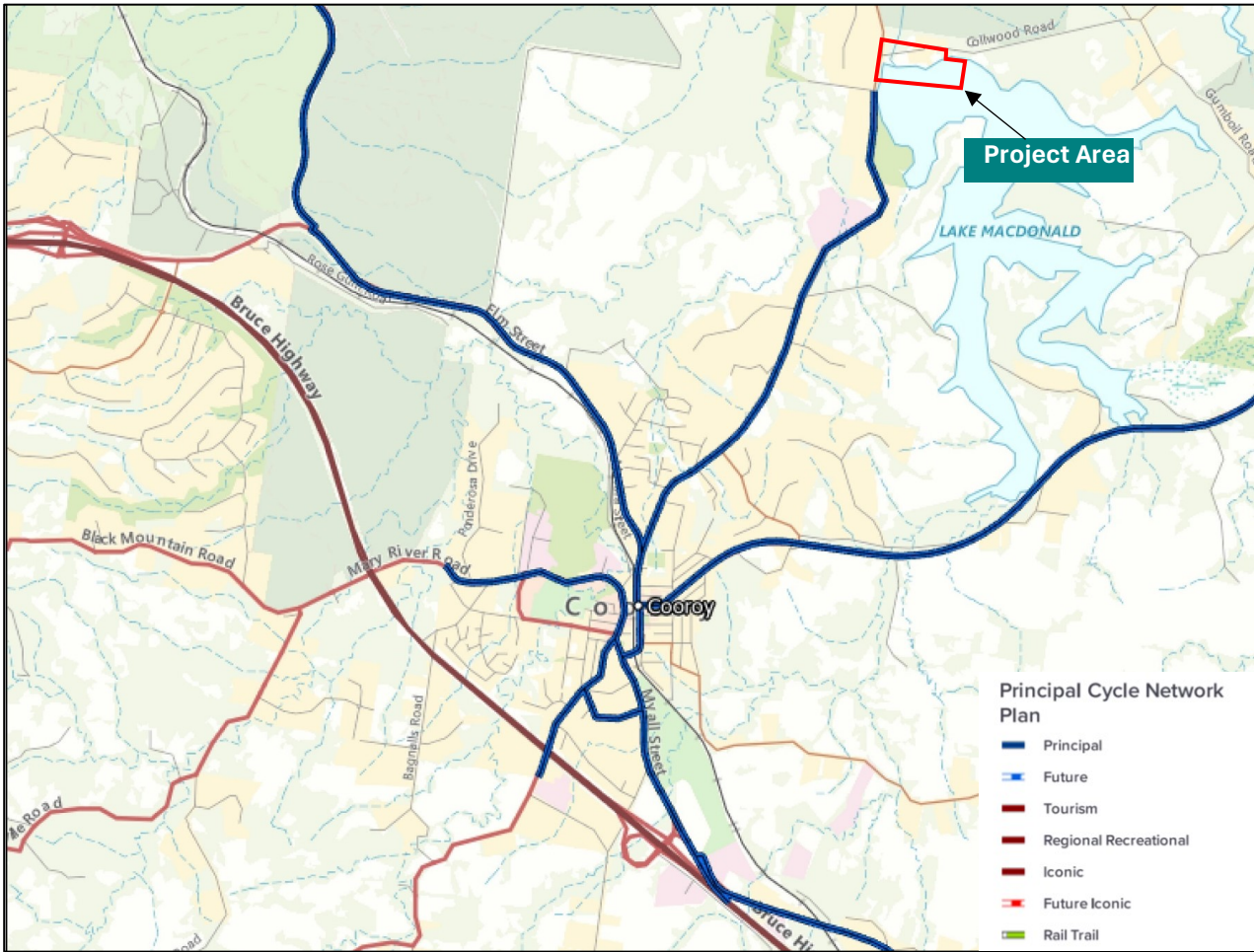


Figure 2-5: TMR PNCP (Source: Qld Glob)

Existing cycling and walking infrastructure has been reviewed based on open data sources including Noosa Shire Council Noosa Trail Network Maps which shows convergence of the Weyba, Yurolo and Wahpunga Trails past the project area, as shown in Figure 2-6 and Figure 2-7 respectively.

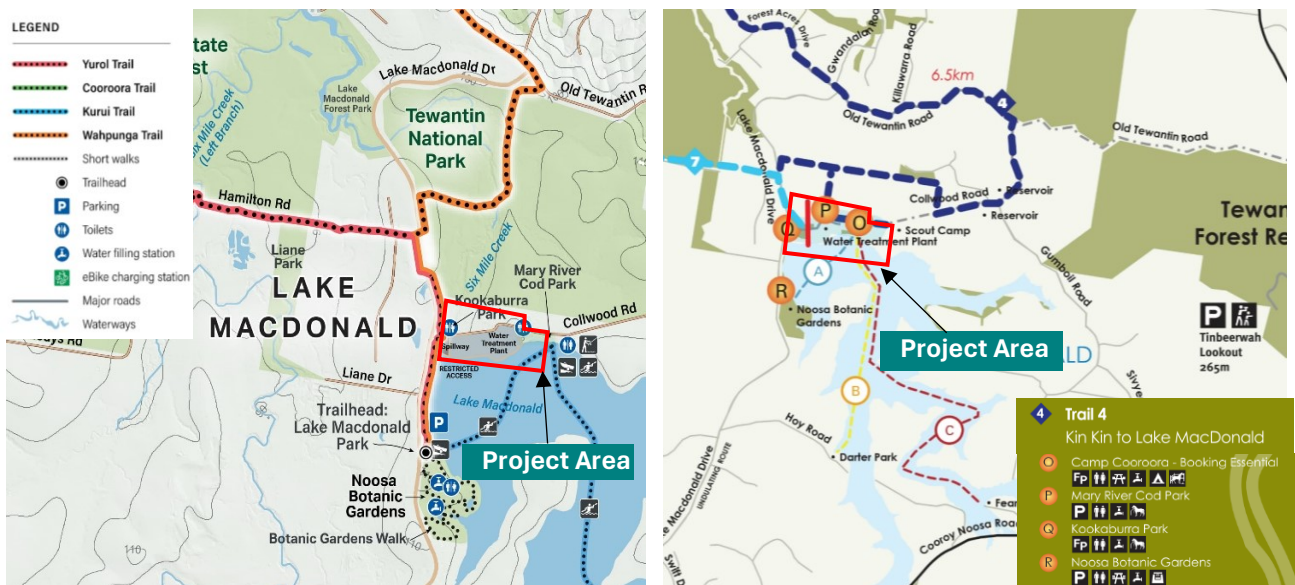


Figure 2-6: Noosa Trail Network Extracts (Source: NSC Website)

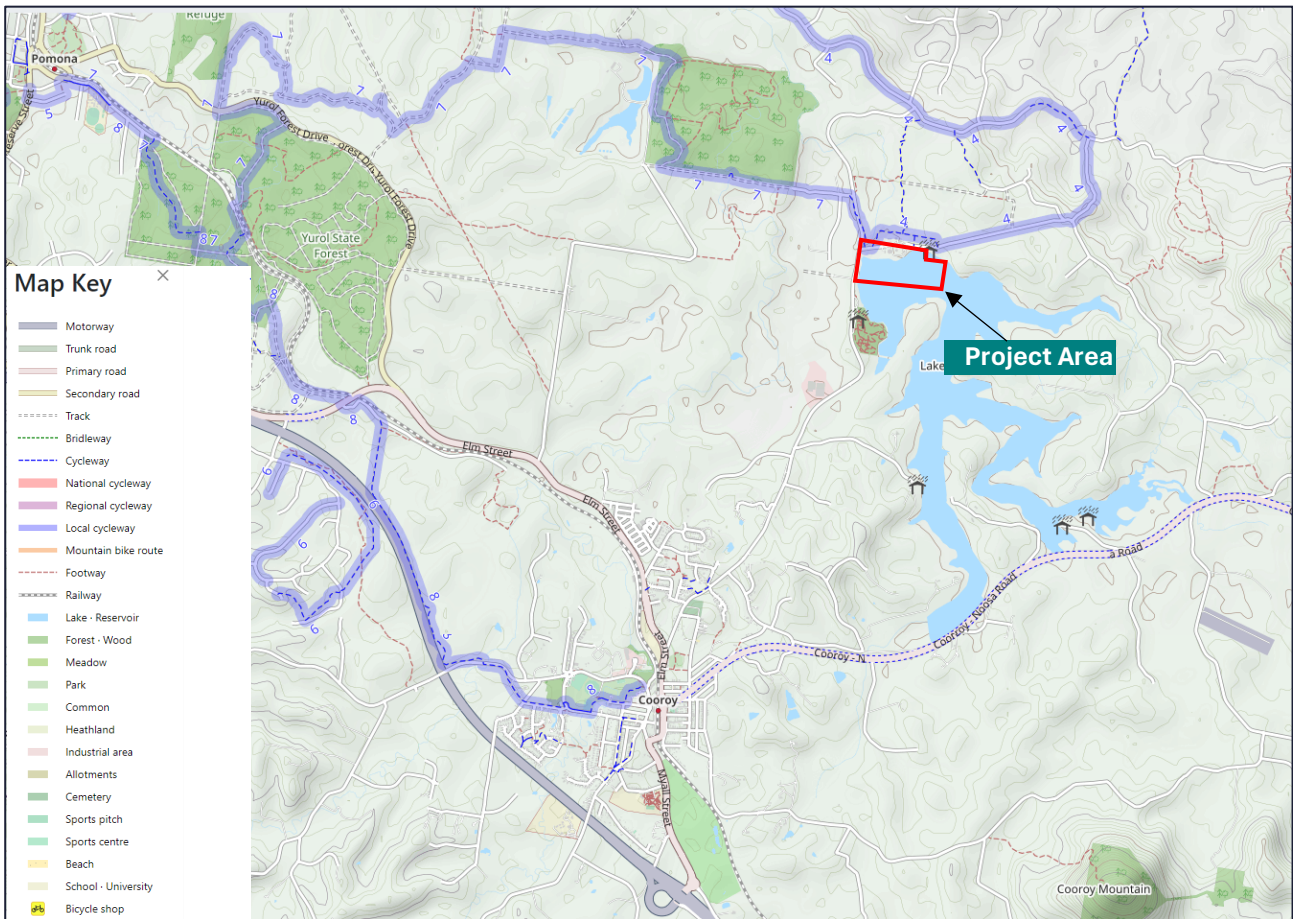


Figure 2-7: Cycling Provisions (Source: OpenStreetMap)

It is not expected any workers will use active transport for this project, however, as noted above the TMP needs to allow for alternative paths and traffic controls measures within the TMP and associated TGS to allow for the safe passage of public walkers and cyclists past the Project area.

2.3 Traffic Volumes and Conditions

2.3.1 Available Traffic Data

SMEC has undertaken this TIA with the latest classified intersection turn counts at the following intersections:

- Classified intersection surveys with peak periods:
 - Elm Street / Lake Macdonald Drive priority intersection - Tuesday 12 September 2023:
 - AM Peak 7:30 - 8:30am
 - PM Peak 2:45 - 3:45pm
 - Lake Macdonald Drive / Collwood Road priority intersection - Tuesday 12 September 2023:
 - AM Peak 7:30 - 8:30am
 - PM Peak 4:00 - 5:00pm
 - Elm Street / Diamond Street priority intersection – Friday 25 October 2024:
 - AM Peak 7:45 - 8:45am
 - PM Peak 2:30 - 3:30pm
 - Cooroy - Noosa Road / Sivyers Road priority intersection: Friday 25 October 2024:
 - AM Peak 7:30 - 8:30am

- PM Peak 2:45 - 3:45pm.

All flows for the intersection AM and PM peaks plus assessment peaks (Refer to **Section 4.4**) are included in **Appendix A**.

A tube count was also collected on Lake Macdonald Drive between Wednesday 6 and Tuesday 12 October 2023 outside no.407, which is approximately 170 south of Collwood Road.

Average Annual Daily Traffic (AADT) for Queensland State Controlled Roads 2013 to 2023 was gathered as part of the latest TIA to review background growth rates on State Controlled Roads.

The Elm Street / Myall Street intersection was also surveyed, however, not included in the assessment as the Project worker peaks travelling through the intersection are well outside is peak AM and PM peak time periods. The following outlines the peak times to confirm this assumption:

- Elm Street / Myall Street priority intersection – Friday 25 October 2024:
 - AM Peak 8:00 - 9:00am
 - PM Peak 2:45 - 3:45pm.

2.3.2 School Peak Period

The Cooroy State School is located on the western side of Elm Street immediately north of Lake Macdonald Drive. Based in information from the school’s website, the school start/end times are 8:45am and 2:50pm, and based on Education Queensland data ([Cooroy State School | Department of Education \(eq.edu.au\)](http://Cooroy State School | Department of Education (eq.edu.au))) it has 339 students across prep to year 6 in 30 classrooms.

An assessment of the school peak period with data from Elm Street / Lake Macdonald Drive priority intersection in September 2020 and September 2023 is shown in **Figure 2–8**. The figure shows the traffic flows through the intersection highlight distinct peak hour (ending) times of 8:30am / 8:45am and 3:30pm / 3:45pm.

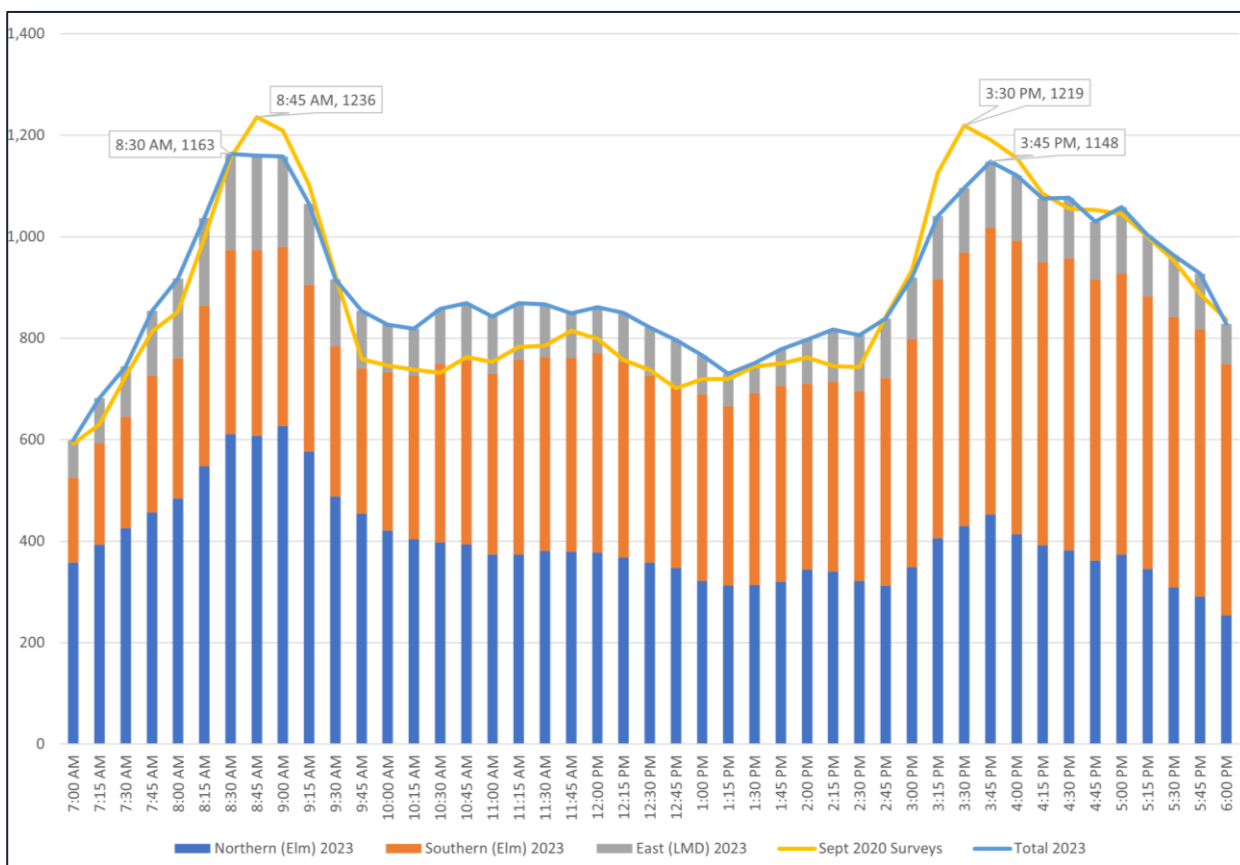


Figure 2–8: School Peak Assessment

2.3.3 School Peak Exclusion

Based on the school bus times and the school peak period traffic movement time periods outlined above, the recommendation in both this TIA and TMP is to restrict construction vehicles for the school peaks including school bus times from 7:20 - 8:45am and 2:30 - 3:45pm.

2.3.4 Growth Rates

Based on the available traffic data from October 2020 and October 2023 for intersection counts, the 12hr flows by approach and total are provided in **Table 2-1**, with the resulting compound growth rates.

Table 2-1: Growth Rates based on intersection surveys

Intersection	Approach	2020	2023	% Growth
Elm Street / Lake Macdonald Drive (LMD)	Northern (Elm Street)	4,499	4,699	1.5%
	Southern (Elm Street)	4,604	4,666	0.5%
	East (Lake Macdonald Drive)	1,300	1,330	0.8%
	Total	10,403	10,695	0.9%
Lake Macdonald Drive (LMD) / Collwood Road	Northern (Lake Macdonald Drive)	634	661	1.4%
	Southern (Lake Macdonald Drive)	43	30	-11.3%
	East (Collwood Road)	660	658	-0.1%
	Total	1,337	1,349	0.3%

AADT data for Queensland State Controlled Roads 2013 to 2023 was gathered and provided in **Table 2-2**.

Table 2-2: TMR Count Sites (Both Directions) Traffic Summary

Road Section ID / Name	Count Site ID / Location Description	AADT (2023)	% HV ¹	% Growth 10 years
142 / Cooroy Connection Road	20740 / 10m east of Miva Street	10,842	9.37	1.24
	20482 / 300m West of Sunrise Road	12,739	8.91	3.21
	20760 / Between Forest Dr and Griffith Ave	12,731	7.2	1.58
145 / Cooroy Connection Road	21130 / Cooroy School Pedestrian Crossing	9,884	Not available	0.93
	20050 / 200m North of Pearsons Rd	7,660	15.02	0.49
	50m North of Rose Gum Road	4,669	14.82	4.30

Note: 1 - Austroads Vehicle Classes 3 through 12.

Based on the above, a 1.5% compound growth rate per annum is considered a reasonable rate to be applied to all surveys for future year analysis.

2.4 Future Road Upgrades

In liaison with TMR, it was confirmed that there are no Category D (protected and funded) or Category C (protected but unfunded) projects in the township of Cooroy.

There is early category B planning in the Elm Street / Diamond Street area, but nothing funded or planned for delivery in the short to medium term, i.e., within the LDMIP construction program dates.

The Elm Street / Lake Macdonald Drive priority intersection is within a category A mapped area which covers the full length of the State Controlled roads between Cooroy and Pomona. There is no active planning being undertaken for the Elm Street / Lake Macdonald Drive priority intersection.

2.5 Crash History

A review of the crash history over the past 5 years for both construction and worker transport routes has been undertaken, with data provided from TMR Webcrash with dates as follows:

- Fatal crashes: 1 December 2018 to 30 April 2024.
- Non-fatal casualty (hospitalisation, medical treatment and minor injury) crashes: 1 December 2018 to 30 November 2023.

Figure 2-9 provides the crash locations mapped by severity which shows no black spots or black lengths in the study area. The crash data and additional summary tables are included in **Appendix B**.

Of note, the data shows no recorded crashes over the past five years available for Elm Street / Lake Macdonald Drive or Lake Macdonald Drive / Collwood Road. Further, the two rear end crashes at Cooroy - Noosa Road / Sivyers Road intersection were prior to the line-marking upgrades of a basic auxiliary right turn, completed in late 2022.

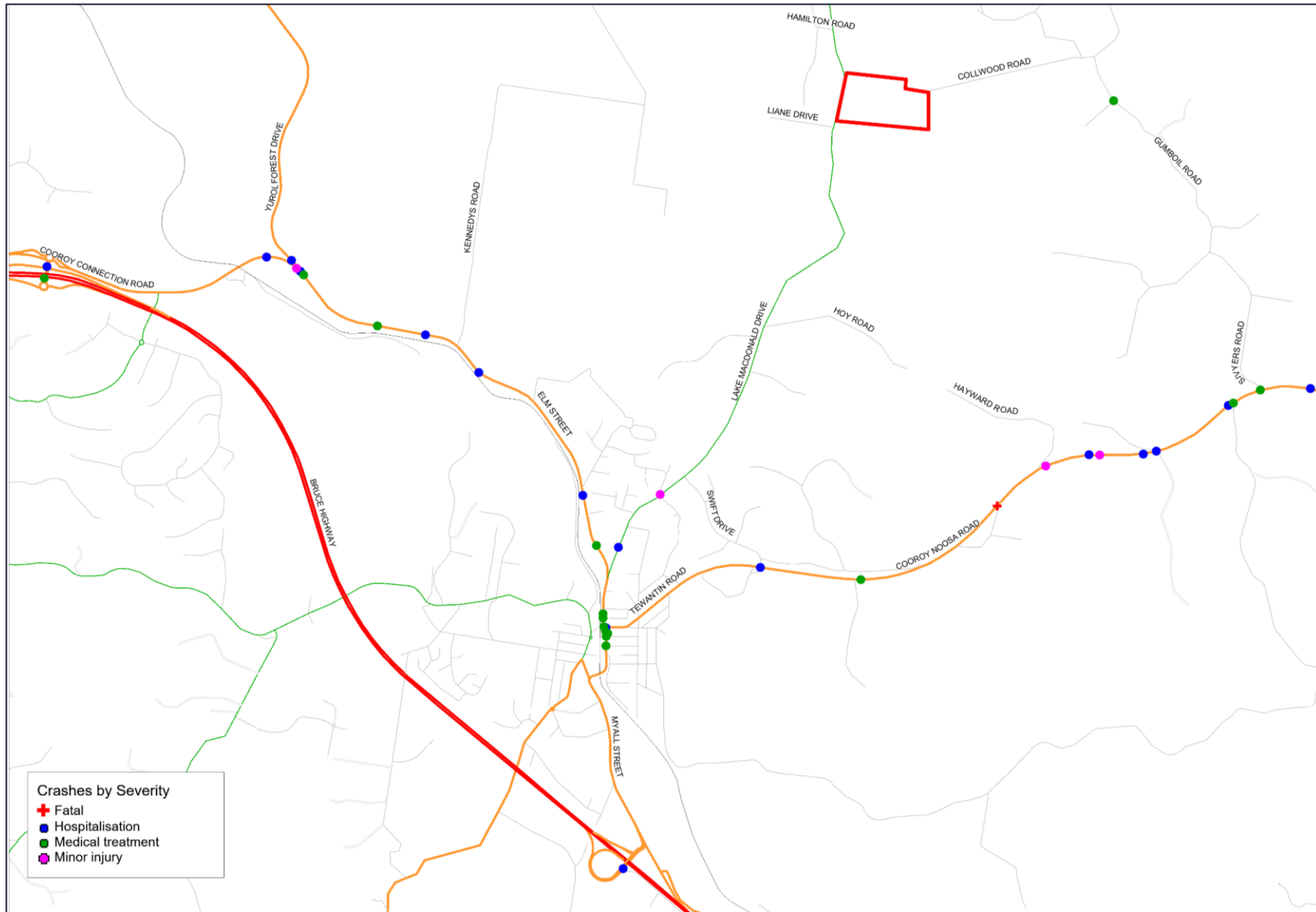


Figure 2-9: Crash locations by severity

2.6 Summary of Existing Traffic Network

Table 2–3 summarises the existing conditions of the key local roads providing access to and from the site. Data sources for the below information are from various sources including:

- SMEC site inspections completed during the project phases.
- Google Maps including Google StreetView.
- Queensland Globe.
- Noosa Shire Council City Planning Scheme Interactive Mapping.
- OpenStreetMap.

Table 2-3: Existing Road conditions

Transport element	Bruce Highway	Cooroy Connection Road (N) – links with Elm Street	Myall Street - links with Elm Street	Elm Street	Cooroy - Noosa Road (at Sivyers Road)	Lake Macdonald Drive	Sivyers Road	Gumboil Road	Collwood Road (east of NWTP)
Speed limit (km/h)	100	80	50 / 60 (with 40 zones for school areas)	60 (with 40 zones near school areas)		80 / 60 (with 40 zones for school areas)	70	60	Unsigned – assumed 50
Classification	Highway	Secondary	Secondary	Secondary	Secondary	Connector	Unclassified – assumed local/neighbourhood	Unclassified – assumed local/neighbourhood	Unclassified – assumed local/neighbourhood
Managed by	State Controlled	State Controlled	State Controlled	State Controlled	State Controlled	Noosa Shire Council	Noosa Shire Council	Noosa Shire Council	Noosa Shire Council
Driving lanes width (m)	7.4m (each carriageway)	6.8	7.3	6.8		5.5 to 6.6	6.1	5.5	~4.0m (unsealed)
Shoulder widths (m)	3.0m each side of carriageway	2.0	Varies – nil to 4.5m (at parking locations)	Varies – nil to 3.0m	1.0	Varies – nil to 1.0m	Nil	Nil	Nil
Total number of traffic lanes	Four	Two	Two	Two	Two	Two	Two	Two	Two
Traffic control	Interchange with Cooroy Connection Road / Old Bruce Highway	Interchange with Old Bruce Highway and onwards to Bruce Highway	Roundabout onwards to Bruce Highway Priority with Elm Street	Key priority intersections with Myall Street, Tewantin Road and Lake Macdonald Drive.	Priority with Sivyers Road	Priority with Elm Street	Priority with Cooroy Noosa Road Priority with Gumboil Road	Priority with Gumboil Road	Priority with Lake Macdonald Drive, Gumboil Road, and Clearview Drive
Principal Cycle Network	No	No	Yes	Yes - Connects with Yurol Forest Drive.	Yes	Yes - From Elm Street to Liane Drive	No	No	No
Bicycle facilities	Nil - Cyclists not permitted	Nil - Cyclists can use sealed verge, some minor lane provision through intersection with Gudgerie Drive.	Nil - Cyclists can use sealed verge	Yes – on-street bicycle lanes provided, some are not interconnected along the whole route.	Nil – wide shoulders along some sections of road	Nil - Cyclists can use sealed verge / parking lanes, some informal lanes provided across intersections but no bicycle markings.	Nil	Nil	Nil
Pedestrian facilities	Nil - Pedestrians not permitted	No	Yes - near several residential land uses, however sporadic and not well connected.	Yes – mainly on its eastern side providing links to residential land use. Pedestrian Operated Signal (POS) located 49m north of Pearl Street, providing a safe crossing link to Cooroy State School. Uncontrolled crossing with median located opposite the Cooroy State School playing fields. Uncontrolled crossing with median break located 96m north of Gem Street, provides links to bus stops.	Nil	Yes	Nil	Nil	Nil
Bus routes / facilities	631	No	No	631 and 632 bus route, and local bus route with bus stops located on both sides of Elm Street 96m north of Gem Street.	631 and 632 bus routes	School bus route with bus stops located: The Lake Macdonald Drive boat ramp The northern corner of Lake Macdonald Drive and Hamilton Road The corner of Lake Macdonald Drive and Forest Acres Drive.	School bus route – TBC	School bus route - TBC	No

Subject Site and Locality

Transport element	Bruce Highway	Cooroy Connection Road (N) – links with Elm Street	Myall Street - links with Elm Street	Elm Street	Cooroy - Noosa Road (at Sivyers Road)	Lake Macdonald Drive	Sivyers Road	Gumboil Road	Collwood Road (east of NWTP)
B-Double approved route	25/26m B-double and (PBS Level 2A route)	No approved route is shown in Qld Globe, however, signage observed in both directions “Cane trucks next 3km, 25m long”.	25/26m B-double and (PBS Level 2A route) – up to intersection with Elm Street	25/26m B-double and (PBS Level 2A route) – from Myall Street to Lake Macdonald Drive. No approved route is shown in Qld Globe north of Macdonald Drive, however, signage observed in both directions “Cane trucks next 3km, 25m long”.	No	25/26m B-double and (PBS Level 2A route) – note route terminates at the disused Quarry (access 295m northeast of Swift Drive).	No	No	No

3. Construction Staging and Site Access

3.1 Construction Staging

Construction of LMDIP is understood to take approximately three years (excluding early works and site demobilisation), from March 2025 to March 20289 with the following work stages to be completed:

- Stage 1 – Preconstruction approvals, procurement, and site establishment (Early Works) from September 2024 to February 2025.
- Stage 2 – Reservoir lowering and aquatic salvage from March 2025 to April 2025.
- Stage 3 – Temporary works (Cofferdam, spillway demolition and working platform from April 2025 to May 2026.
- Stage 4 – Dam construction from May 2026 to March 2028.
- Stage 5 – Reinstatement, rehabilitation and close out from March 2028 to November 2029.

A full program provided is provided in **Appendix C** (refer to TeamBinder reference LMDIP-05242-GNL-PJC-PMM-00003).

3.2 Site Layout and Access

The site will be set-up for two main stages of works, early works and main construction works stages, with the site car parking provisions increasing in line with the increase of construction and worker requirements.

The site layouts are shown in the following figures:

- **Figure 3-1:** General Arrangement Layout – Early Works (Stage 1), includes:
 - Site access via Lake Macdonald Drive and Collwood Road priority intersection and via Collwood Road (E) approach.
 - Total of 60 car parking spaces to be provided for workers via car parks 1 and 2.
- **Figure 3-2:** General Arrangement Layout – Main Works (following Early Works until project completion), includes:
 - Site access via Lake Macdonald Drive and Collwood Road priority intersection and via Collwood Road (E) approach.
 - Total of 150 car parking spaces to be provided for workers. Prior to the main works car park 3 would be constructed to facilitate the increase in workers and associated parking demands.

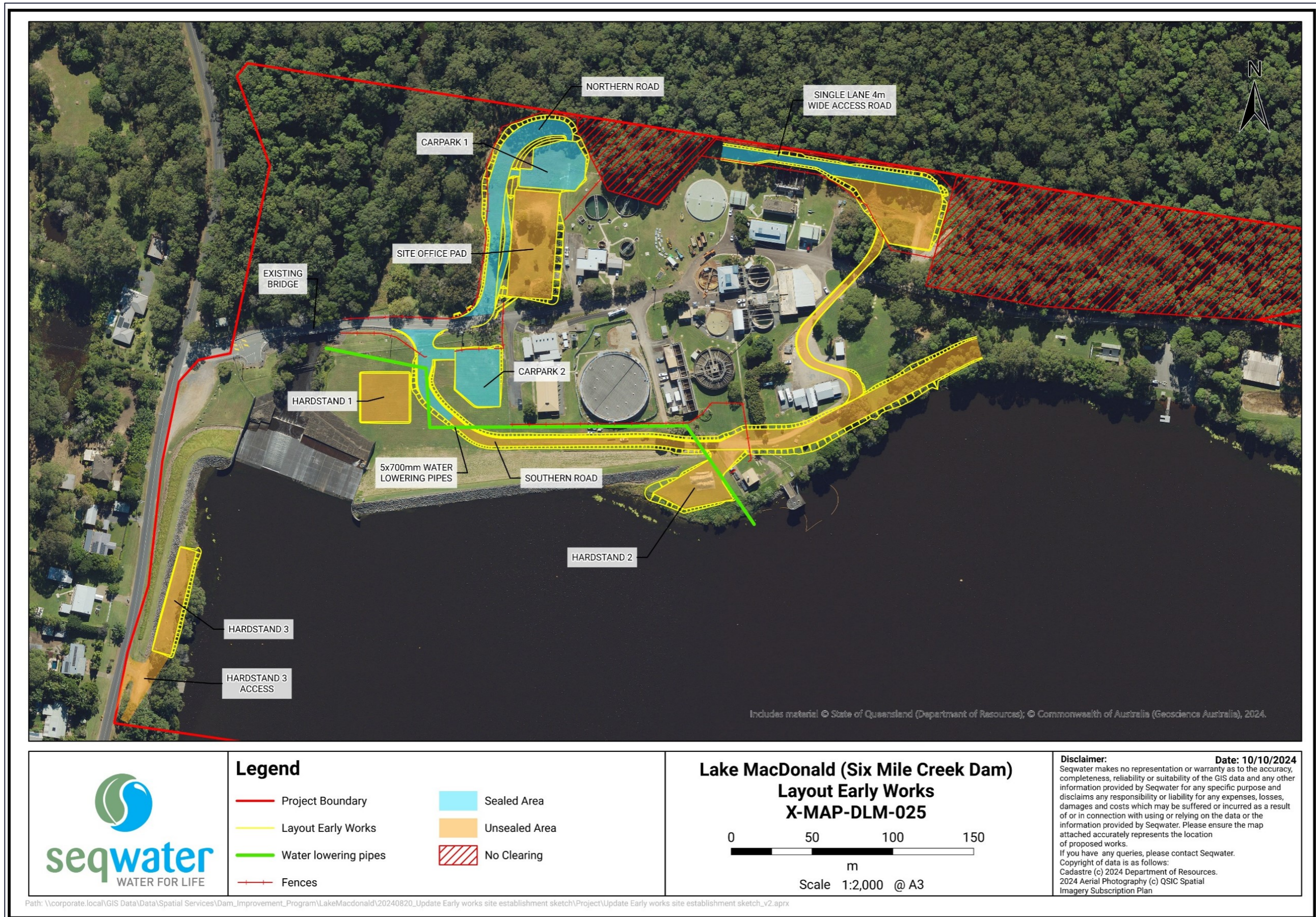


Figure 3-1: Civil Works – Temporary Roads General Arrangement – Early Works (source Seqwater)



Figure 3-2: Civil Works – Temporary Roads General Arrangement (source John Holland)

3.3 Construction Vehicle Types and Routes

3.3.1 Construction Vehicle Types

The construction vehicle types have been consolidated into groupings for the purposes of aiding with traffic generation and vehicle route assessments by their anticipated size, as shown in **Table 3-1**. Note construction vehicle types and classifications subject to final confirmation of John Holland suppliers and subcontractors (upon finalising these will be detailed in the Main Contractors Site Traffic Management Plan and Vehicle Management Plan).

The design vehicle that will require access via the proposed routes is a 19.0m articulated vehicle. Up to a maximum of 100 Oversize-Overmass (OMOS) vehicles are expected for this project at the time of undertaking this TIA. Any changes would be considered and updated as part of the TMP in consultation with key stakeholders.

Table 3-1: Construction traffic classification consolidation

Vehicle type	Sub-vehicle type	Vehicle classification	Vehicle length (based upon classification)	Vehicle weight
Light vehicles	Private car	99th percentile passenger vehicle	5.2m	-
	Utes			
Heavy vehicles	General purpose vehicle	Small Rigid Vehicle (SRV)	6.4m	2-5 tonnes
	Rubbish truck	Medium Rigid Vehicle (MRV)	8.8m	10 tonnes
	Concrete truck		8.8m (3.9m high)	32 tonnes
	Rigid truck	Heavy Rigid Vehicle (HRV)	12.5m	15 tonnes
	Semi-trailers	Articulated Vehicle (AV)	19.0m	24 – 42.5 tonnes depending on axle configuration
	Truck and Dog			30 tonnes

3.3.2 Construction Traffic Routes

3.3.2.1 Construction Workers (Light Vehicle Movements)

Construction workers are expected to reside in the Sunshine Coast, Noosa, and Gympie. As noted by John Holland all works are expected to travel to and from the site via their own private vehicle with on-site car parking provided. No mini-bus or bus/coach transfer of workers is proposed at this stage. Whilst some car-pooling is expected, this has not been included as part of this assessment for a more conservative approach to the total light vehicle numbers.

The following figures show the most direct and expect traffic routes to the site from the above origins:

- **Figure 3-3:** Sunshine Coast residing workers – travel via Bruce Highway (S), Myall Street, Elm Street, Lake Macdonald Drive.
- **Figure 3-4:** Noosa residing workers – travel via Eenie Creek Road, Backmans Road, Cooroy - Noosa Road, Sivyers Road, Gumboil Road, and Collwood Road.
- **Figure 3-5:** Gympie residing workers – travel via Bruce Highway (N), Cooroy Connection Road, Elm Street, Lake Macdonald Drive.

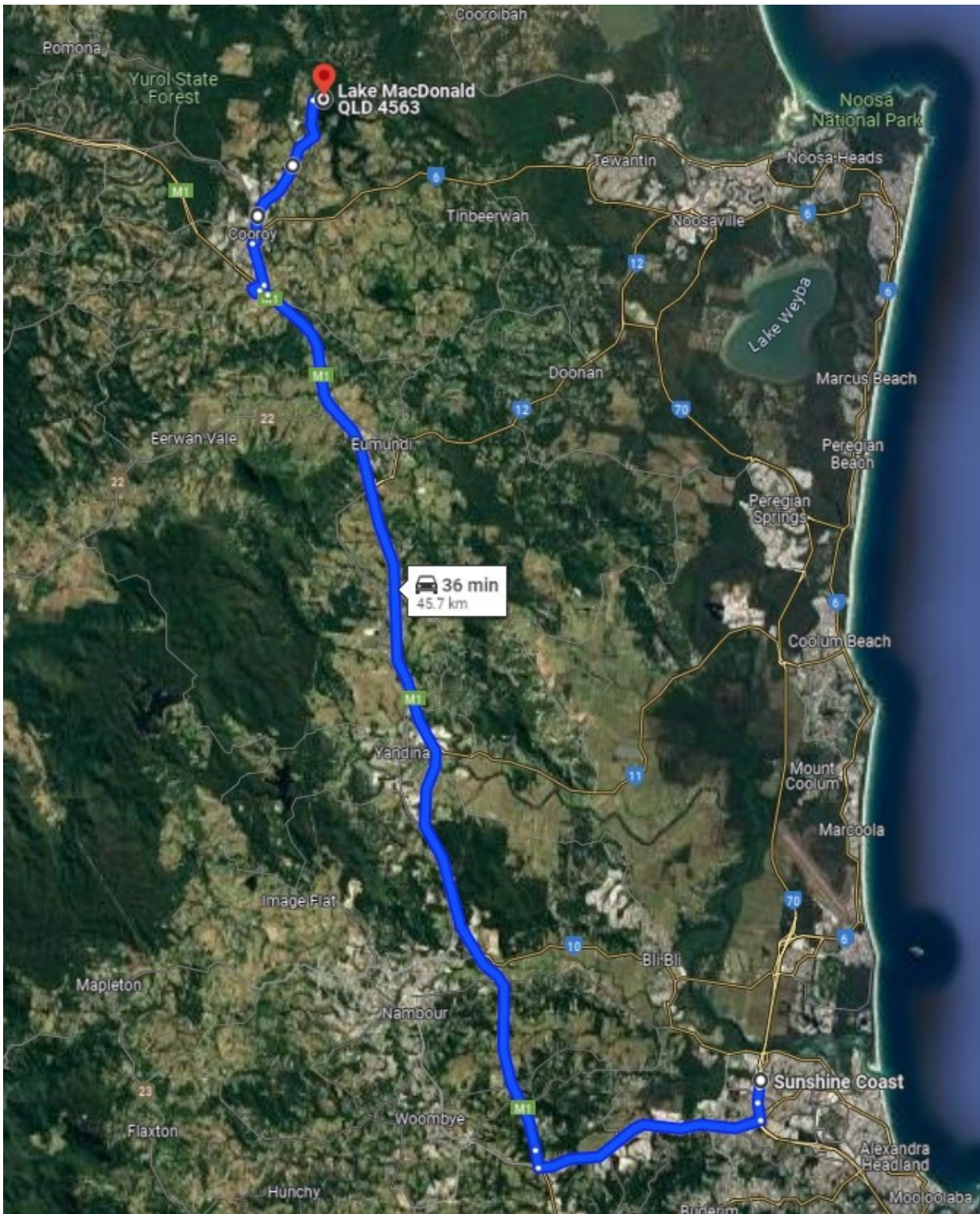


Figure 3-3: Sunshine Coast – Worker Travel Route

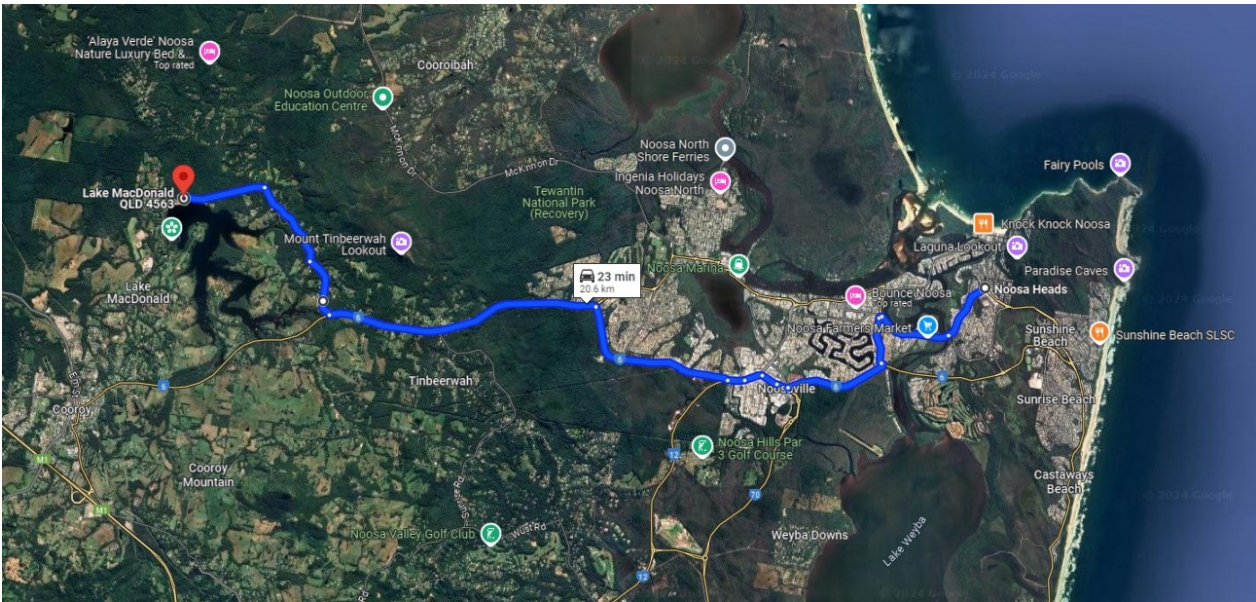


Figure 3-4: Noosa – Worker Travel Routes

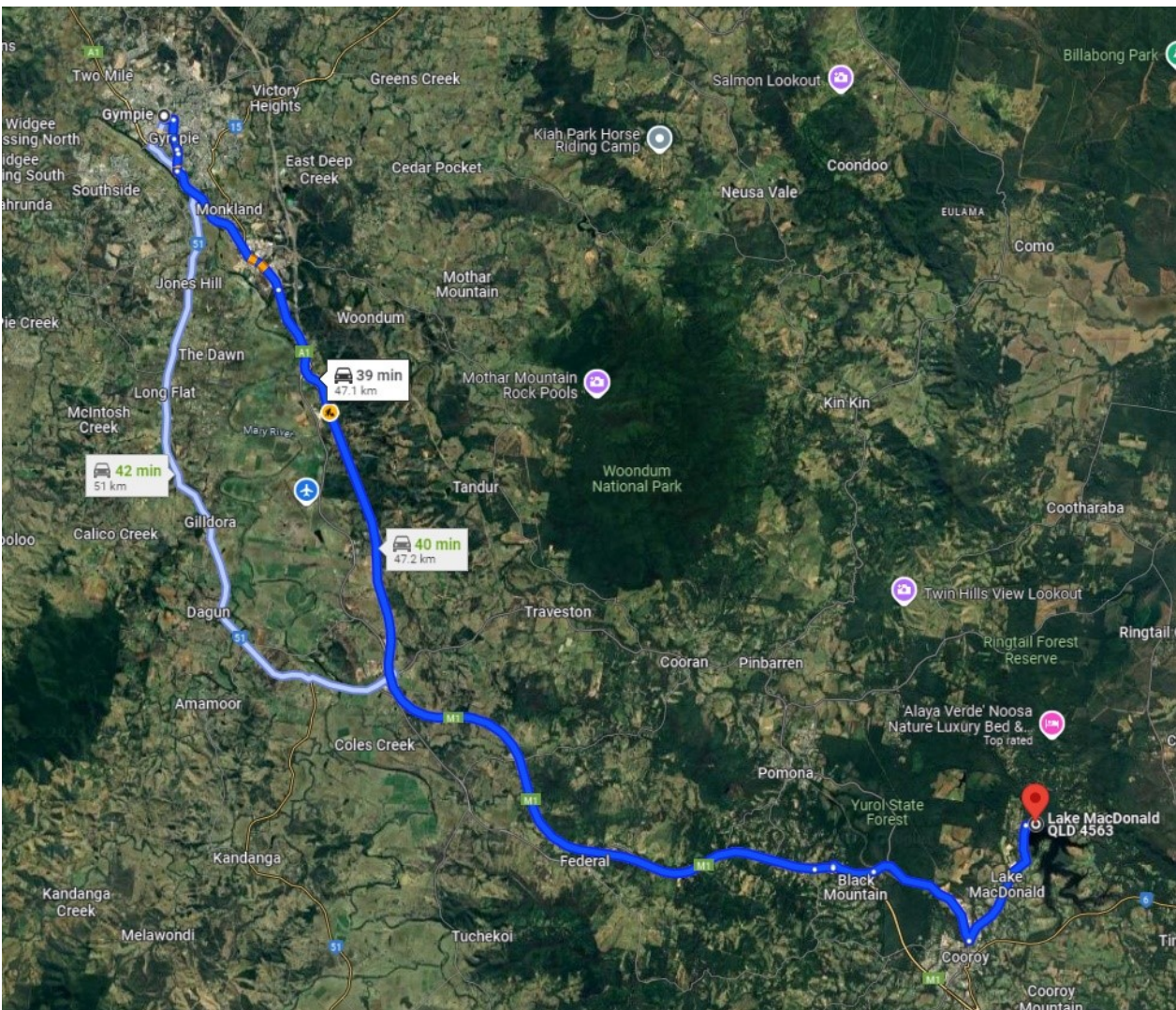


Figure 3-5: Gympie – Worker Travel Route

3.3.2.2 Construction Traffic (Heavy Vehicle Movements)

3.3.2.2.1 General Construction Vehicle Access

To comply with the Queensland Government – Coordinator Generals evaluation report (May 2019) and TMR comments on site accessibility requirements, construction traffic access to the site will be limited to the following routes:

- Construction vehicle site access is limited to a single access route onwards to the site in and out via Lake Macdonald Drive.
- Construction vehicles are to travel to / from the site access from the Bruce Highway north interchange (exit 237) with Cooroy Connection Road and travel to/from the site via Elm Street and Lake Macdonald Drive, refer Figure 3-6.
- Construction vehicles are *not* permitted to travel via the following routes:
 - Eastern light vehicle access routes, particularly the Sivyers Road and Collwood Road (E) access route.
 - Bruce Highway interchange link to Myall Street as there are access and capacity concerns with regards to the Myall Street / Elm Street, and Elm Street / Diamond Street priority intersections.

At this stage (will be verified as part of the TMP), concrete deliveries will be from the east and use Cooroy – Noosa Road, right at Elm Street and right into Lake Macdonald Drive, with the reverse route used for existing vehicles. Whilst Elm Street / Lake Macdonald Drive intersection is within the school zone, this eastern construction vehicle route reduces the number of heavy vehicle passing the school pick up/drop off areas and supervised crossing.

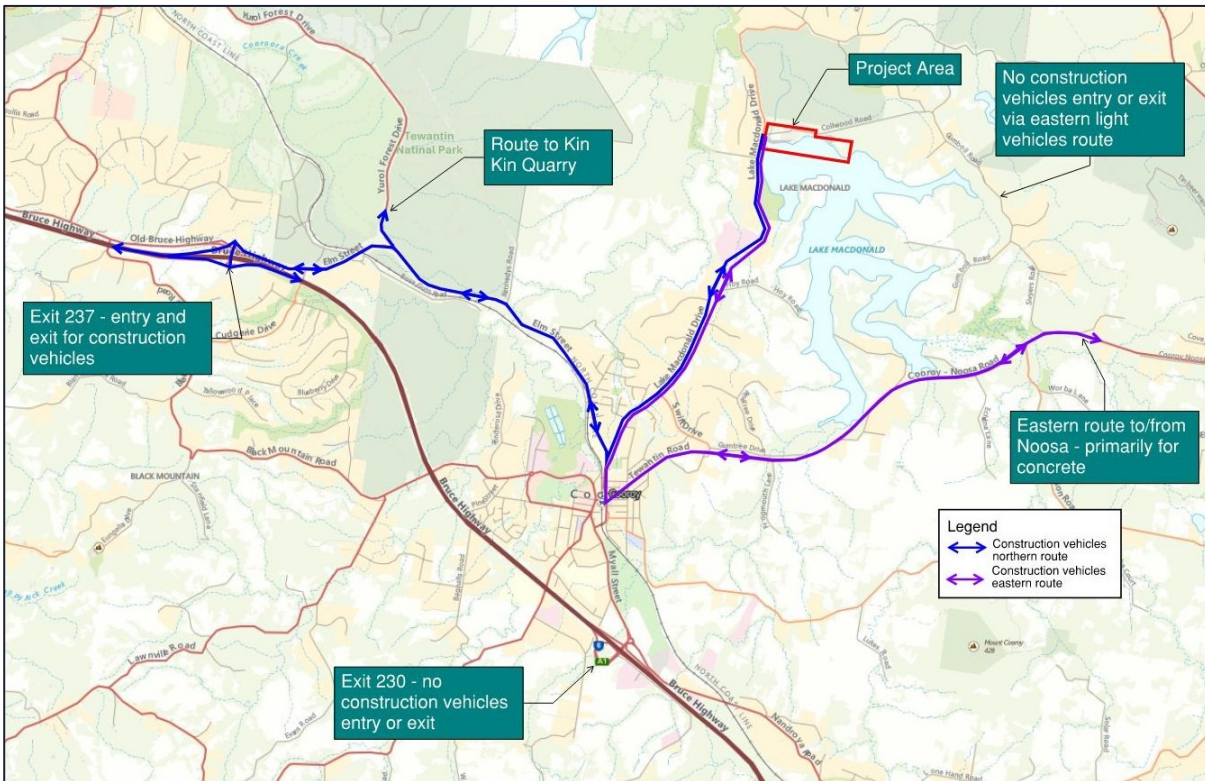


Figure 3-6: Construction heavy vehicle routes

3.3.2.2.2 Quarry Materials – Delivery Routes

John Holland has advised that the following local quarries may be utilised by the project, which can access the site via the following shown transport routes:

- Boral Moy Pocket in **Figure 3–7**:
 - Moy Pocket Road, Eumundi Kenilworth Road, Bruce Highway to exit 237, Cooroy Connection Road, and travel to/from the site via Elm Street and Lake Macdonald Drive.

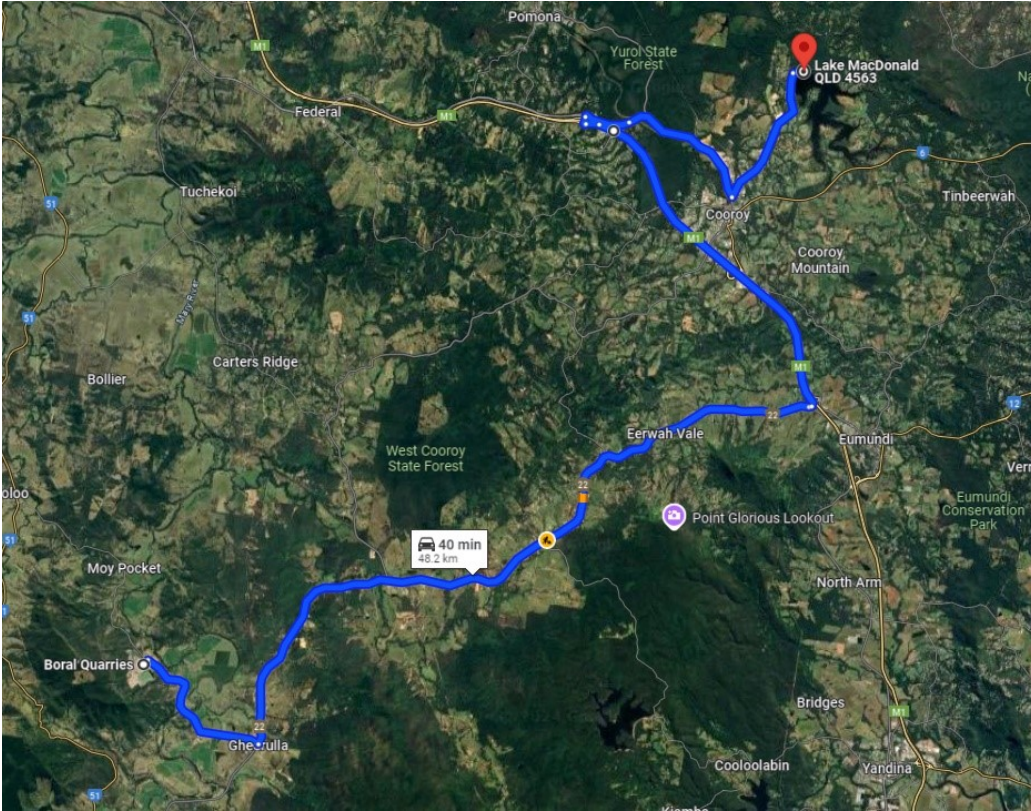


Figure 3–7: Boral Moy Pocket Quarry – Transport Route to LMD Site Access

- Corbets in **Figure 3–8**:
 - Bruce Highway to exit 237, Cooroy Connection Road and travel to/from the site via Elm Street and Lake Macdonald Drive.

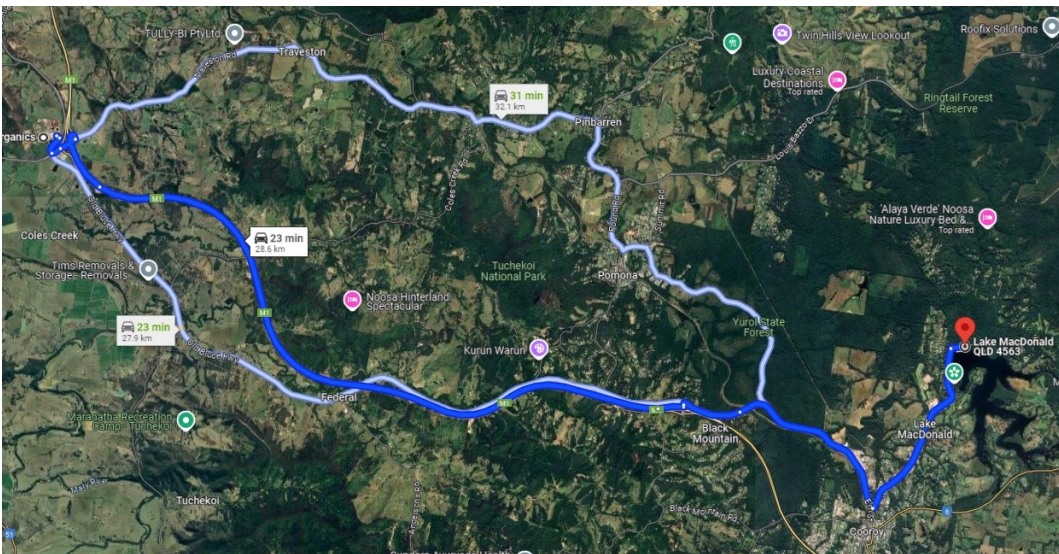


Figure 3–8: Corbets Quarry – Transport Route to LMD Site Access

- Kin Quarry in Figure 3–9:
 - Sheppersons Lane, Gympie Kin Road, Pomona Kin Kin Road, Factory Street, Hill Street, Yural Forest Drive, to/from the site via Elm Street and Lake Macdonald Drive.

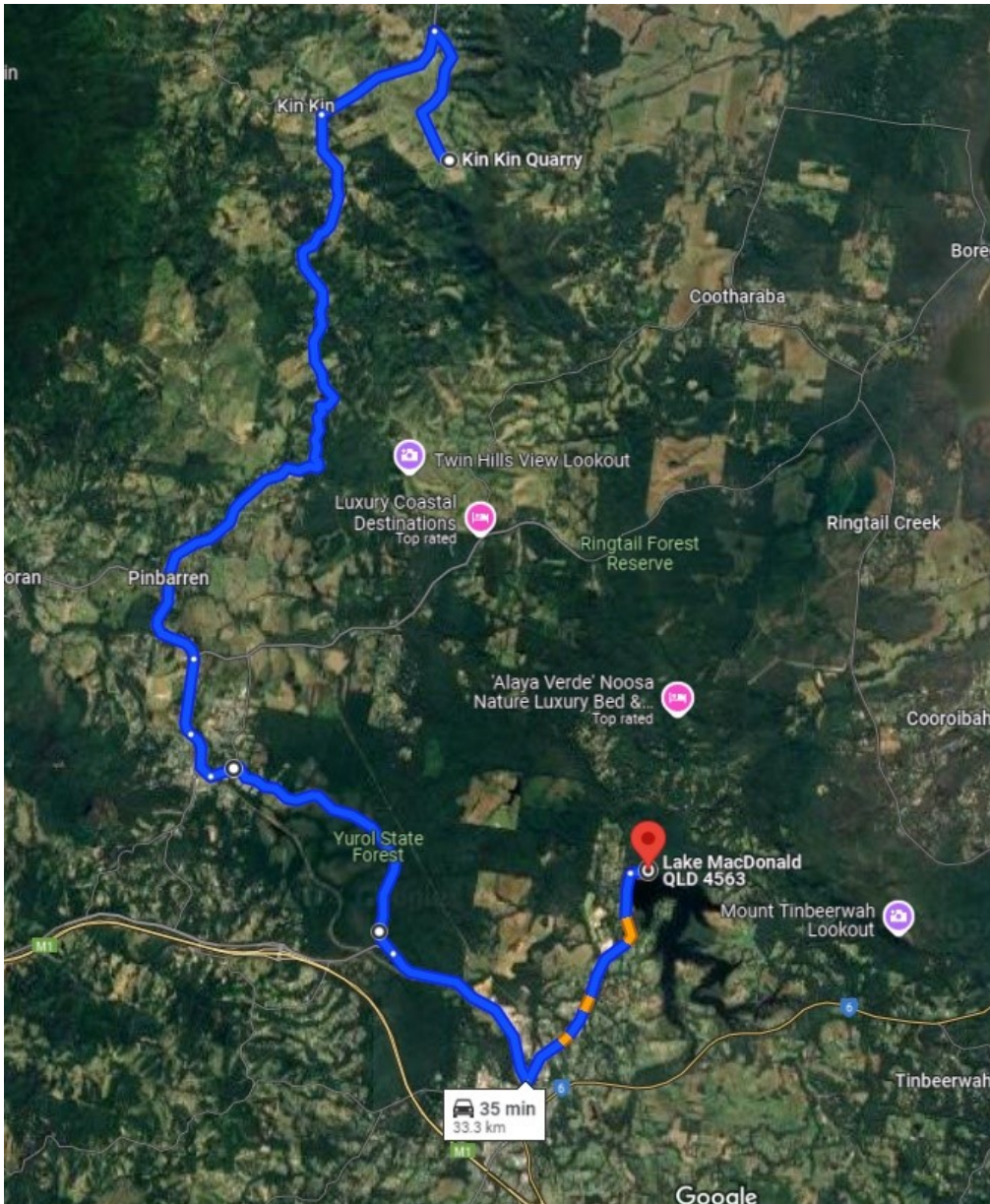


Figure 3–9: Kin Kin Quarry – Transport Route to LMD Site Access

3.3.2.2.3 Concrete and Concrete Materials – Delivery Routes

John Holland has advised that the following local concrete plants will be utilised by the project, which can access the site via the following shown transport routes:

- Holcim Noosa, 68 Rene Street in **Figure 3–10**:
 - Cooroy – Noosa Road from Beckmans Road (Tewantin) and travel to/from the site via Elm Street and Lake Macdonald Drive. Swift Drive is not a permitted route for heavy vehicles.

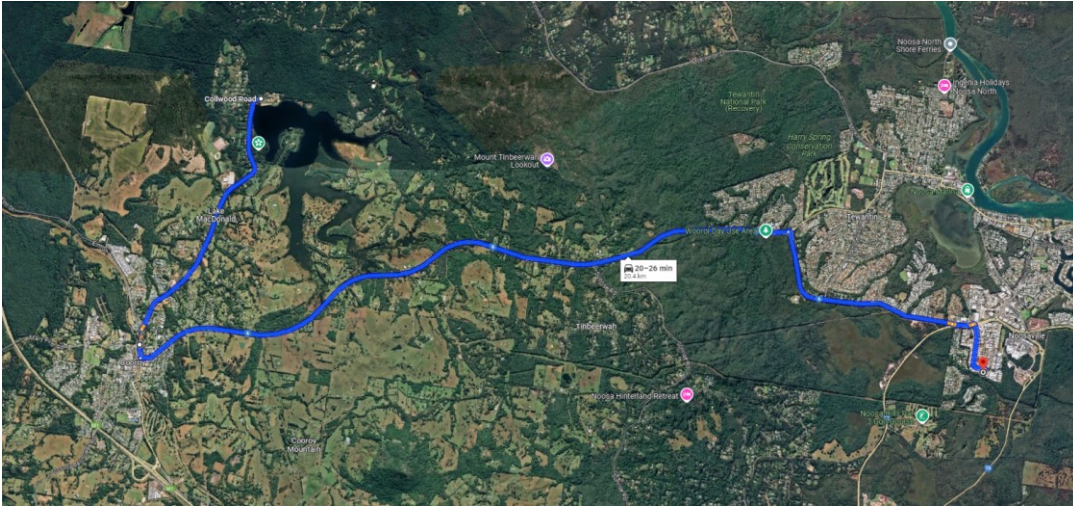


Figure 3-10: Holcim Noosa – Transport Route to LMD Site Access

- Holcim, Nursery Rd, Beerburrum in **Figure 3-11**:
 - Travel via Bruce Highway to exit 237, Cooroy Connection Road, Elm Street and Lake Macdonald Drive.

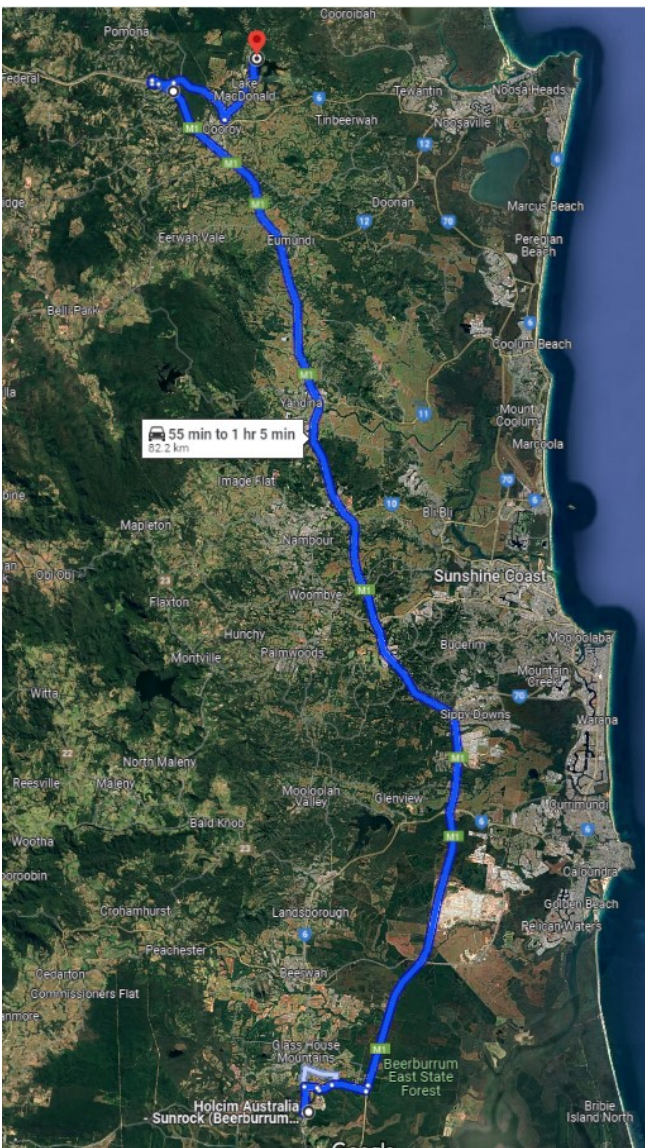


Figure 3-11: Holcim Beerburrum – Transport Route to LMD Site Access

4. Construction Traffic Impacts

4.1 Working Hours

Whilst the permitted working hours are Monday to Friday from 6:30am to 6:30pm and Saturday from 6:30am to 4:00pm, information provided from John Holland indicates that typically only a five-day working week will be undertaken for the Project. Additional details are provided below for workers and heavy vehicle times. This is with the exception of one minor works element for the spillway demolition and working platform, which is to be undertaken from 20 March and 23 April 2026 in the works program (final timeframes would be detailed in the TMP).

4.2 Workers / Light Vehicle Movements

It is noted that the Coordinator-General (OCG) evaluation report on the impacts assessment report (2019) required the below:

5.7.5 Proposed management and mitigation measures

To ensure additional project-related traffic does not result in unacceptable impacts on state-controlled and local roads, the proponent proposes controls on working hours to minimise truck haulage during peak traffic periods and school pick-up and drop-off periods. These controls will ensure the construction workforce travels to the project site prior to work commencing between 6:30 am and 7:30 am, and leaves the site between 3:30 pm and 4:30 pm, minimising the overlap with school bus operating times. I require this to be undertaken.

The above contradicts the requirement to minimise traffic impacts during school pick-up and drop-pick up periods. As such, John Holland indicates the workers will typically be travelling to and from the site from Monday to Friday and proposed arrival and departure times as outlined in **Figure 4-1** to *avoid* any impacts during school pick-up and drop-pick up periods

Figure 4-1 show a peak of 148 workers is expected in early 2028. During the highest three-month peak, there is an average of 140 workers which has been considered a reasonable basis for the intersection analysis.

Table 4-1: Project workers arrival and departure times, peak numbers

Worker Type	Arrive	Depart	Peak Month	Peak 3-month Average	Project Average
Project Staff (white collar)	6:00 - 6:30 AM	6:00 - 6:30 PM	29	31	25
Project Workforce (blue collar)	5:30 - 6:30 AM	5:00 - 6:00 PM	18	18	14
Sub-Contractor Personal (blue collar)	6:00 - 6:30 AM	5:00 - 5:15 PM	101	91	34
Total			148	140	72

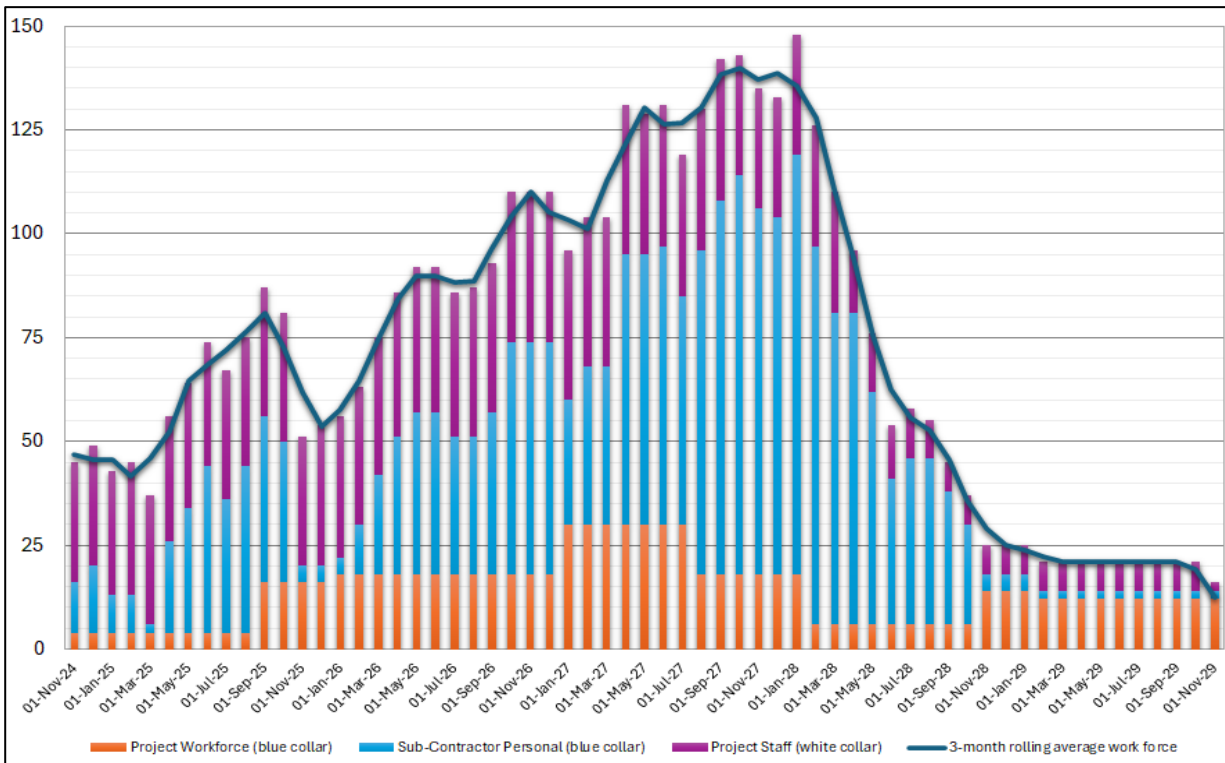


Figure 4-1: Workers by Month

It is expected that construction workers travelling to and from the site will be distributed as follows:

- 60% (~78 workers) from Sunshine Coast (entering site locally via Elm Street south, and Lake Macdonald Drive).
- 20% (~26 workers) from Noosa (entering site locally via Cooroy - Noosa Road and Sivyers Road).
- 20% (~26 workers) from Gympie (entering site locally via Elm Street north, and Lake Macdonald Drive).

4.3 Heavy Vehicle Movements

Heavy vehicle movements are understood to be required to be *minimised* during school pick-up/drop-off times and associated school bus route running times should the route transverse Elm Street to and along Lake Macdonald Drive.

- Accordingly, heavy vehicle movements are recommended to be *minimised, where possible*, during the following times based on the school bus times and analysis of traffic flows at Elm Street / Lake Macdonald Drive intersection (Refer to **Section 2.3.3**):
 - 7:20 - 8:45am
 - 2:30 - 3:45pm.
- Based on the above restricted time periods and a finishing time of 5:00pm, this equates to a total heavy vehicle movement/delivery window of 7 hours 50 minutes.

It should be noted, it is not practical for critical works such as concrete pours to have heavy vehicles restricted during the above times as they need regular movements to / from the site. Further, to reduce the length of the program and duration of impacts key work elements are proposed to continue during these restricted times but at reduced flows.

A summary graph of the daily average trucks per day (per month, two-way) is provided in **Figure 4-2** based on data provided by John Holland – Refer to **Appendix E**. As shown in **Figure 4-2**, a peak of 94 heavy vehicle (two-way) movements is estimated to occur during the construction peak in early 2028. The 3-monthly rolling average is also shown, which equates to 85 heavy vehicle (two-way) movements.

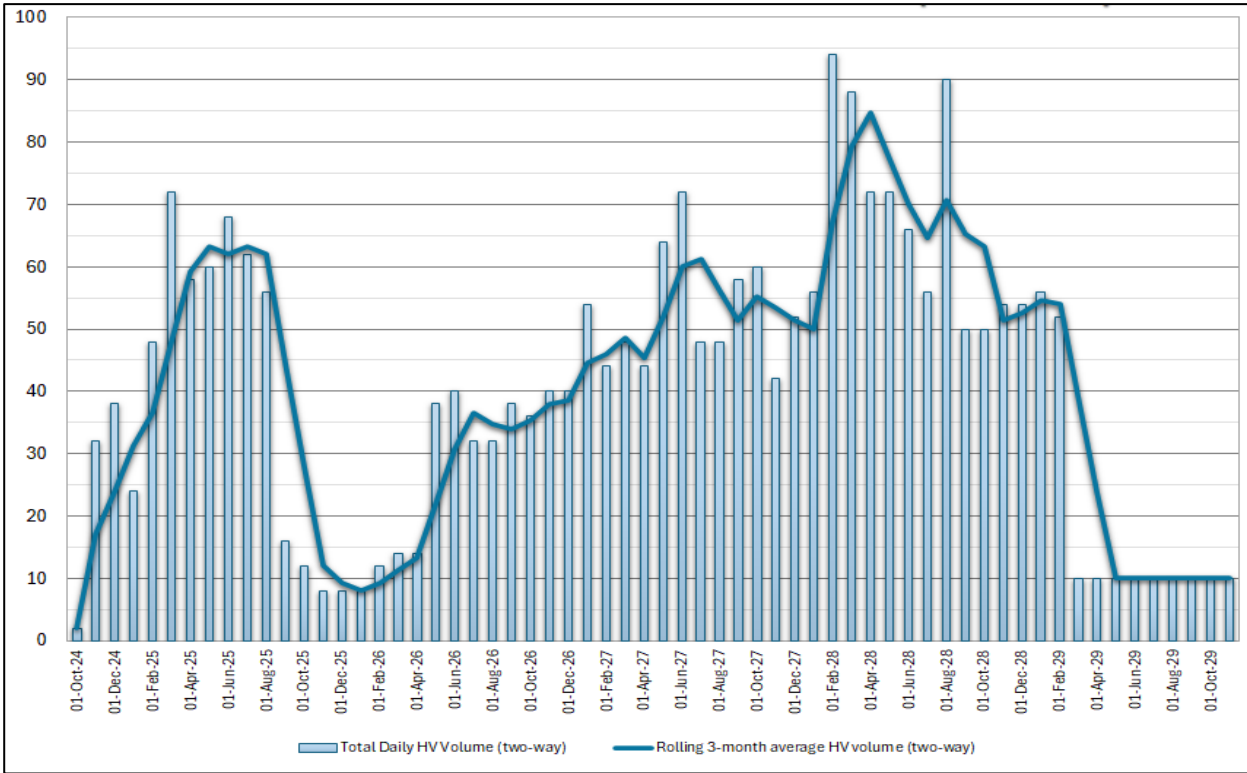


Figure 4-2: Heavy vehicle two-way flow by month

Figure 4-3 provides the daily average heavy vehicle movements (two-way) per day with the split between the northern and eastern routes and for reduced or restricted school hours.

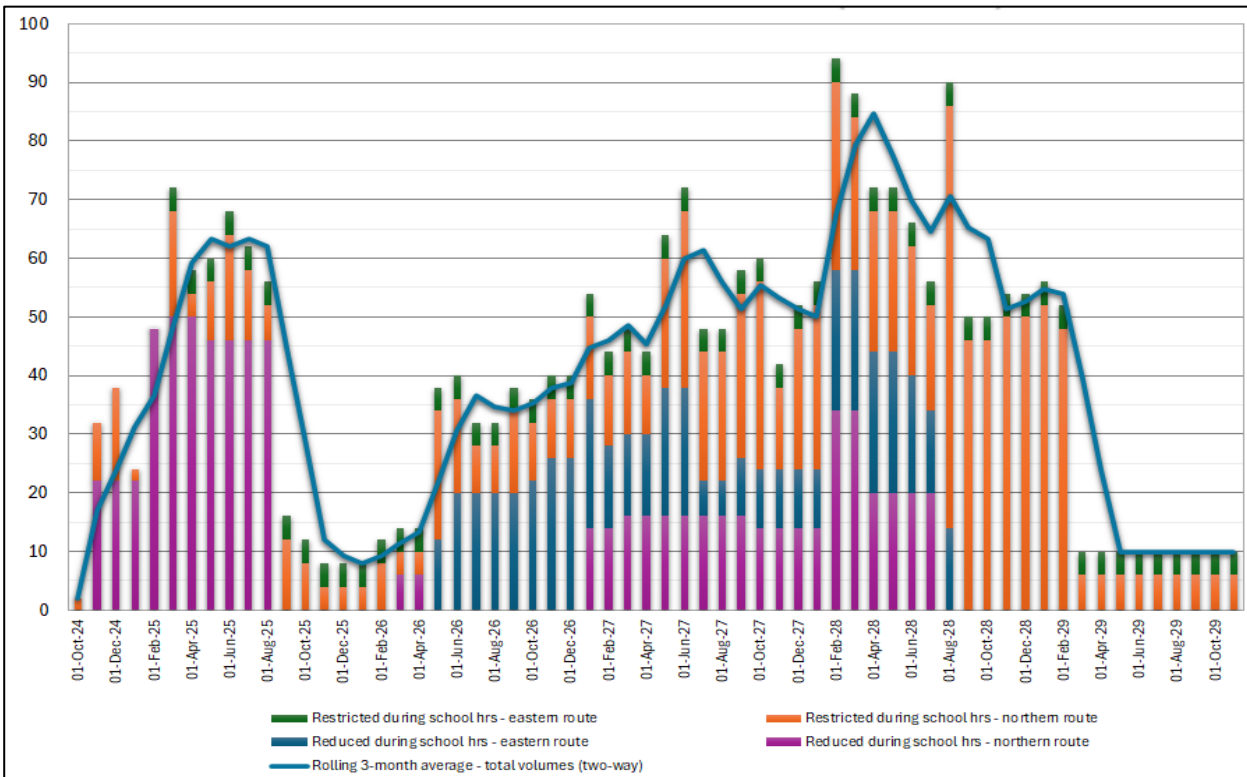


Figure 4-3: Heavy vehicle flows two-way by month by route and reduced or restricted school hours

Based on the assumption of a five-day work week and vehicle movement hours, the estimated peak hour flow for heavy vehicles is 21 two-way movements (rounded up to be conservative) as shown in **Figure 4-4** or 11 movements entering and 11 movements exiting the site. This equates to one heavy vehicle entering and one exiting the site every 5.5 minutes.

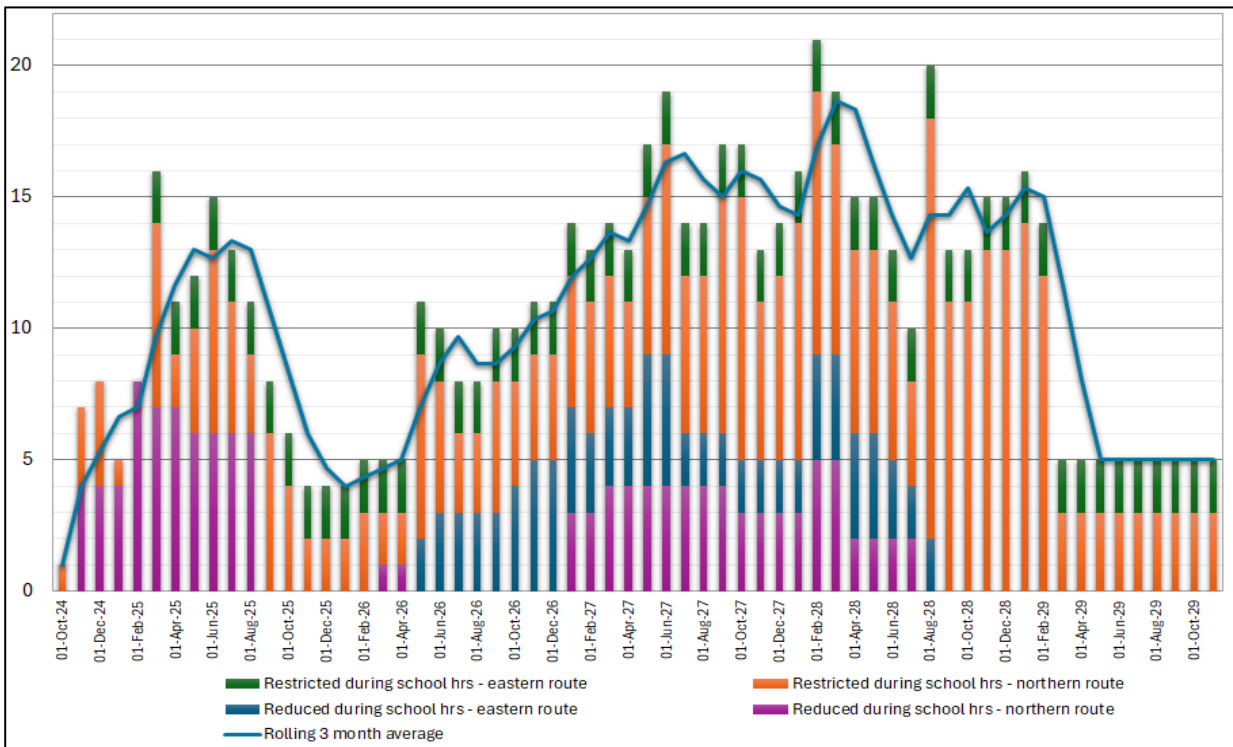


Figure 4-4: Peak hour heavy vehicle two-way flows (rounded up)

For work elements requiring continuous heavy vehicle movements during school peaks, the estimated heavy movement will be minimised to a maximum of six two-way movements or three movements entering and three movements exiting the site. This equates to one heavy vehicle entering the site every 20 minutes and one exiting the site every 20 minutes noting split between the northern and eastern routes as shown in **Figure 4-5**.

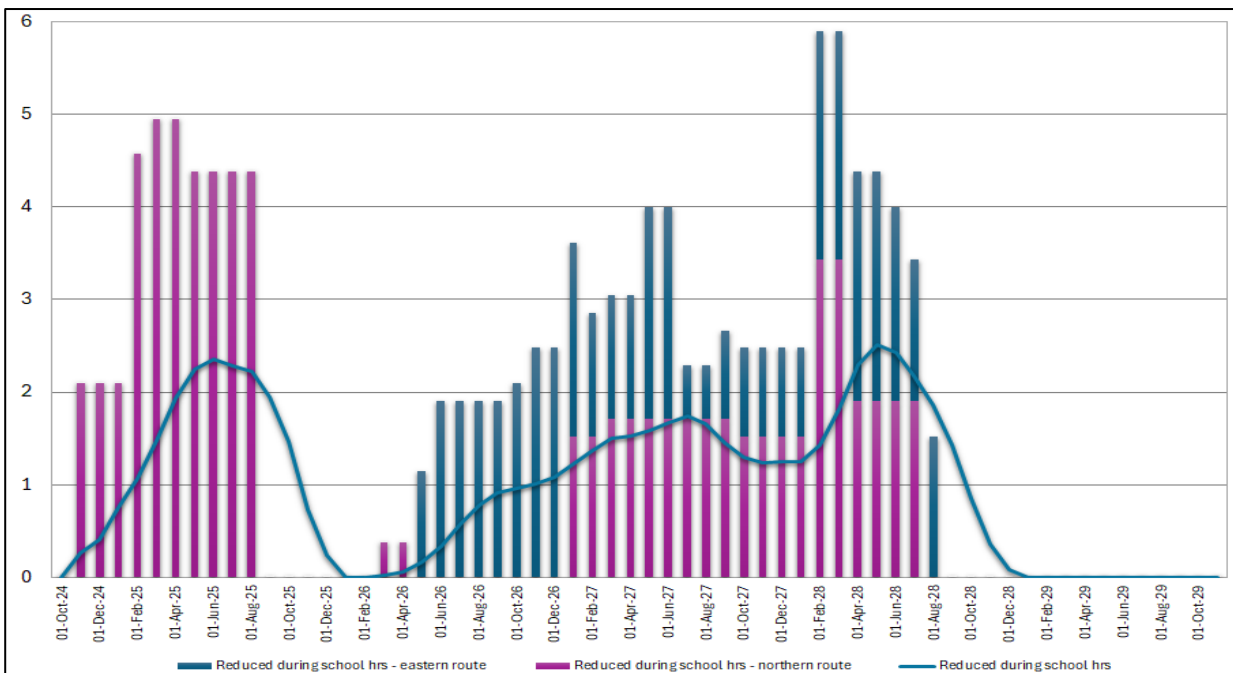


Figure 4-5: Reduced heavy vehicle two-way flows during school peaks

Figure 4-6 shows the peak hour flow for heavy vehicles restricted during school peaks of 18 two-way movements (rounded up to be conservative).

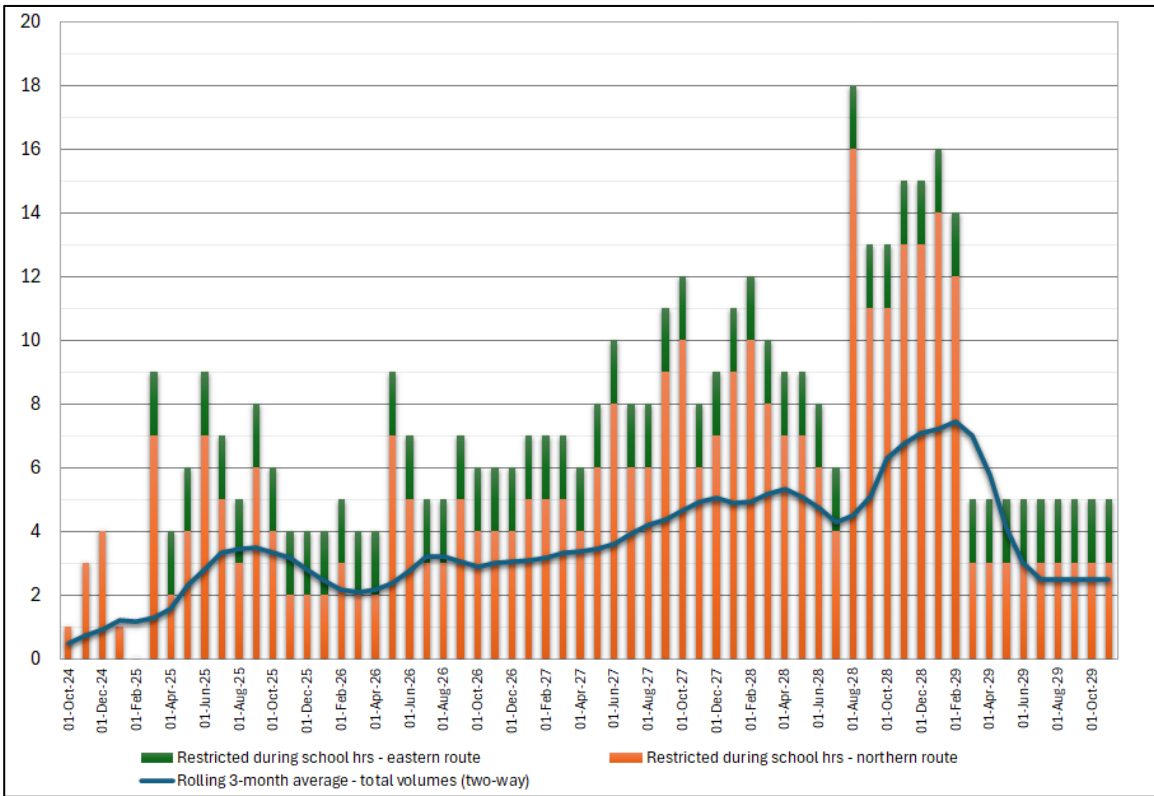


Figure 4-6: Restricted hourly heavy vehicle two-way flows outside school peaks

Figure 4-7 and Figure 4-8 show the peak hour flow for heavy vehicles two-way movements (rounded up to be conservative) for the eastern and northern routes, respectively.

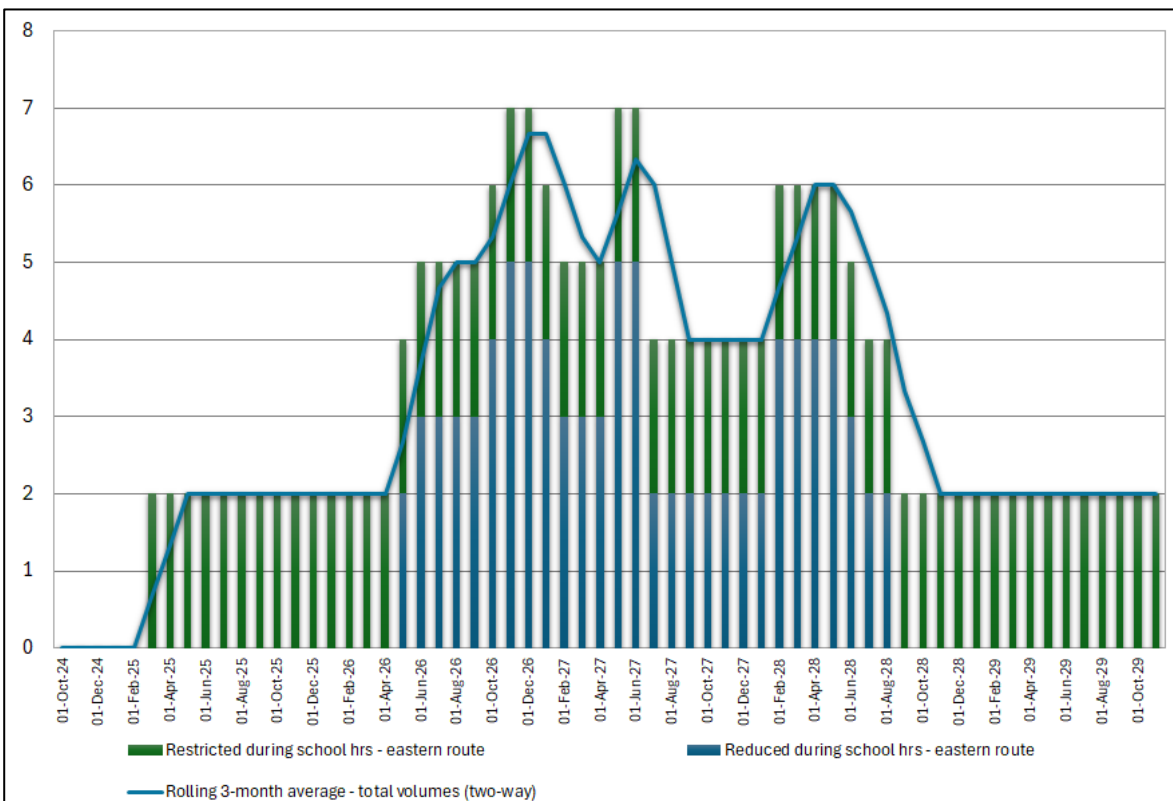


Figure 4-7: Eastern route hourly heavy vehicle two-way flows

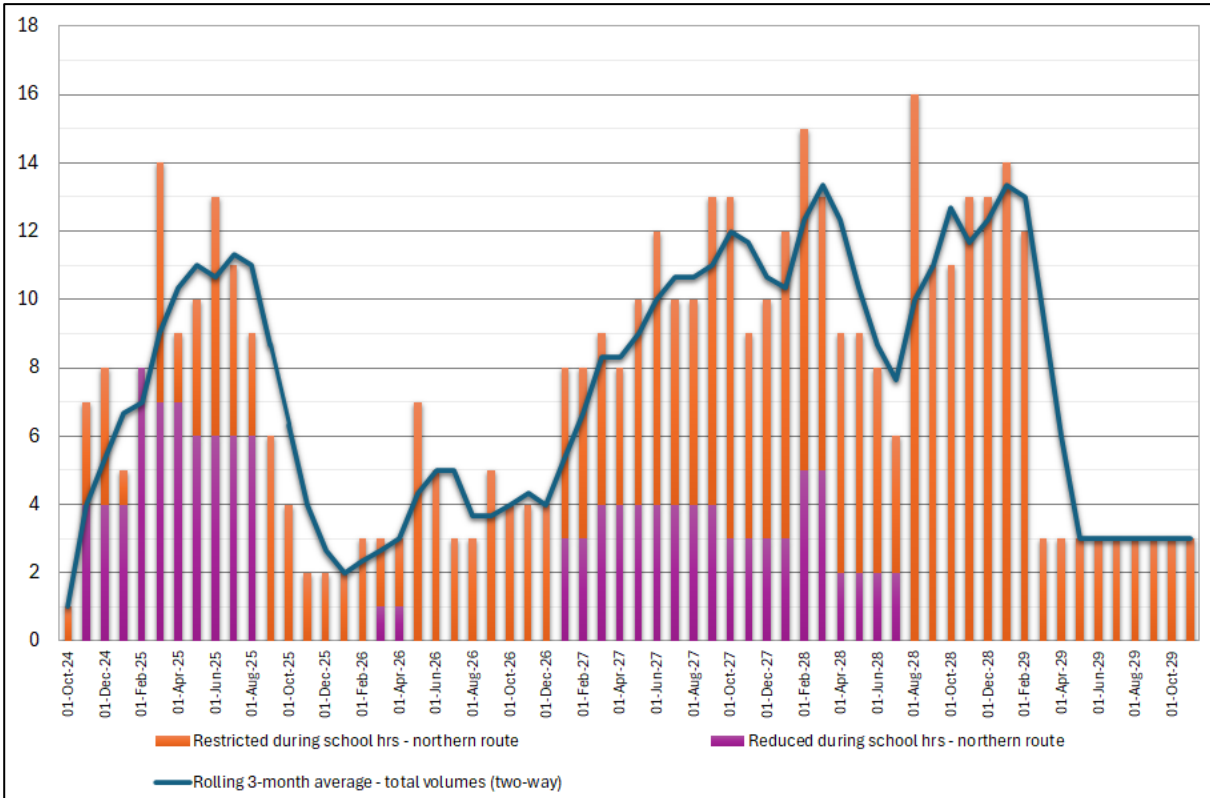


Figure 4-8: Western route hourly heavy vehicle two-way flows

For context, **Figure 4-9** and **Figure 4-10** provide the existing heavy vehicle flows at Elm Street / Lake Macdonald Drive for a rolling hourly and total 6am to 6pm respectively, which shows only 100 heavy vehicles currently turn to or from Lake Macdonald Drive.

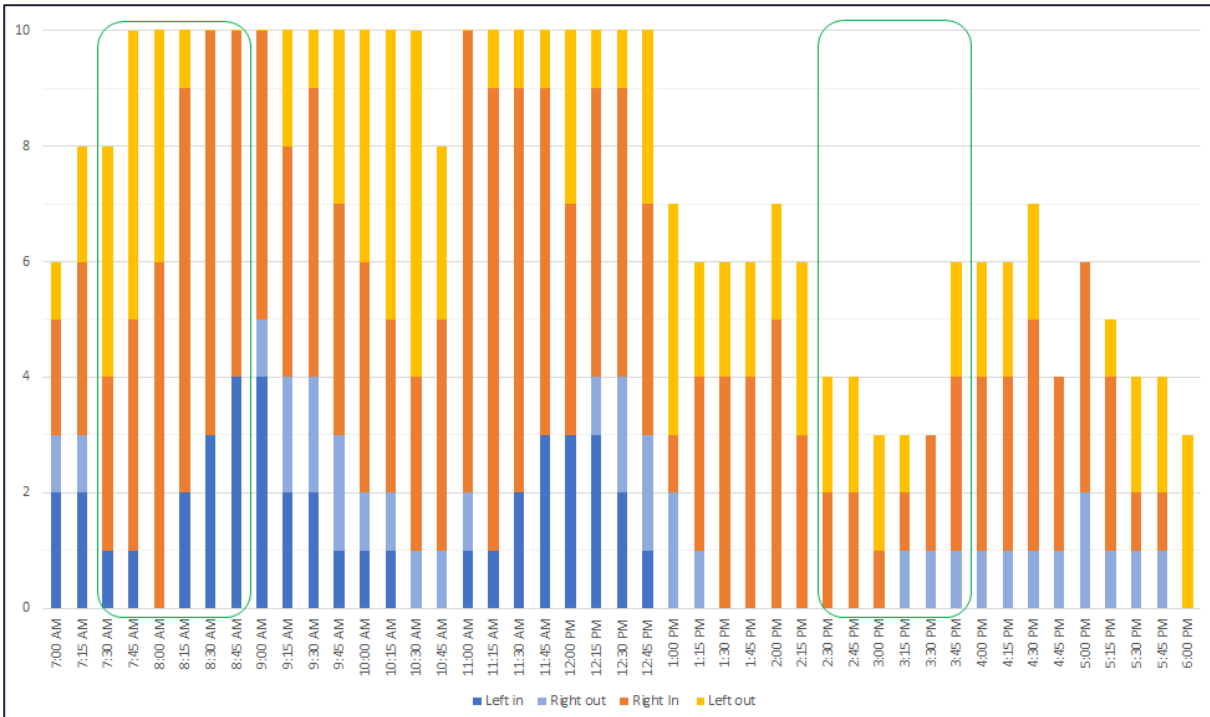


Figure 4-9: Existing heavy vehicle flows at Elm Street / Lake Macdonald Drive – rolling hourly profile

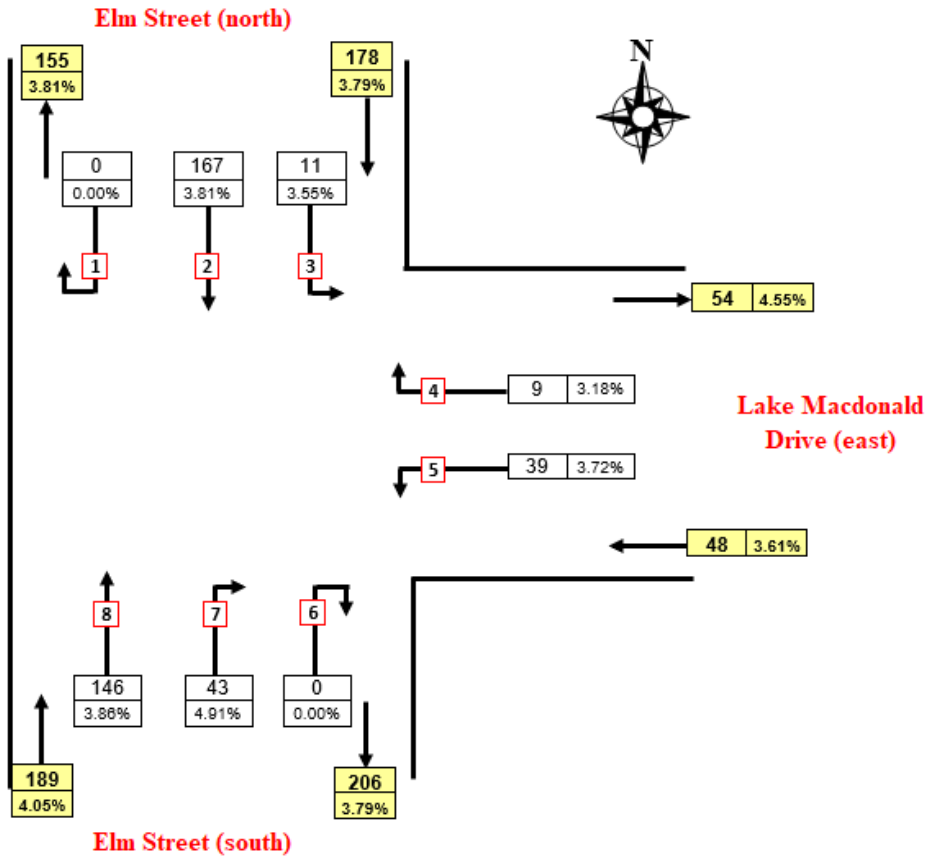


Figure 4-10: Existing Heavy vehicle flows at Elm Street / Lake Macdonald Drive – 6am to 6pm

4.4 Assessment Approach

Based on the above hours and movements for light and heavy vehicle, **Figure 4-11** shows a typical day with one-way traffic flows, noting only heavy vehicles will have two-way flows (i.e., workers will arrive in the morning and depart in the evening).

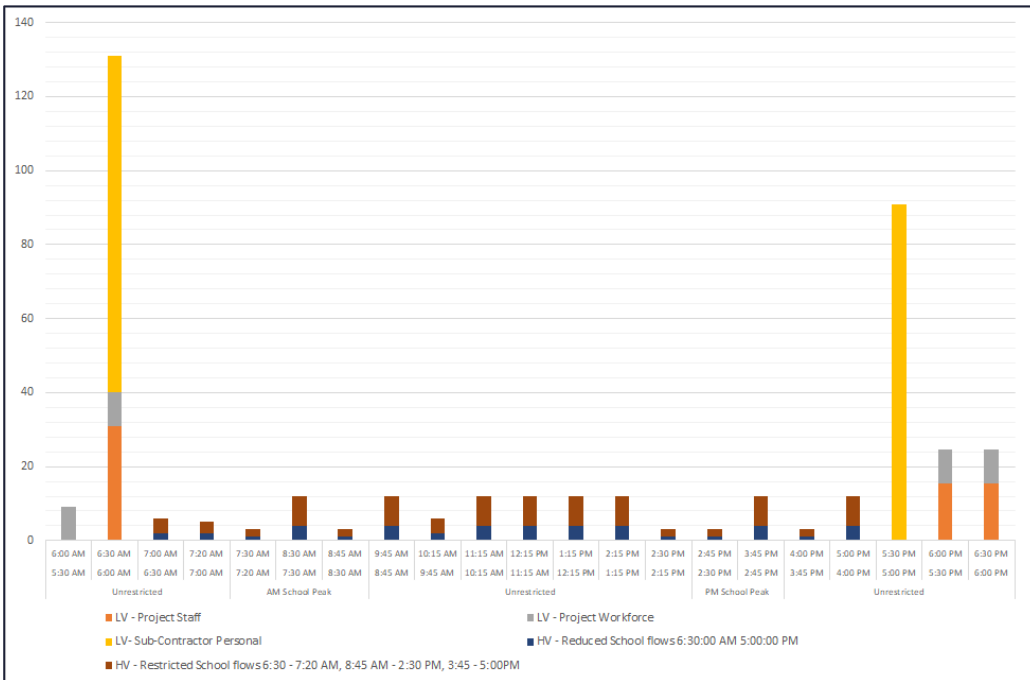


Figure 4-11: Project peak hour assessment

The following peak periods have been assessed for the various

1. AM workers arrival: 6:00 – 6:30 am – noting a 30min assessment
2. AM heavy vehicle: unrestricted flows from 10:15am to 11:15 am
3. PM heavy vehicle: unrestricted flows from 4:00 – 5:00 pm
4. PM workers departure: 5:00 – 6:00 pm.

Note, Elm Street / Myall Street intersection has not been assessed as only light vehicles will travel through it and outside its peak periods as noted in **Section 2.3.1**. Further, Cooroy - Noosa Road / Sivyers Road intersection will only be assessed in the workers arrival and departure assessment as only a peak of 3.5 heavy vehicles (one-way) will travel along Cooroy - Noosa Road and below the 5% assessment trigger.

4.5 SIDRA Modelling

SIDRA intersection (v9.1) has been used to assess the key local intersections with the following outputs:

- Degree of saturation (DoS). This is the ratio of demand to capacity. A DoS of 1.0 or more in theory represents over saturated conditions, but in reality, a lower practical DoS is used. For priority-controlled intersections, a DoS of 0.8 is the desired upper limit; for roundabouts, it is 0.85; and for signals it is 0.90.
- Average delay. This is the average amount of time it takes a vehicle to negotiate an intersection, including the time to negotiate corners and the time stopped in queues or waiting for a green signal. This parameter is the most tangible to drivers.
- Level of service (LoS). This is an alpha-numeric rating of the overall performance of an intersection, ranging from LoS A (very good) to LoS F (very poor). It is directly related to the average delay. The desirable target is generally LoS C or above, but in congested urban environments the realistic target is usually taken to be LoS D. Level of service is not reported for priority-controlled intersections from an overall intersection performance perspective, as major road movements have zero delay, which skews the results.
- 95th percentile back of queue (95% Q). This is the queue length that is not exceeded 95 percent of the time. Ideally, queue lengths should not exceed the turning lane storage or block back into upstream intersections.

4.5.1 SIDRA Model Development and Parameters

SIDRA models (isolated intersection) have been developed of the following intersections to assess the impacts of the construction worker and construction traffic impacts during the peak construction phase of the project in 2028.

1. Elm Street / Lake Macdonald Drive priority intersection: workers AM & PM / heavy vehicle AM and PM.
2. Lake Macdonald Drive / Collwood Road priority intersection: workers AM & PM / heavy vehicle AM and PM
3. Elm Street / Diamond Street priority intersection: workers AM & PM / heavy vehicle AM and PM noting heavy vehicle flows are below trigger threshold.
4. Cooroy - Noosa Road / Sivyers Road priority intersection: workers AM & PM / heavy vehicle AM and PM noting heavy vehicle flows are below trigger threshold.

The SIDRA models of the analysed intersections have been developed as follows:

- All measurements taken from google earth imagery.
- Model calibration parameters have adopted default saturation flow rates (1,950 through car units/hr (tcu/hr)). Intersection gap times adjusted to traffic lane compositions provided.
- Lake Macdonald Drive grades up to Elm Street. This has been inferred to be an approximate 4% gradient based on a level change of approximately 2.75m over 68m. This has been adopted in the SIDRA modelling of this intersection.
- Most models have not been validated to queuing as part of the traffic surveys as flows were low result in minimal queues.

- Intersection validation was based on general review of videos and observations from recent site inspections which found results reflective of the SIDRA base (without project) scenario with typical parameters i.e. gap acceptances.
- Elm Street / Diamond Street was reviewed in more detail with regards to produced traffic queues and adopted of appropriate gap and headway times for vehicles exiting and entering Diamond Street. Video footage was reviewed, and gap times adjusted with review to the SIDRA / Austroads times which are applicable for the road configuration and observed operations. This resulted in a modelled 6 sec gap and 3.5 sec headway for vehicles exiting and turning right from Diamond Street, with other gap / headway times adopted as per a two-lane give-way road.

4.5.2 Traffic Demands

The project is expected to be constructed over a 4-year period, pending approvals from March 2025 to March 2029. For the purposes of developing the most conservative case traffic volume impacts, and the nature of the local area traffic a 1.5% growth rates have been applied to the base traffic survey information to mid-2028 as the peak construction.

The base with development traffic demands is provided in the following drawings in **Appendix H1** and **Appendix H2** for base without Project and with without Project scenarios respectively:

- 30035740_TFD_005 – 2028 Base without Project (Worker LVs) AM (6:00 - 7:00am) and PM (5:00 - 6:00pm) peak periods
- 30035740_TFD_006 – 2023 Base with Development (Construction HVs) AM (10:15 -11:15am) and PM (4:00 - 5:00pm) peak periods
- 30035740_TFD_007 – 2028 Base with Development (Worker LVs) AM (6:00 - 7:00am) and PM (5:00 - 6:00pm) peak periods
- 30035740_TFD_008 – 2028 Base with Development (Construction HVs) AM (10:15 -11:15am) and PM (4:30 - 5:00pm) peak periods.

4.5.3 Intersection analysis

The following tables provide summary SIDRA results for each intersection for 2028 for the base (without Project) and with Project scenarios for all four peaks assessed. Full SIDRA outputs provided in **Appendix G**.

In summary the intersections are predicted to operate within capacity metrics with little or no traffic delays or queues.

It is noted that the Diamond Street (E) approach operates at a LoS E during the 2028 Base (without Project) Scenario (10:15 - 11:15am only) with delays close to reaching LoS F levels, which are triggered with the Project Scenario. It should be noted that during this assessment period only two heavy vehicle trips are predicted to be moving through the intersection (to/from the site). It is therefore considered that project related trips do not cause a detrimental operational outcome which requires mitigation measures at this intersection.

Table 4-2: Lake MacDonald Drive / Collwood Road - 2028 Light Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 6:00 – 7:00am				PM 5:00 – 6:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Lake MacDonald Drive	Lane 1 - Ahead and Right Turn	0	0.01	1.6	LOS A	0	0.04	0.1	LOS A
	Approach	0	0.01	1.6	NA	0	0.04	0.1	NA
East - Collwood Road	Lane 1 - Left and Right Turn	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
	Approach	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
North - Lake MacDonald Drive	Lane 1 - Ahead and Left Turn	0	0.04	2.1	LOS A	0	0.02	2.2	LOS A
	Approach	0	0.04	2.1	NA	0	0.02	2.2	NA
Overall		0	0.04	2.0	NA	0	0.04	0.7	NA
With Project Scenario									
South - Lake MacDonald Drive	Lane 1 - Ahead and Right Turn	2	0.07	5.4	LOS A	0	0.04	0.1	LOS A
	Approach	2	0.07	5.4	NA	0	0.04	0.1	NA
East - Collwood Road	Lane 1 - Left and Right Turn	0	0.00	0.6	LOS A	2	0.05	0.1	LOS A
	Approach	0	0.00	0.6	LOS A	2	0.05	0.1	LOS A
North - Lake MacDonald Drive	Lane 1 - Ahead and Left Turn	0	0.04	2.1	LOS A	0	0.02	2.2	LOS A
	Approach	0	0.04	2.1	NA	0	0.02	2.2	NA
Overall		2	0.07	4.0	NA	2	0.05	0.4	NA

Table 4-3: Lake MacDonald Drive / Collwood Road - 2028 Heavy Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 10:15 – 11:15am				PM – 4:00 – 5:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Lake MacDonald Drive	Lane 1 - Ahead and Right Turn	0	0.03	0.1	LOS A	0	0.06	0.1	LOS A
	Approach	0	0.03	0.1	NA	0	0.06	0.1	NA
East - Collwood Road	Lane 1 - Left and Right Turn	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
	Approach	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
North - Lake MacDonald Drive	Lane 1 - Ahead and Left Turn	0	0.03	2.1	LOS A	0	0.03	2.1	LOS A
	Approach	0	0.03	2.1	NA	0	0.03	2.1	NA
Overall		0	0.03	1.1	NA	0	0.06	0.7	NA
With Project Scenario									
South - Lake MacDonald Drive	Lane 1 - Ahead and Right Turn	0	0.03	0.1	LOS A	0	0.06	0.1	LOS A
	Approach	0	0.03	0.1	NA	0	0.06	0.1	NA
East - Collwood Road	Lane 1 - Left and Right Turn	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
	Approach	0	0.00	0.5	LOS A	0	0.00	0.5	LOS A
North - Lake MacDonald Drive	Lane 1 - Ahead and Left Turn	0	0.03	2.1	LOS A	0	0.03	2.1	LOS A
	Approach	0	0.03	2.1	NA	0	0.03	2.1	NA
Overall		0	0.03	1.1	NA	0	0.06	0.7	NA

Table 4-4: Elm Street / Lake MacDonald Drive - 2028 Light Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 6:00 – 7:00am				PM 5:00 – 6:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Elm Street	Lane 1 - Ahead Lane	0	0.08	0.0	LOS A	0	0.22	0.1	LOS A
	Lane 2 - Short Right Turn Lane	1	0.03	7.5	LOS A	3	0.09	6.7	LOS A
	Approach	1	0.08	1.1	NA	3	0.22	1.3	NA
East - Lake MacDonald Drive	Lane 1 - Left and Right Turn	3	0.11	8.5	LOS A	4	0.14	10.0	LOS B
	Approach	3	0.11	8.5	LOS A	4	0.14	10.0	LOS B
North - Lake MacDonald Drive	Lane 1 - Short Left Turn Lane	0	0.01	5.6	LOS A	0	0.01	5.5	LOS A
	Lane 2 - Ahead Lane	0	0.19	0.1	LOS A	0	0.13	0.0	LOS A
	Approach	0	0.19	0.4	NA	0	0.13	0.5	NA
Overall		3	0.19	1.6	NA	4	0.22	1.9	NA
With Project Scenario									
South - Elm Street	Lane 1 - Ahead Lane	0	0.08	0.0	LOS A	0	0.22	0.1	LOS A
	Lane 2 - Short Right Turn Lane	3	0.11	7.6	LOS A	3	0.09	6.7	LOS A
	Approach	3	0.11	3.1	NA	3	0.22	1.3	NA
East - Lake MacDonald Drive	Lane 1 - Left and Right Turn	3	0.11	8.8	LOS A	9	0.28	10.4	LOS B
	Approach	3	0.11	8.8	LOS A	9	0.28	10.4	LOS B
North - Lake MacDonald Drive	Lane 1 - Short Left Turn Lane	0	0.03	5.6	LOS A	0	0.01	5.5	LOS A
	Lane 2 - Ahead Lane	0	0.19	0.1	LOS A	0	0.13	0.0	LOS A
	Approach	0	0.19	0.7	NA	0	0.13	0.5	NA
Overall		3	0.19	2.4	NA	9	0.28	2.7	NA

Table 4-5: Elm Street / Lake MacDonald Drive - 2028 Heavy Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 10:15 – 11:15am				PM – 4:00 – 5:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Elm Street	Lane 1 - Ahead Lane	0	0.18	0.0	LOS A	0	0.24	0.1	LOS A
	Lane 2 - Short Right Turn Lane	3	0.10	8.0	LOS A	4	0.15	7.7	LOS A
	Approach	3	0.18	1.6	NA	4	0.24	1.9	NA
East - Lake MacDonald Drive	Lane 1 - Left and Right Turn	6	0.20	10.3	LOS B	10	0.30	13.6	LOS B
	Approach	6	0.20	10.3	LOS B	10	0.30	13.6	LOS B
North - Lake MacDonald Drive	Lane 1 - Short Left Turn Lane	0	0.01	5.6	LOS A	0	0.02	5.5	LOS A
	Lane 2 - Ahead Lane	0	0.20	0.1	LOS A	0	0.20	0.1	LOS A
	Approach	0	0.20	0.3	NA	0	0.20	0.5	NA
Overall		6	0.20	2.2	NA	10	0.30	2.8	NA
With Project Scenario									
South - Elm Street	Lane 1 - Ahead Lane	0	0.18	0.0	LOS A	0	0.24	0.1	LOS A
	Lane 2 - Short Right Turn Lane	3	0.10	8.1	LOS A	5	0.16	7.8	LOS A
	Approach	3	0.18	1.7	NA	5	0.24	1.9	NA
East - Lake MacDonald Drive	Lane 1 - Left and Right Turn	9	0.28	13.5	LOS B	16	0.43	19.5	LOS C
	Approach	9	0.28	13.5	LOS B	16	0.43	19.5	LOS C
North - Lake MacDonald Drive	Lane 1 - Short Left Turn Lane	0	0.02	5.9	LOS A	0	0.03	5.8	LOS A
	Lane 2 - Ahead Lane	0	0.20	0.1	LOS A	0	0.20	0.1	LOS A
	Approach	0	0.20	0.5	NA	0	0.20	0.6	NA
Overall		9	0.28	2.7	NA	16	0.43	3.7	NA

Table 4-6: Cooroy - Noosa Road / Sivyers Road - 2028 Light Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 6:00 – 7:00am				PM 5:00 – 6:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
East - Cooroy - Noosa Road	Lane 1 - Ahead Lane	0	0.08	0.0	LOS A	0	0.22	0.1	LOS A
	Lane 2 - Short Right Turn Lane	1	0.03	7.5	LOS A	3	0.09	6.7	LOS A
	Approach	1	0.08	1.1	NA	3	0.22	1.3	NA
North - Sivyers Road	Lane 1 - Left and Right Turn	3	0.11	8.5	LOS A	4	0.14	10.0	LOS B
	Approach	3	0.11	8.5	LOS A	4	0.14	10.0	LOS B
West - Cooroy - Noosa Road	Lane 1 - Short Left Turn Lane	0	0.01	5.6	LOS A	0	0.01	5.5	LOS A
	Lane 2 - Ahead Lane	0	0.19	0.1	LOS A	0	0.13	0.0	LOS A
	Approach	0	0.19	0.4	NA	0	0.13	0.5	NA
Overall		3	0.19	1.6	NA	4	0.22	1.9	NA
With Project Scenario									
East - Cooroy - Noosa Road	Lane 1 - Ahead Lane	0	0.16	0.0	LOS A	0	0.28	0.1	LOS A
	Lane 2 - Short Right Turn Lane	1	0.03	8.9	LOS A	1	0.02	8.8	LOS A
	Approach	1	0.16	0.7	NA	1	0.28	0.4	NA
North - Sivyers Road	Lane 1 - Left and Right Turn	2	0.06	12.9	LOS B	3	0.11	12.3	LOS B
	Approach	2	0.06	12.9	LOS B	3	0.11	12.3	LOS B
West - Cooroy - Noosa Road	Lane 1 - Short Left Turn Lane	0	0.00	6.9	LOS A	0	0.01	6.9	LOS A
	Lane 2 - Ahead Lane	0	0.24	0.0	LOS A	0	0.21	0.0	LOS A
	Approach	0	0.24	0.1	NA	0	0.21	0.2	NA
Overall		2	0.24	0.8	NA	3	0.28	0.9	NA

Table 4-7: Cooroy - Noosa Road / Sivyers Road - 2028 Heavy Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 10:15 – 11:15am				PM – 4:00 – 5:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
East - Cooroy - Noosa Road	Lane 1 - Ahead Lane	0	0.29	0.1	LOS A	0	0.30	0.1	LOS A
	Lane 2 - Short Right Turn Lane	1	0.03	10.2	LOS B	1	0.02	9.3	LOS A
	Approach	1	0.29	0.4	NA	1	0.30	0.3	NA
North - Sivyers Road	Lane 1 - Left and Right Turn	3	0.12	21.6	LOS C	2	0.09	17.3	LOS C
	Approach	3	0.12	21.6	LOS C	2	0.09	17.3	LOS C
West - Cooroy - Noosa Road	Lane 1 - Short Left Turn Lane	0	0.01	7.0	LOS A	0	0.01	6.9	LOS A
	Lane 2 - Ahead Lane	0	0.32	0.1	LOS A	0	0.26	0.0	LOS A
	Approach	0	0.32	0.3	NA	0	0.26	0.4	NA
Overall		3	0.32	0.8	NA	2	0.30	0.7	NA
With Project Scenario									
East - Cooroy - Noosa Road	Lane 1 - Ahead Lane	0	0.29	0.1	LOS A	0	0.30	0.1	LOS A
	Lane 2 - Short Right Turn Lane	1	0.03	10.2	LOS B	1	0.02	9.3	LOS A
	Approach	1	0.29	0.4	NA	1	0.30	0.3	NA
North - Sivyers Road	Lane 1 - Left and Right Turn	3	0.12	21.7	LOS C	2	0.09	17.4	LOS C
	Approach	3	0.12	21.7	LOS C	2	0.09	17.4	LOS C
West - Cooroy - Noosa Road	Lane 1 - Short Left Turn Lane	0	0.01	7.0	LOS A	0	0.01	6.9	LOS A
	Lane 2 - Ahead Lane	0	0.32	0.1	LOS A	0	0.26	0.0	LOS A
	Approach	0	0.32	0.3	NA	0	0.26	0.4	NA
Overall		3	0.32	0.8	NA	2	0.30	0.8	NA

Table 4-8: Elm Street / Diamond Street - 2028 Light Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 6:00 – 7:00am				PM 5:00 – 6:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Elm Street	Lane 1 - Ahead and Left Turn Lane	0	0.06	0.2	LOS A	0	0.16	0.1	LOS A
	Lane 2 - Short Right Turn Lane	6	0.20	7.2	LOS A	8	0.27	6.9	LOS A
	Approach	6	0.20	4.4	NA	8	0.27	3.1	NA
East - Diamond Street	Lane 1 - Short Left Turn Lane	5	0.15	5.6	LOS A	7	0.23	5.6	LOS A
	Lane 2 - Ahead and Right Turn Lane	4	0.15	14.9	LOS B	17	0.50	26.0	LOS D
	Approach	5	0.15	7.8	LOS A	17	0.50	12.1	LOS B
North - Elm Street	Lane 1 - Short Left Turn Lane	0	0.12	4.6	LOS A	0	0.09	4.6	LOS A
	Lane 2 - Ahead and Right Turn Lane	0	0.13	0.1	LOS A	0	0.13	0.1	LOS A
	Approach	0	0.13	2.2	NA	0	0.13	1.8	NA
West - Car Park Access	Lane 1 - All Movement	0	0.01	7.5	LOS A	1	0.02	11.9	LOS B
	Approach	0	0.01	7.5	LOS A	1	0.02	11.9	LOS B
Overall		6	0.20	4.2	NA	17	0.50	5.5	NA
With Project Scenario									
South - Elm Street	Lane 1 - Ahead and Left Turn Lane	0	0.10	0.1	LOS A	0	0.16	0.1	LOS A
	Lane 2 - Short Right Turn Lane	6	0.20	7.2	LOS A	9	0.29	7.6	LOS A
	Approach	6	0.20	3.4	NA	9	0.29	3.4	NA
East - Diamond Street	Lane 1 - Short Left Turn Lane	5	0.15	5.6	LOS A	8	0.24	6.0	LOS A
	Lane 2 - Ahead and Right Turn Lane	4	0.17	16.3	LOS C	19	0.57	30.7	LOS D
	Approach	5	0.17	8.2	LOS A	19	0.57	13.8	LOS B
North - Elm Street	Lane 1 - Short Left Turn Lane	0	0.12	4.6	LOS A	0	0.09	4.6	LOS A
	Lane 2 - Ahead and Right Turn Lane	0	0.13	0.1	LOS A	0	0.17	0.0	LOS A
	Approach	0	0.13	2.2	NA	0	0.17	1.5	NA
West - Car Park Access	Lane 1 - All Movement	0	0.01	8.3	LOS A	1	0.02	13.2	LOS B
	Approach	0	0.01	8.3	LOS A	1	0.02	13.2	LOS B
Overall		6	0.20	4.0	NA	19	0.57	5.9	NA

Table 4-9: Elm Street / Diamond Street - 2028 Heavy Vehicle SIDRA Summary Results

Approach	Lane configuration	AM – 10:15 – 11:15am				PM – 4:00 – 5:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
Base (without Project) Scenario									
South - Elm Street	Lane 1 - Ahead and Left Turn Lane	0	0.17	0.1	LOS A	0	0.18	0.1	LOS A
	Lane 2 - Short Right Turn Lane	19	0.45	10.0	LOS B	16	0.39	8.8	LOS A
	Approach	19	0.45	5.1	NA	16	0.39	4.2	NA
East - Diamond Street	Lane 1 - Short Left Turn Lane	10	0.29	6.4	LOS A	8	0.25	6.0	LOS A
	Lane 2 - Ahead and Right Turn Lane	26	0.74	49.2	LOS E	19	0.59	36.0	LOS E
	Approach	26	0.74	18.3	LOS C	19	0.59	14.3	LOS B
North - Elm Street	Lane 1 - Short Left Turn Lane	0	0.13	4.7	LOS A	0	0.11	4.6	LOS A
	Lane 2 - Ahead and Right Turn Lane	0	0.19	0.0	LOS A	0	0.17	0.0	LOS A
	Approach	0	0.19	1.8	NA	0	0.17	1.8	NA
West - Car Park Access	Lane 1 - All Movement	1	0.02	16.7	LOS C	1	0.03	14.9	LOS B
	Approach	1	0.02	16.7	LOS C	1	0.03	14.9	LOS B
Overall		26	0.74	7.5	NA	19	0.59	6.1	NA
With Project Scenario									
South - Elm Street	Lane 1 - Ahead and Left Turn Lane	0	0.17	0.1	LOS A	0	0.18	0.1	LOS A
	Lane 2 - Short Right Turn Lane	19	0.45	10.1	LOS B	16	0.39	8.8	LOS A
	Approach	19	0.45	5.1	NA	16	0.39	4.2	NA
East - Diamond Street	Lane 1 - Short Left Turn Lane	10	0.29	6.4	LOS A	8	0.25	6.0	LOS A
	Lane 2 - Ahead and Right Turn Lane	28	0.76	51.7	LOS F	19	0.61	37.4	LOS E
	Approach	28	0.76	19.1	LOS C	19	0.61	14.7	LOS B
North - Elm Street	Lane 1 - Short Left Turn Lane	0	0.13	4.7	LOS A	0	0.11	4.6	LOS A
	Lane 2 - Ahead and Right Turn Lane	0	0.19	0.0	LOS A	0	0.17	0.0	LOS A
	Approach	0	0.19	1.8	NA	0	0.17	1.8	NA

Approach	Lane configuration	AM – 10:15 – 11:15am				PM – 4:00 – 5:00pm			
		95% Q	DoS	Avg Delay (secs)	LoS	95% Q	DoS	Avg Delay (secs)	LoS
West - Car Park Access	Lane 1 - All Movement	1	0.02	16.7	LOS C	1	0.03	14.9	LOS B
	Approach	1	0.02	16.7	LOS C	1	0.03	14.9	LOS B
Overall		28	0.76	7.7	NA	19	0.61	6.2	NA

5. Swept Paths and Turn Warrants

5.1 Swept Paths

5.1.1 Lake Macdonald Drive / Collwood Road

The following 'design vehicle' swept paths were assessed, and results are included in **Appendix H-1**:

- Semi-trailer right in and left out
- Truck and Dog in and left out.

The assessment for semi-trailers shows both the right turn entering and left turn exiting both cross over the centreline. Truck and dog heavy vehicles will have sufficient overset to each other up to the western side of the no public access hatching.

As such, exiting vehicles will need to be held on site and give way to entering vehicles by traffic controllers.

5.1.2 Lake Macdonald Drive / Handstand Area 3

The following 'design vehicle' swept paths were assessed, and results are included in **Appendix H-2**:

- Truck and Dog in and left out.

Due to the limited area for manoeuvring, this area will only be accessed by truck and dog heavy vehicles. Also, the access width has been designed for a single vehicle to enter or exit at once to reduce the impact of vegetation clearing (due to the physical constraint of the left embankment).

As such, exiting vehicles will need to be held on site and give way to entering vehicles by traffic controllers.

5.1.3 Elm Street / Lake Macdonald Drive

The following 'design vehicle' swept paths were assessed, and results are included in **Appendix H-3**

- Semi left in (straddling the two lanes) and right out.
- Semi right in and left out.
- Truck and Dog left in and right out.
- Truck and Dog in and left out.

The assessment for semi-trailers shows both the left turn in from Elm Street and right turn from Lake Macdonald Road cross over the Lake Macdonald Road centreline. Further, semi-trailers turning left also cross over the road centreline on exiting. This is an existing deficiency, however, there are limited existing heavy vehicles undertaking these manoeuvres.

It is noted that the Lake Macdonald Drive is a designated 25/26m B-double and PBS Level 2A route terminating at the disused Quarry (access 295m northeast of Swift Drive). This route continues on Elm Street south of Lake Macdonald Drive onto Myall Street to the Bruce Highway exit 230 interchange.

In the Early stage between November 2024 to 28 February 2025, stop/go traffic management is proposed due to the limited planned semi-trailer numbers.

Prior to the increase of semi-trailers, this intersection will need to be upgraded to facilitate the safe movement of semi-trailers without impacting the road centreline and oncoming traffic.

Any additional provisions to allow for safe manoeuvring for 25/26m B-double and PBS Level 2A should be the responsibility of the relevant development or the State.

5.2 Turn Warrants

A turn warrants assessment has been undertaken at Lake Macdonald Drive / Collwood Road intersection for construction traffic conditions for the purpose of the assessment is to identify whether existing intersections meet current traffic conditions.

These assessments have been undertaken in accordance with:

- TMR Supplement to Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (November 2021).
- Traffic volume presented within Section 7.6.

Figure 5-1 illustrates the turn warrant assessment for Lake Macdonald Drive / Collwood Road for light vehicles AM peak and the range for heavy vehicles. Whilst a BAR may be installed, it is not considered required as the Project will install a works zone with a speed reduction of 40km/h and traffic controllers to control manage traffic flow and safety of all road users. Further, the following have also been considered and thus a BAR is not recommended:

- Additional road width will impact the western verge with will be required for the detour of walkers on the Noosa Trail Network.
- Lake Macdonald Drive will need to be reduced to a one way arrange for several months during the demolition and re-construction of the left embankment.

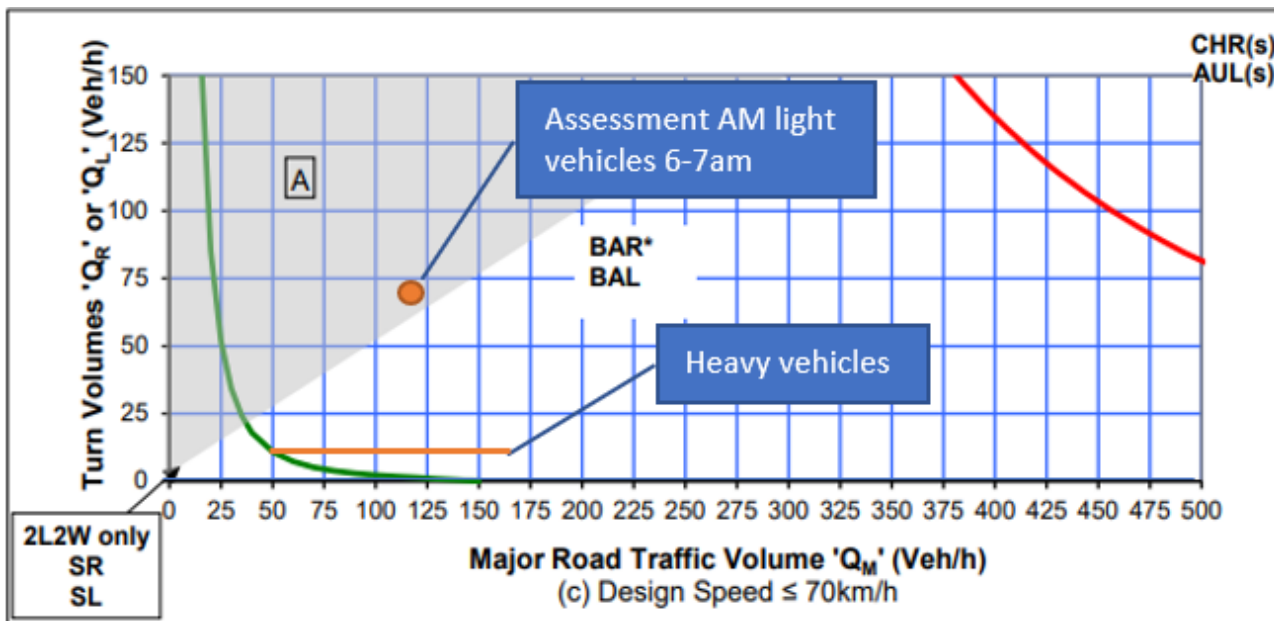


Figure 5-1: Lake Macdonald Drive / Collwood Road – Turn Warrant Assessment

6. Site Access Review and Mitigation

6.1 Elm Street / Lake Macdonald Drive

Following noted from a review of the Elm Street and Lake Macdonald Drive Priority Intersection:

- Intersection capacity: Performs within capacity under the assessed forecast traffic demands, with spare capacity.
- Intersection arrangement / turning lanes: Dedicated left and right turn traffic lanes are provided as part of the existing intersection arrangement. A bicycle lane is highlighted within the left turn traffic lane which is worn and needs to be re-painted.
- Safe Intersection Sight Distance (SISD): Potentially not achieved for cars although may be acceptable for trucks with increased object height criteria.
- Accessibility (Swept path): Semi-trailers cross over the centreline on Lake Macdonald Road. This is an existing deficiency, however, there are limited existing heavy vehicles undertaking these manoeuvres. Semi-trailers turning left into Lake Macdonald Road will need to undertake this movement by straddling the through and left turn lanes at low speed which has the risk of side swiping either other turning vehicles or passing cyclists if they are not aware / paying attention to these potential movements.
- Other:
 - Larger vehicles when propped up at the intersection will have to do so via Lake Macdonald Drive approach which is at a grade (inferred at approx. 4%), there is a risk of heavy vehicles rolling backwards, or exiting the intersection at a slow speed.
 - Larger vehicles when propped up at the intersection via Lake Macdonald Drive will block the uncontrolled pedestrian crossing. There is a risk of pedestrians crossing at the rear of the heavy vehicle and being struck by entering traffic whose visibility will be obscured.
- Potential mitigation measures include:
 - Approaching vehicles will need to be held on Lake Macdonald Road by traffic controllers for semi-trailers until permanent upgrade completed.
 - Kerb realignment to permit design vehicle movements via designated traffic lanes.
 - Warning signage of moving construction vehicles through the intersection.
 - Driver awareness / training.
 - Reduced speed limits through the intersection / approaches to 40km/h at all times during the construction phase, noting a school zone with a 40km/h speed limit between 7 -9 am and 2 -4 pm existing on Elm Street.

6.2 Lake Macdonald Drive / Collwood Road

Following noted from a review of the Lake Macdonald Drive and Collwood Road Priority Intersection:

- Intersection capacity: Performs within capacity under the assessed forecast traffic demands, with spare capacity.
- Intersection arrangement / turning lanes: Based on the very low traffic volumes no dedicated turning lanes are deemed to be warranted.
- Safe Intersection Sight Distance (SISD): No issue southbound with posted speed of 60km/h. Posted speed to the north is 80km/h directly north of this intersection and approach speed should be reduced.
- Accessibility (Swept path checks): Semi-trailers swept paths shows both the right turn entering and left turn exiting both cross over the centreline. Truck and dog heavy vehicles will have sufficient overset to each other up to the western side of the no public access hatching.
- Potential mitigation measures include:

- Exiting vehicles will need to be held on site and give way to entering vehicles by traffic controllers
Warning signage of moving construction vehicles through the intersection.
- Driver awareness / training.
- Reduced speed limits through the intersection / approaches to 40km/h at all times during the construction phase.

6.3 Elm Street / Diamond Street

Following noted from a review of the Lake Macdonald Drive and Collwood Road Priority Intersection:

- Intersection capacity: The right turn on Diamond Street has a high delay and approaching acceptable limits.
- Intersection arrangement / turning lanes: Elm Street right turn lane (southern leg) and left turn (northern leg) have dedicated short turn lanes. Diamond Street left turn has a dedicated short turn lane.
- Safe Intersection Sight Distance (SISD): The Elm Street left turn (northern leg) obstructs the view of southbound through movements due to the slight bend on the northern leg. This impacts the gap acceptance and thus the right turn movement with a high delay.
- Accessibility (Swept path checks): not completed as no change to typical vehicles proposed. Semi-trailers and rigid heavies are existing permitted vehicles.
- Potential mitigation measures include:
 - TMR to consider upgrade with left slip turn on Elm Street (northern leg) or to a roundabout or signalised intersection.
 - Driver awareness / training.

6.4 Cooroy - Noosa Road / Sivyers Road

Following noted from a review of the Cooroy - Noosa Road / Sivyers Road Priority Intersection:

- Intersection capacity: Performs within capacity under the assessed forecast traffic demands, with spare capacity.
- Intersection arrangement / turning lanes: Dedicated left and right turn traffic lanes are provided as part of the intersection arrangement.
- Safe Intersection Sight Distance (SISD): Visibility to the west may be impeded by street/signs, road barrier and the road alignment and may require further review. In addition, the vehicles turning left in can also present a visibility barrier for drivers looking west when exiting Sivyers Road.
- Accessibility (Swept path checks): Only light vehicle access therefore all movements sufficient.
- Potential mitigation measures include:
 - Driver awareness / training.

7. Summary and Next Steps

7.1 Summary

This assessment has shown that as per previously undertaken TIA's for the project that the construction phase of the project is predicted to have minimal traffic capacity impacts on the local road network and is deemed acceptable.

Some further construction traffic movement and safety measures have been identified for further consideration to mitigate potential accessibility impacts on the local network, which can be considered as part of the TMP for the project.

7.2 Next Steps

Following next steps are suggested:

- Stakeholder agreement on:
 - Proposed construction transport routes and timings.
 - Findings on capacity impacts during the construction of the project.
- TMP to consider further and provide way forward on:
 - Construction vehicle accessibility (including swept path analysis) and mitigation considerations.
 - Further detail additional control measures.

Appendix A

Traffic Surveys

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 2 Weather: Fine

Location: Collwood Road/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

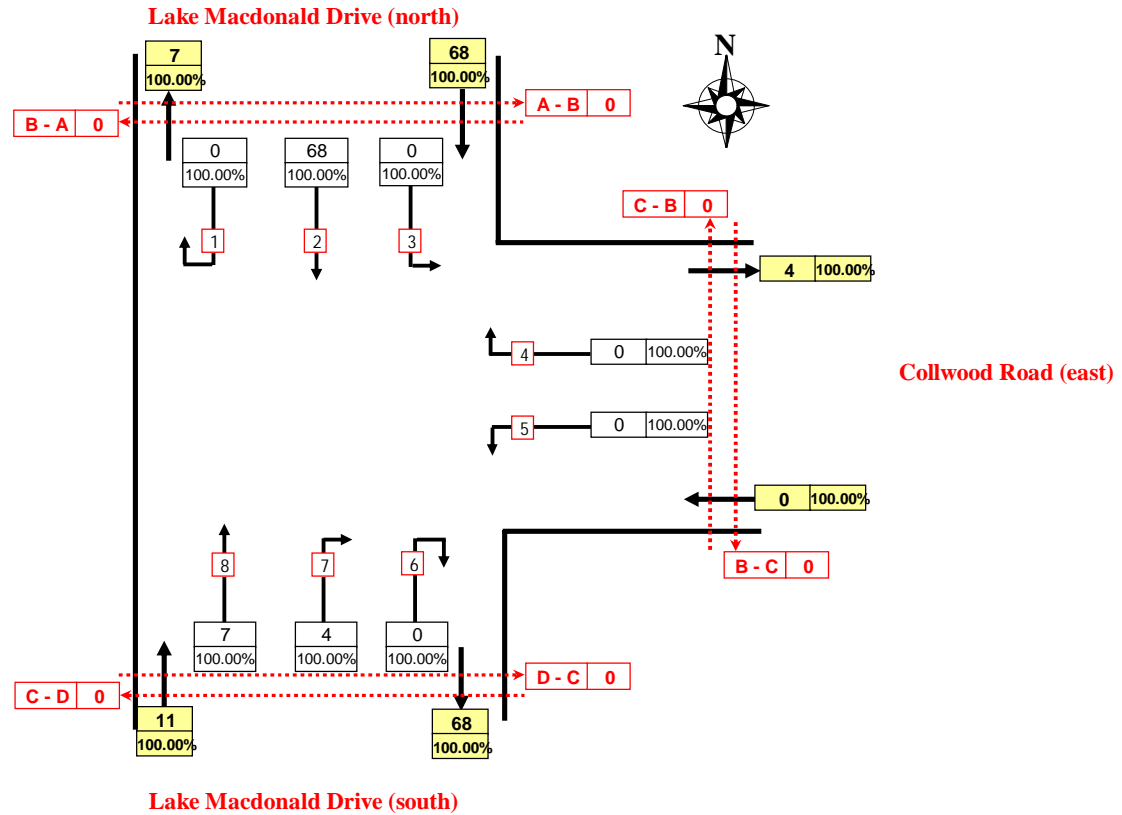
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 5:00 PM

Hour Ending:

On-road classification:

Off-road classification:



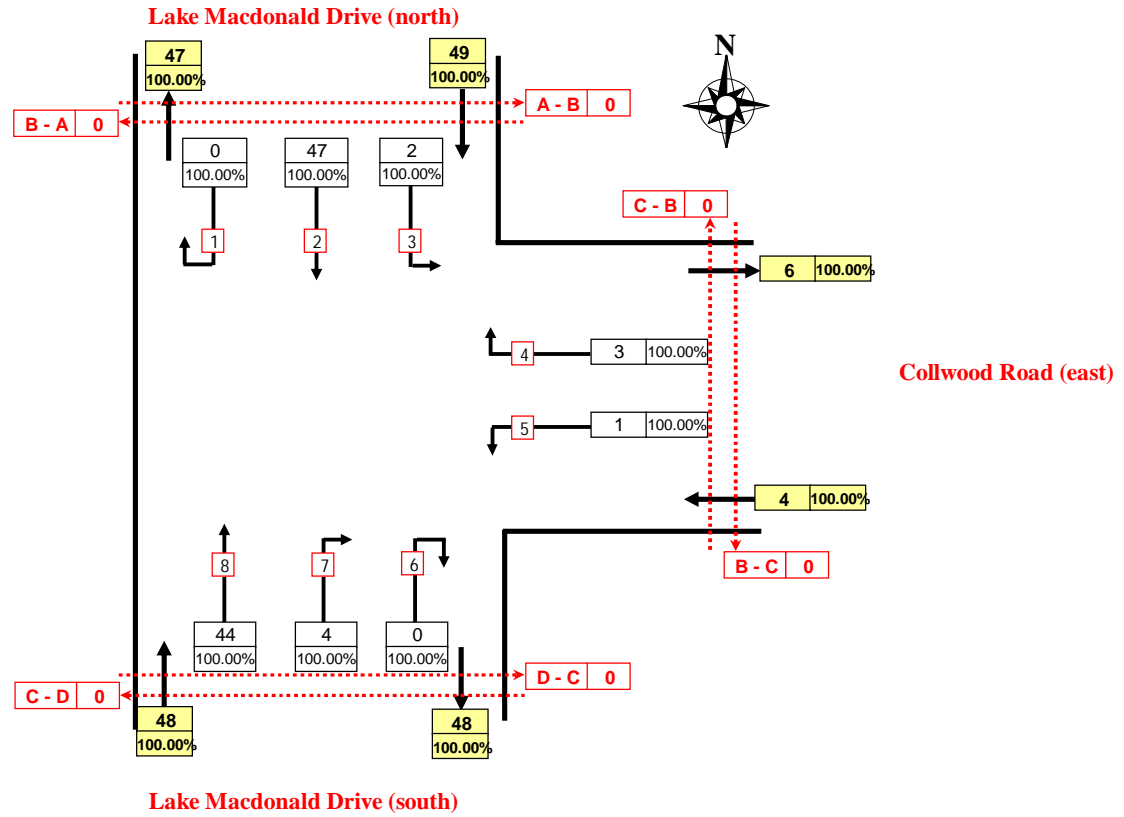
Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 2 **Weather:** Fine
Location: Collwood Road/Lake Macdonald Drive, Cooroy
Day/Date: Tuesday, 12 September 2023
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:30 AM
 PM Peak : Hour ending - 5:00 PM

Hour Ending:
On-road classification:
Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 2 Weather: Fine

Location: Collwood Road/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

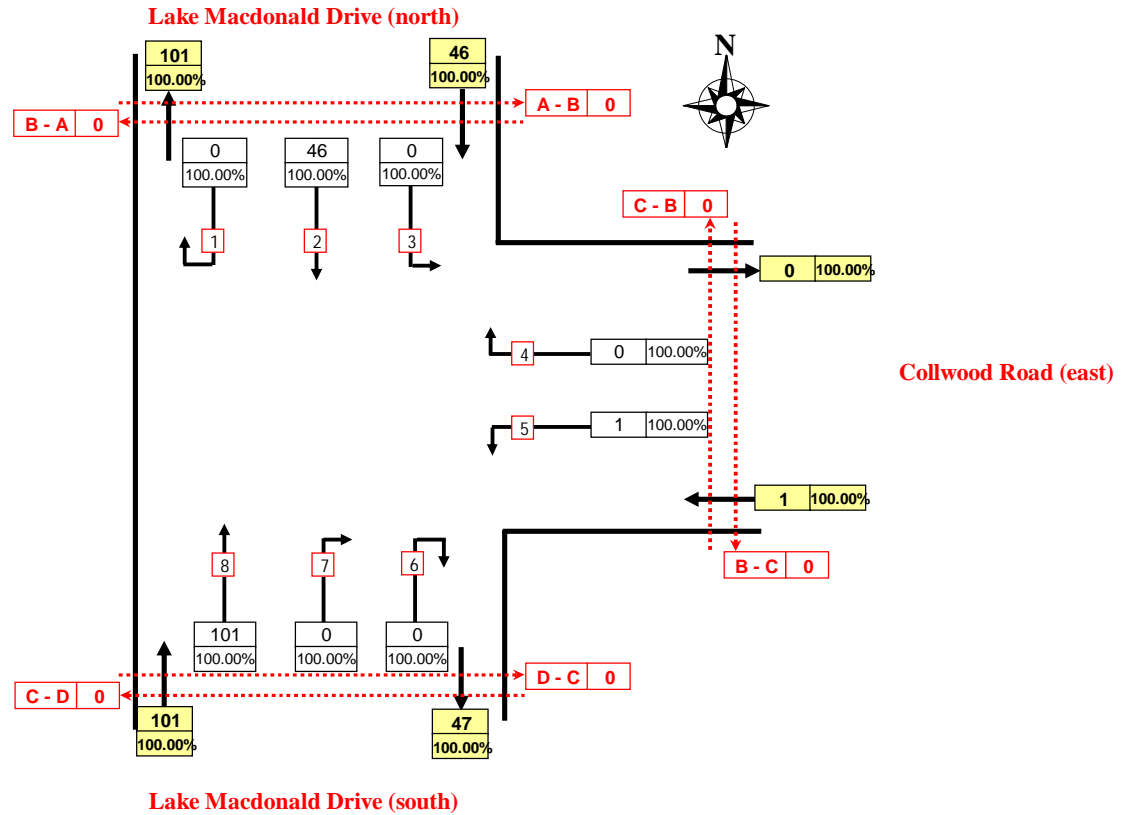
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 5:00 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 2 Weather: Fine

Location: Collwood Road/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

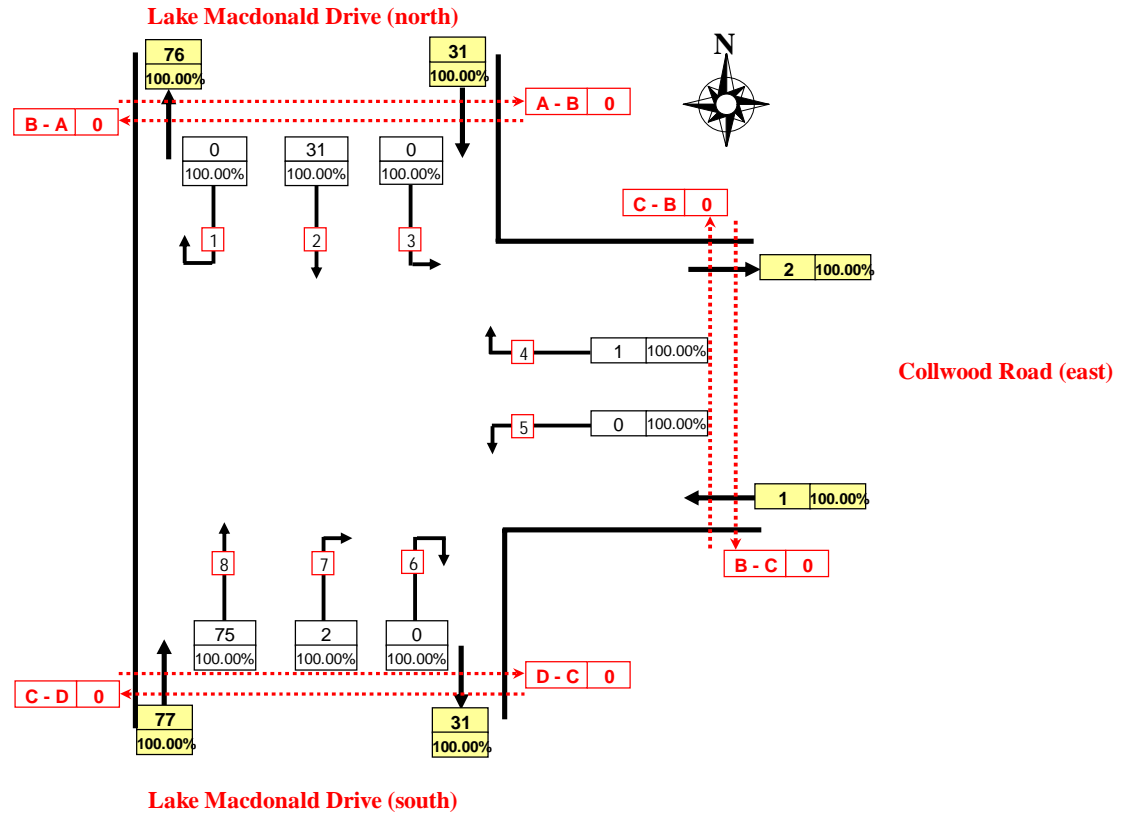
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 5:00 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 2 Weather: Fine

Location: Collwood Road/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

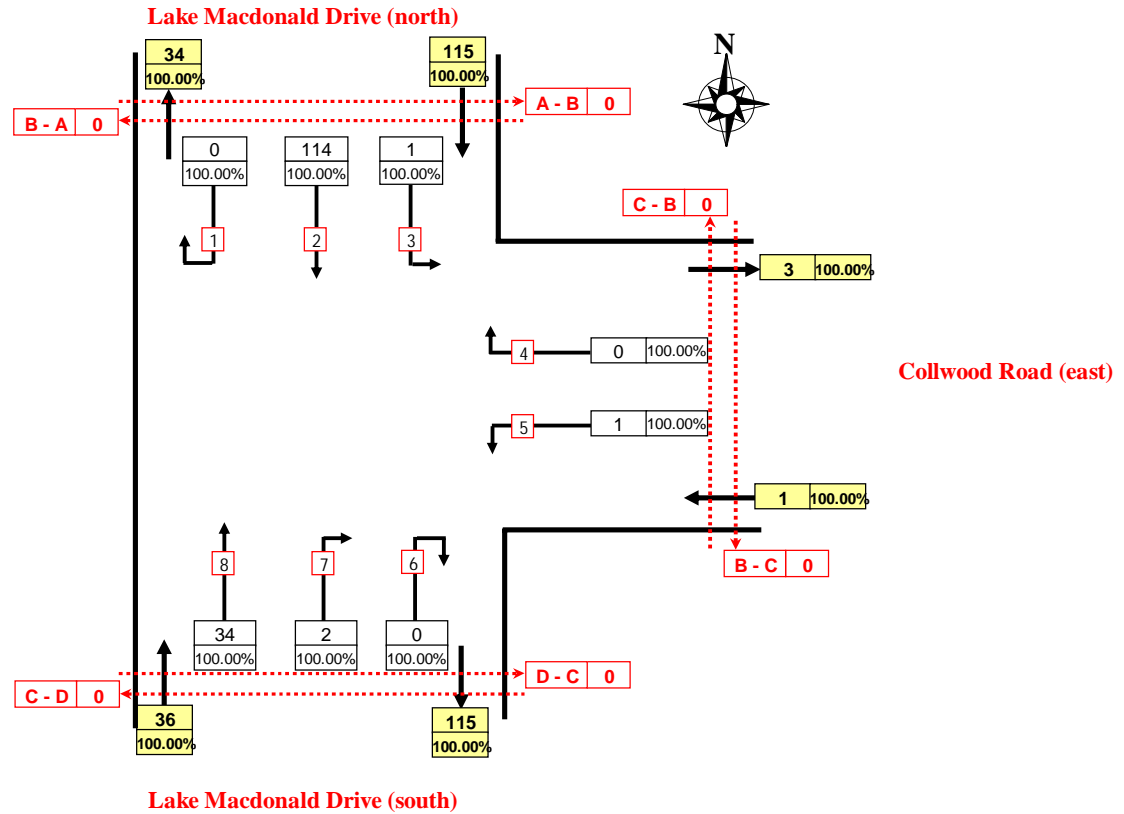
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 5:00 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

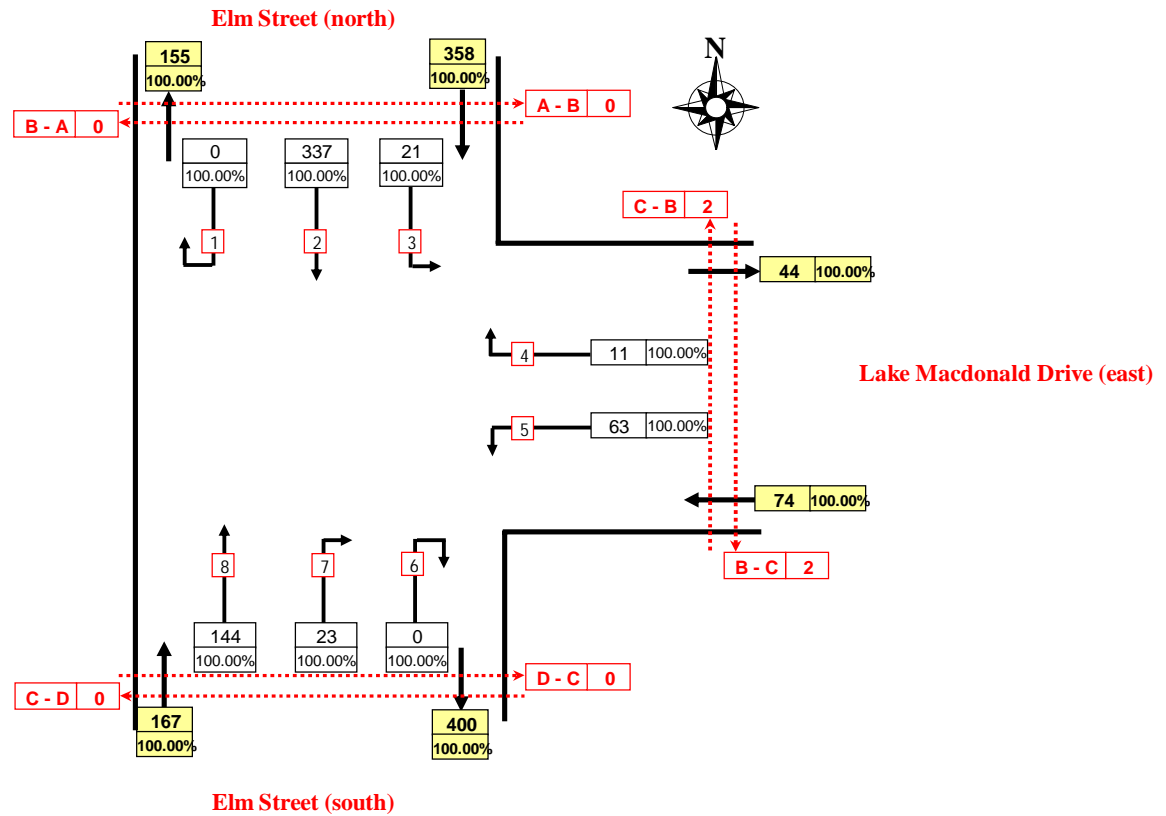
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

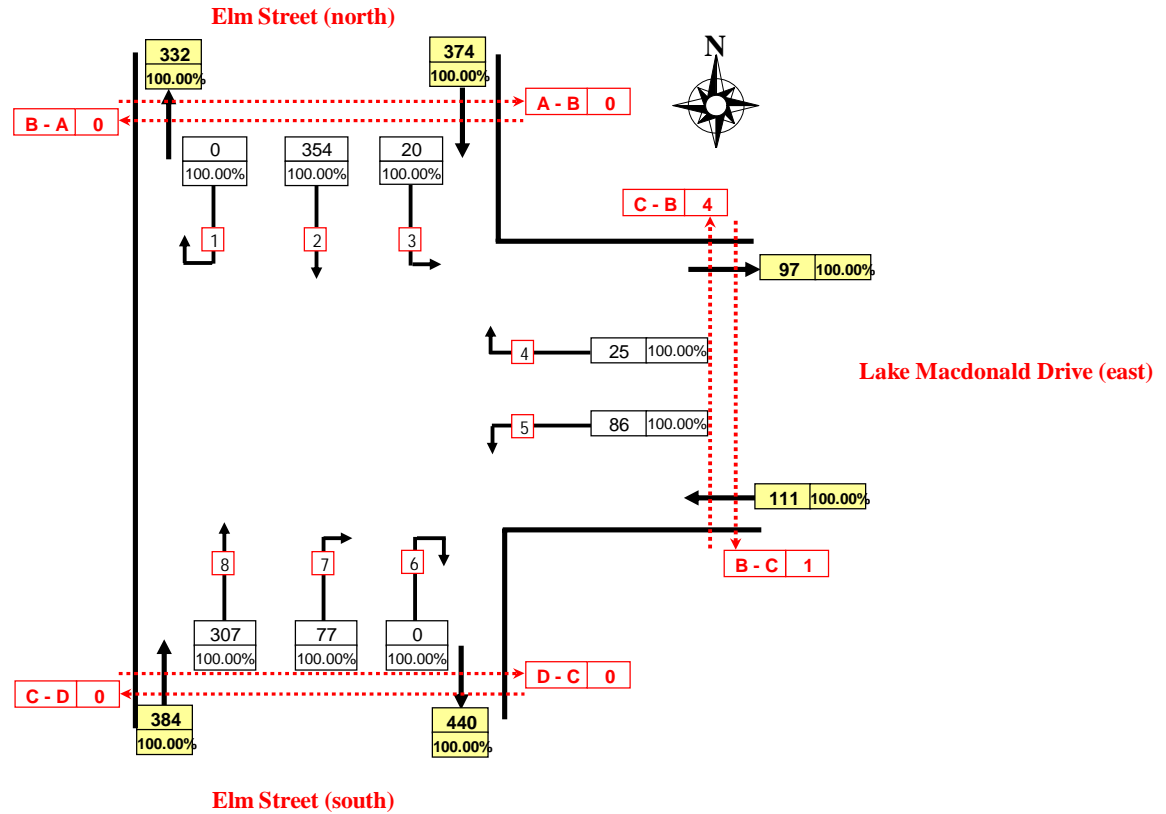
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

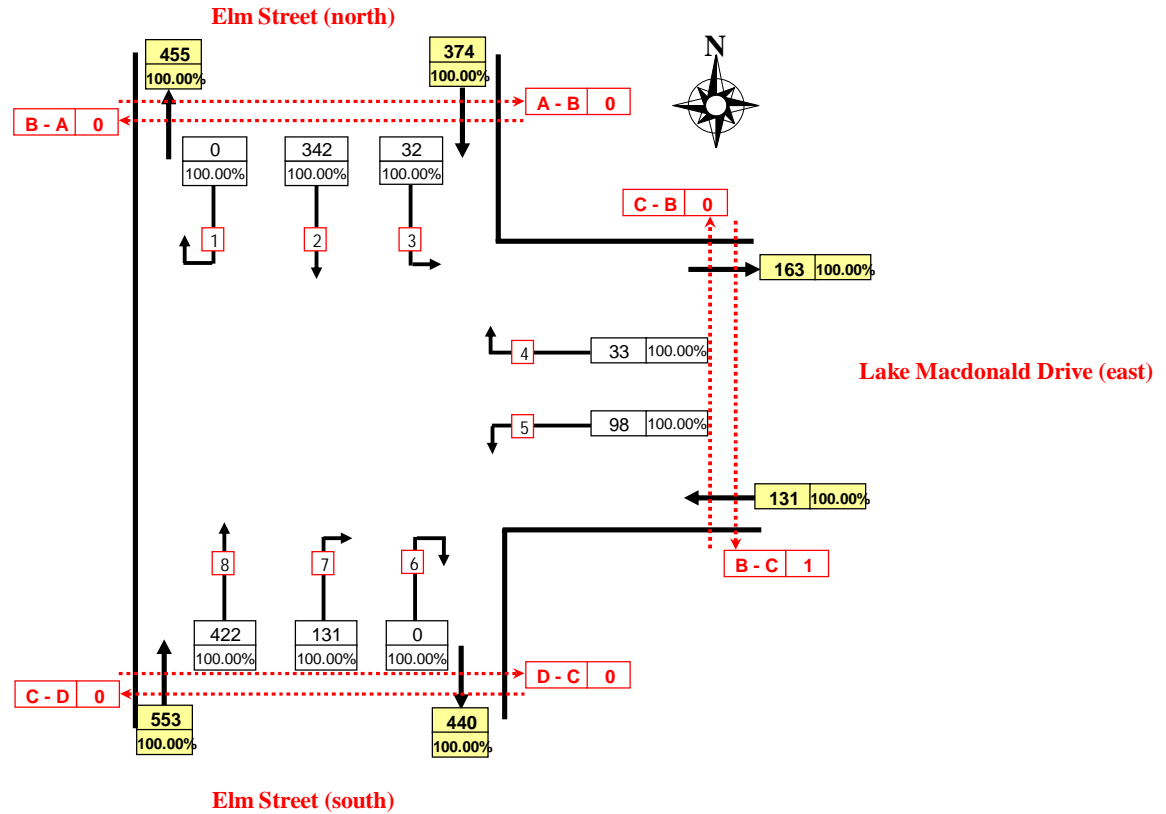
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

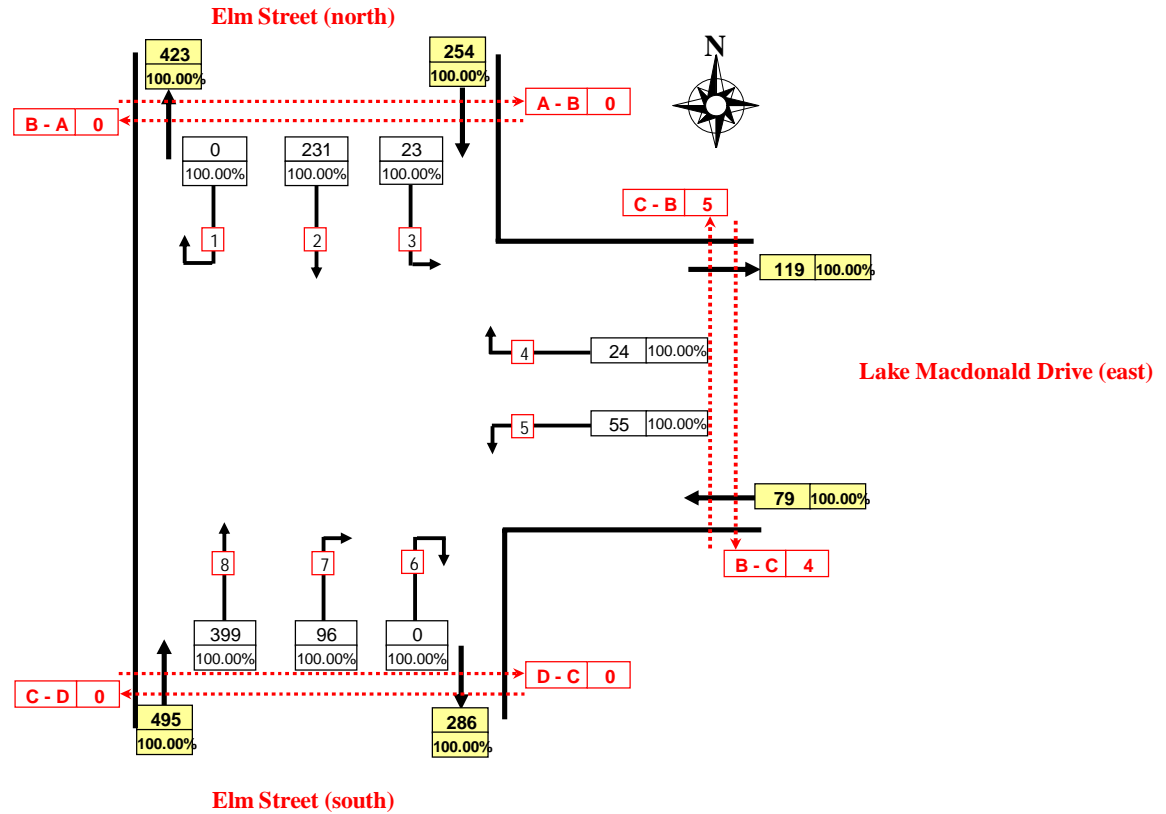
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

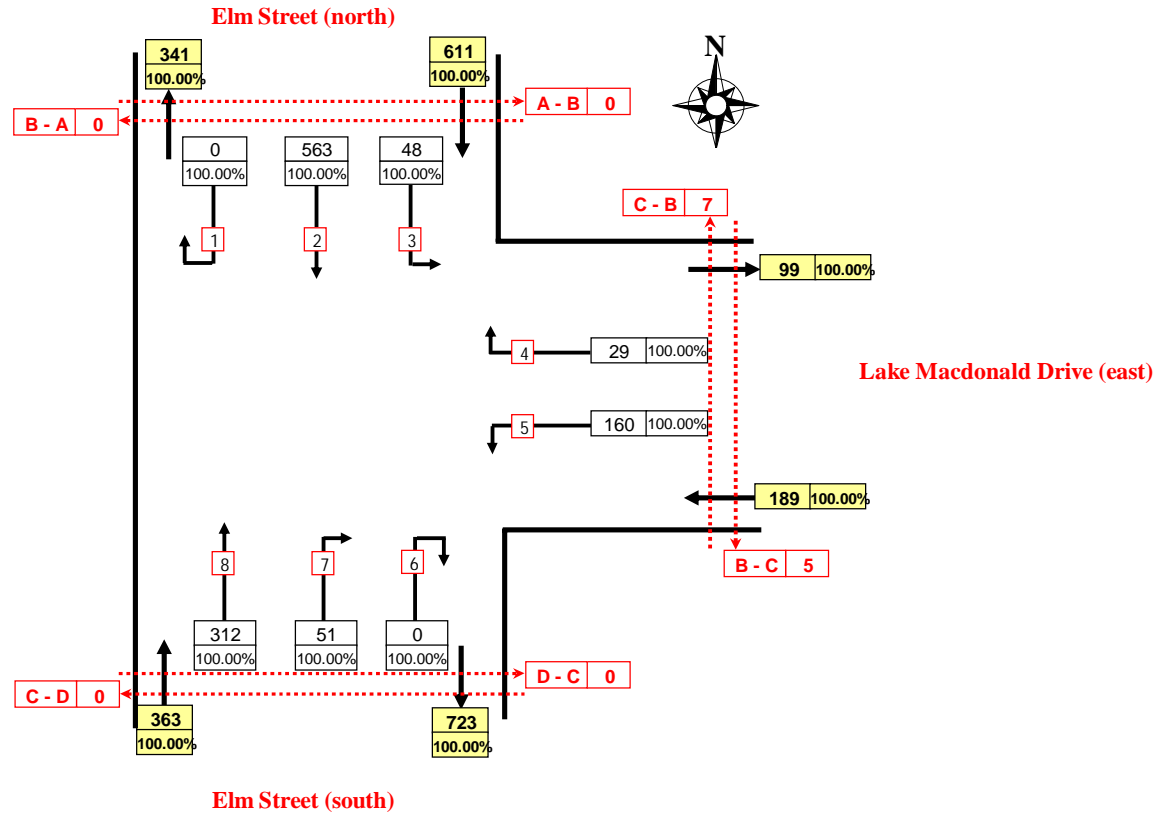
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 1 Weather: Fine

Location: Elm Street/Lake Macdonald Drive, Cooroy

Day/Date: Tuesday, 12 September 2023

Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM

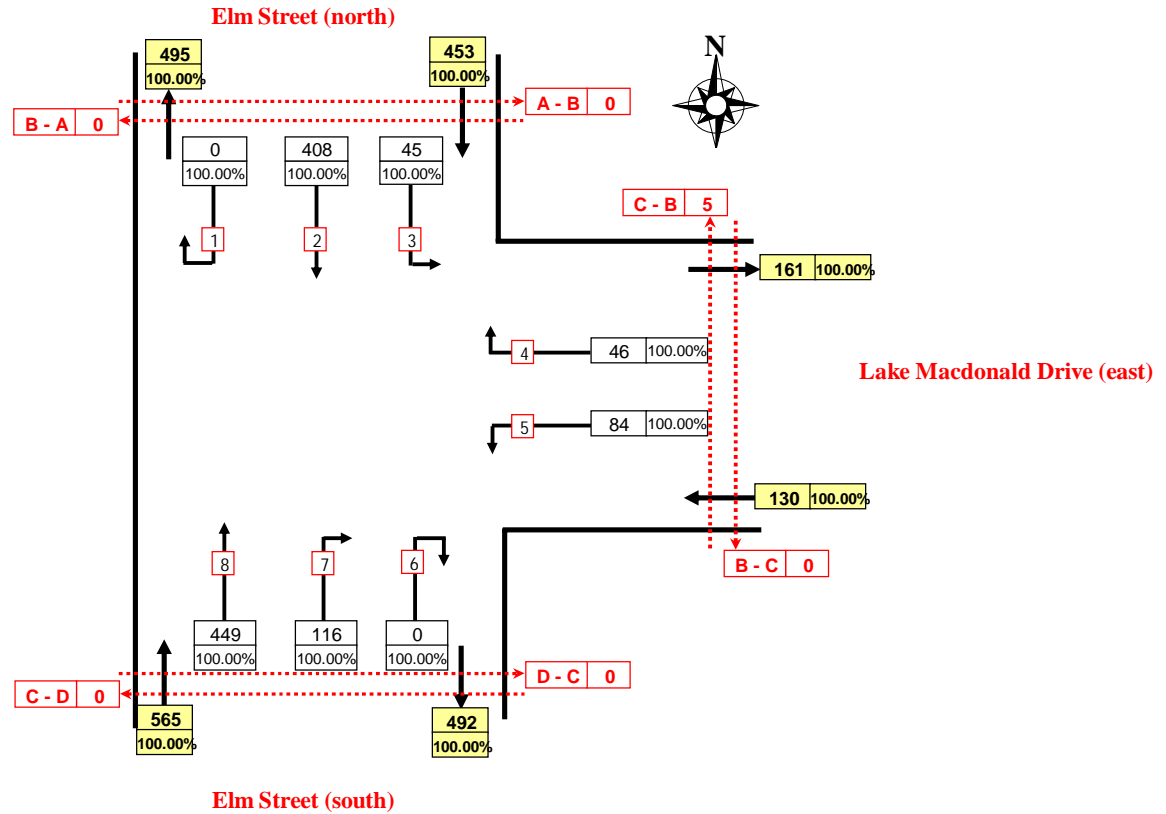
AM Peak : Hour ending - 8:30 AM

PM Peak : Hour ending - 3:45 PM

Hour Ending:

On-road classification:

Off-road classification:



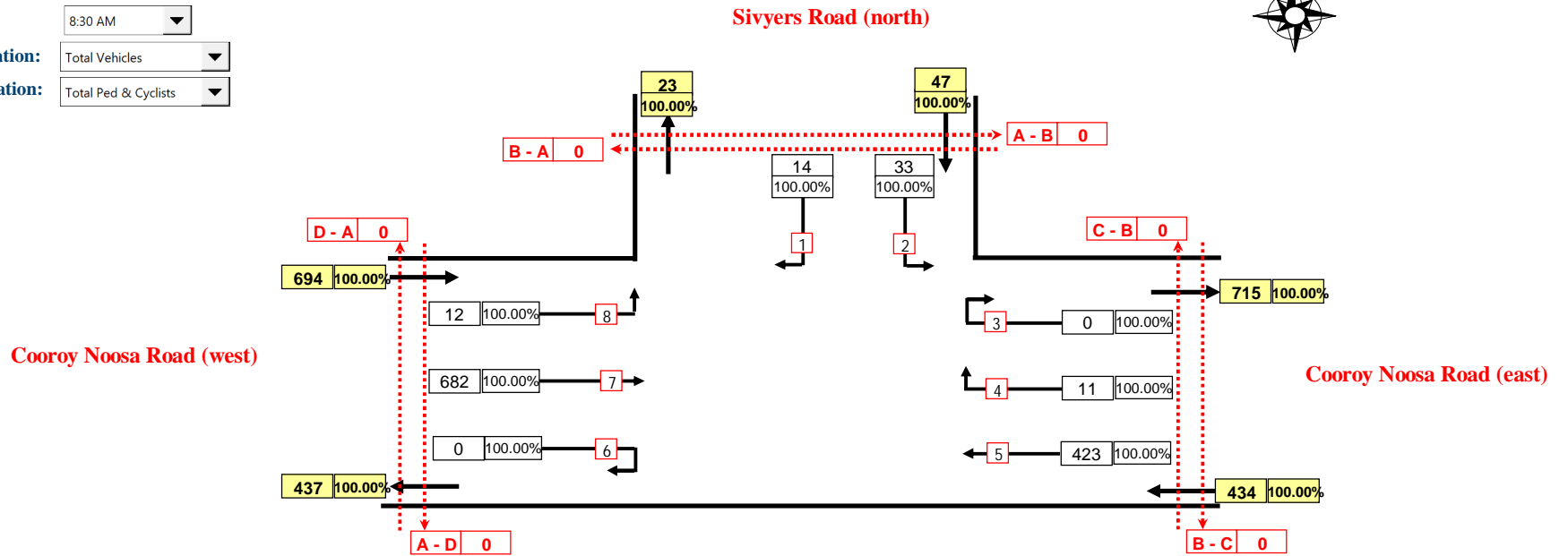
Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT



Site No.: 3 **Weather:** Fine
Location: Cooroy Noosa Road/Sivyers Road, Lake Macdonald (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:30 AM
 PM Peak : Hour ending - 3:45 PM

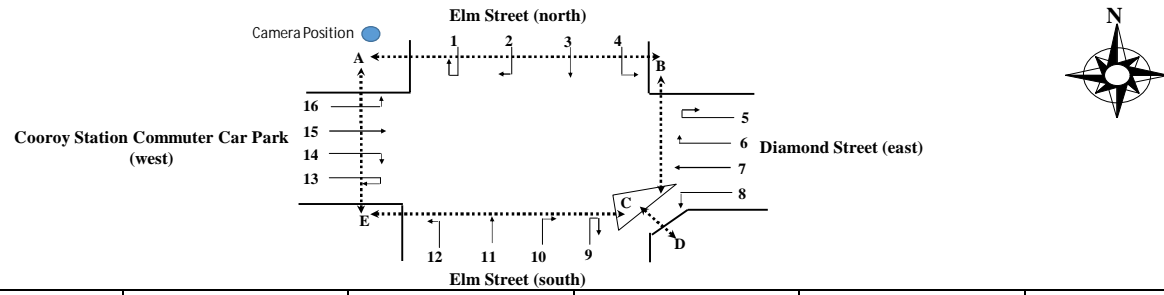
Hour Ending:
On-road classification:
Off-road classification:



Note: = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 Weather: Fine
 Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
 Day/Date: Friday, 25 October 2024
 AM Peak: Hour ending - 8:45 AM
 PM Peak: Hour ending - 3:30 PM



TIME (1/4 hr end)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8			
	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists	Light Vehicles	Heavy Vehicles	Total	Cyclists				
6:15 AM	0	0	0	0	1	0	1	0	33	1	34	0	46	3	49	0	0	0	0	10	1	11	0	0	34	2	36	0				
6:30 AM	0	0	0	0	2	0	2	0	49	2	51	0	48	2	50	0	0	0	13	1	14	0	1	33	6	39	0					
6:45 AM	0	0	0	0	2	0	2	0	65	1	66	1	57	2	59	0	0	0	17	3	20	0	0	50	4	54	4					
7:00 AM	0	0	0	0	0	0	0	80	7	87	0	52	1	53	0	0	0	12	1	13	0	0	48	8	56	0						
7:15 AM	0	0	0	0	0	0	0	92	2	94	0	66	2	68	0	0	0	9	0	9	0	0	61	2	63	0						
7:30 AM	0	0	0	0	0	0	0	76	5	81	0	84	4	88	3	0	0	20	0	20	2	0	52	2	54	0						
7:45 AM	0	0	0	0	0	0	0	73	6	79	0	72	2	74	0	0	0	9	1	10	0	0	67	5	72	0						
8:00 AM	0	1	1	0	0	0	0	116	6	122	0	75	4	79	1	0	0	11	2	13	0	1	61	2	63	1						
8:15 AM	0	0	0	0	0	0	0	120	12	132	0	65	2	67	0	0	0	10	2	12	0	0	69	2	71	1						
8:30 AM	0	0	0	0	0	0	0	151	7	158	0	77	1	78	0	0	0	9	0	9	0	0	105	9	114	0						
8:45 AM	0	0	0	0	0	0	0	128	4	132	0	82	1	83	0	0	0	12	0	12	0	2	92	1	93	0						
9:00 AM	0	0	0	0	0	0	0	95	4	99	0	52	1	53	0	0	0	14	0	14	0	0	74	4	78	1						
9:15 AM	0	0	0	0	1	0	1	92	1	93	1	54	1	55	0	0	0	12	1	13	0	1	65	8	73	0						
9:30 AM	1	0	1	0	0	0	0	79	2	81	1	69	1	70	0	1	0	19	1	20	0	0	91	2	93	0						
9:45 AM	0	0	0	0	0	0	0	91	4	95	0	67	4	71	1	0	0	21	2	23	0	0	68	4	72	0						
10:00 AM	0	0	0	0	0	0	0	90	5	95	0	51	0	51	0	0	0	21	1	22	0	0	76	2	78	0						
10:15 AM	1	0	1	0	0	0	0	84	3	87	0	76	2	78	0	1	0	20	0	20	1	0	79	1	80	1						
10:30 AM	0	0	0	0	0	0	0	85	5	90	1	48	2	50	1	0	0	34	1	35	0	0	75	0	75	0						
10:45 AM	0	0	0	0	0	0	0	71	4	75	1	46	5	51	0	0	0	20	2	22	0	0	79	8	87	0						
11:00 AM	0	0	0	0	0	0	0	87	3	90	1	52	3	55	0	0	0	30	0	30	0	0	68	4	72	0						
11:15 AM	0	0	0	0	0	0	0	75	2	77	0	50	6	56	0	1	0	26	2	28	0	0	61	4	65	0						
11:30 AM	0	0	0	0	0	0	0	68	3	71	0	55	2	57	0	0	0	27	1	28	0	0	69	6	75	0						
11:45 AM	0	0	0	0	0	0	0	83	4	87	0	46	2	48	0	0	0	26	2	28	0	0	77	1	78	0						
12:00 PM	0	0	0	0	0	0	1	69	1	70	1	60	2	62	0	0	0	23	2	25	0	1	80	2	82	0						
12:15 PM	0	0	0	0	0	0	0	69	4	73	0	53	2	55	0	0	0	33	2	35	0	0	82	2	84	0						
12:30 PM	0	0	0	0	1	0	1	61	3	64	0	45	1	46	0	0	0	34	1	35	0	2	69	3	72	0						
12:45 PM	0	0	0	0	0	0	0	62	2	64	0	55	0	55	0	0	0	36	0	36	0	0	66	8	74	0						
1:00 PM	0	0	0	0	0	0	0	58	2	60	0	43	3	46	0	2	0	32	0	32	0	0	66	6	72	0						
1:15 PM	0	0	0	0	0	0	0	71	3	74	0	45	1	46	0	0	0	31	1	32	0	1	64	3	67	0						
1:30 PM	0	0	0	0	0	0	0	68	1	69	0	41	0	41	0	0	0	30	3	33	0	0	69	3	72	0						
1:45 PM	0	0	0	0	0	0	0	66	3	69	0	44	1	45	0	0	0	25	0	25	0	2	80	5	85	0						
2:00 PM	0	0	0	0	2	0	2	74	3	77	0	53	2	55	0	0	0	32	0	32	0	0	82	1	83	0						
2:15 PM	0	0	0	0	0	0	0	79	5	84	0	41	2	43	0	0	0	29	1	30	0	1	82	3	85	0						
2:30 PM	0	0	0	0	0	0	0	70	1	71	0	44	1	45	0	0	0	40	2	42	0	0	70	2	72	0						
2:45 PM	0	0	0	0	0	0	0	76	2	78	0	45	0	45	0	0	0	31	1	32	0	0	88	7	95	0						
3:00 PM	0	2	2	0	0	0	0	92	6	98	0	45	2	47	0	0	0	27	1	28	0	0	111	7	118	0						
3:15 PM	0	2	2	0	0	0	0	146	6	152	1	82	3	85	0	0	0	10	1	11	0	0	104	3	107	0						
3:30 PM	0	0	0	0	1	0	1	88	2	90	0	56	3	59	0	0	0	26	0	26	0	0	97	3	100	0						
3:45 PM	1	0	1	0	0	0	0	69	0	69	0	47	1	48	0	0	0	30	1	31	0	0	72	6	78	0						
4:00 PM	0	0	0	0	1	0	1	62	2	64	0	39	4	43	0	0	0	22	1	23	0	0	77	3	80	1						
4:15 PM	0	0	0	0	0	0	0	80	3	83	0	55	0	55	0	0	0	20	1	21	0	1	70	0	70	0						
4:30 PM	0	0	0	0	1	0	1	75	0	75	0	35	2	37	0	0	0	28	0	28	0	1	58	1	59	0						
4:45 PM	0	0	0	0	0	0	0	74	1	75	0	54	4	58	0	0	0	25	0	25	0	0	69	3	72	0						
5:00 PM	0	0	0	0	0	0	0	66	2	68	0	39	0	39	0	0	0	31	0	31	0	0	79	0	79	0						
5:15 PM	0	0	0	0	1	0	1	65	1	66	0	32	2	34	0	0	0	27	2	29	0	0	68	0	68	0						
5:30 PM	0	0	0	0	2	0	2	62	1	63	0	36	1	37	0	0	0	32	1	33	0	0	72	1	73	0						
5:45 PM	0	0	0	0	0	0	0	56	2	58	1	41	2	43	0	0	0	30	2	32	0	1	71	0	71	0						
6:00 PM	0	0	0	0	0	0	0	48	0	48	0	32	0	32	0	0	0	31	0	31	0	0	58	1	59	0						
12 hr Total	3	5	8	0	15	0	2	3789	149	3938	9	2552	92	2644	6	5	0	5	0	1117	47	1164	3	15	0	3458	160	3618	9			
AM Peak	0	1	1	0	0	0	0	515	29	544	0	299	8	307	1	0	0	0	42	4	46	0	3	0	0	327	14	341	2			
PM Peak	0	4	4	0	1	0	0	402	16	418	1	228	8	236	0	0	0	0	94	3	97	0	0	0	0	400	20	420	0			

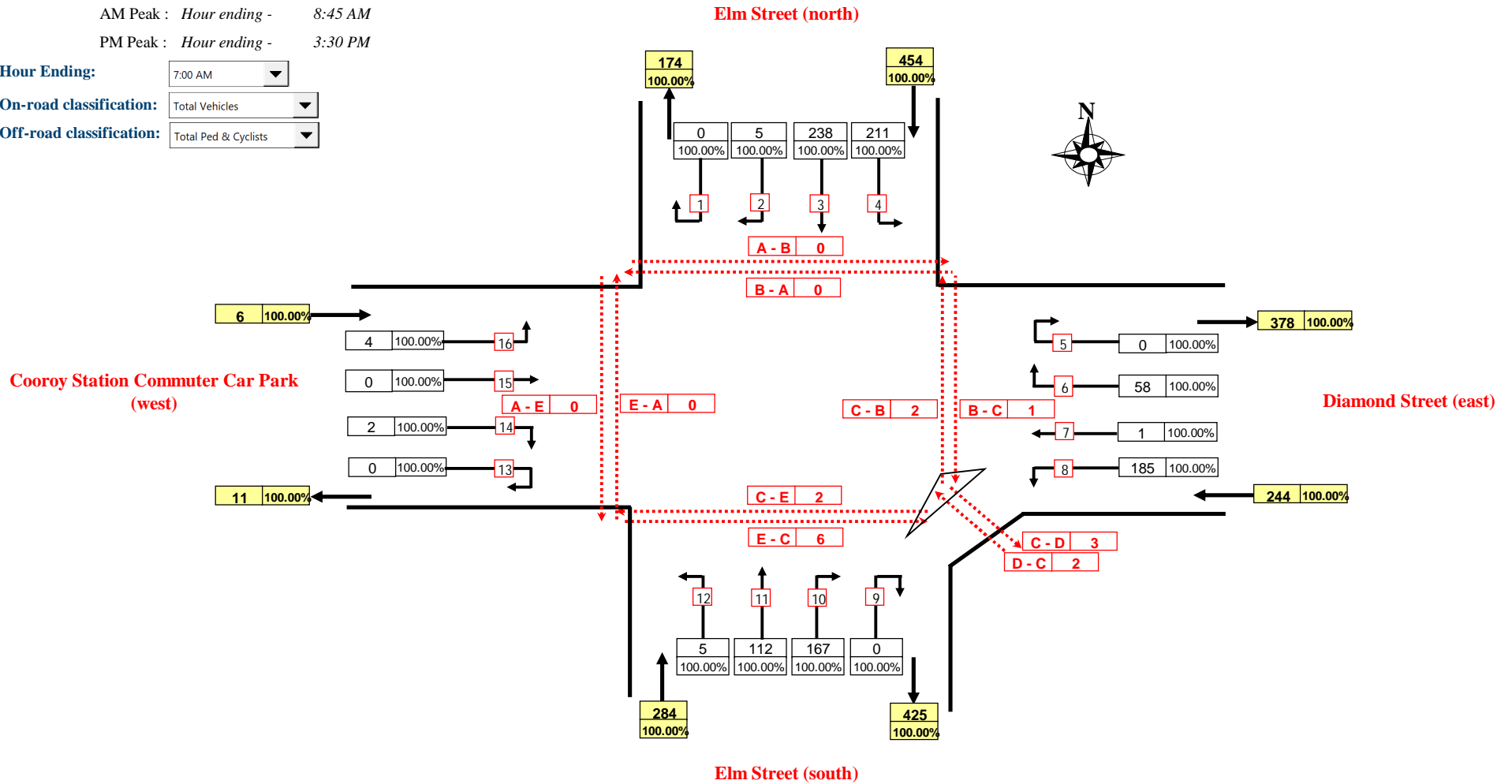
AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

Hour Ending: 7:00 AM

On-road classification: Total Vehicles

Off-road classification: Total Ped & Cyclists



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

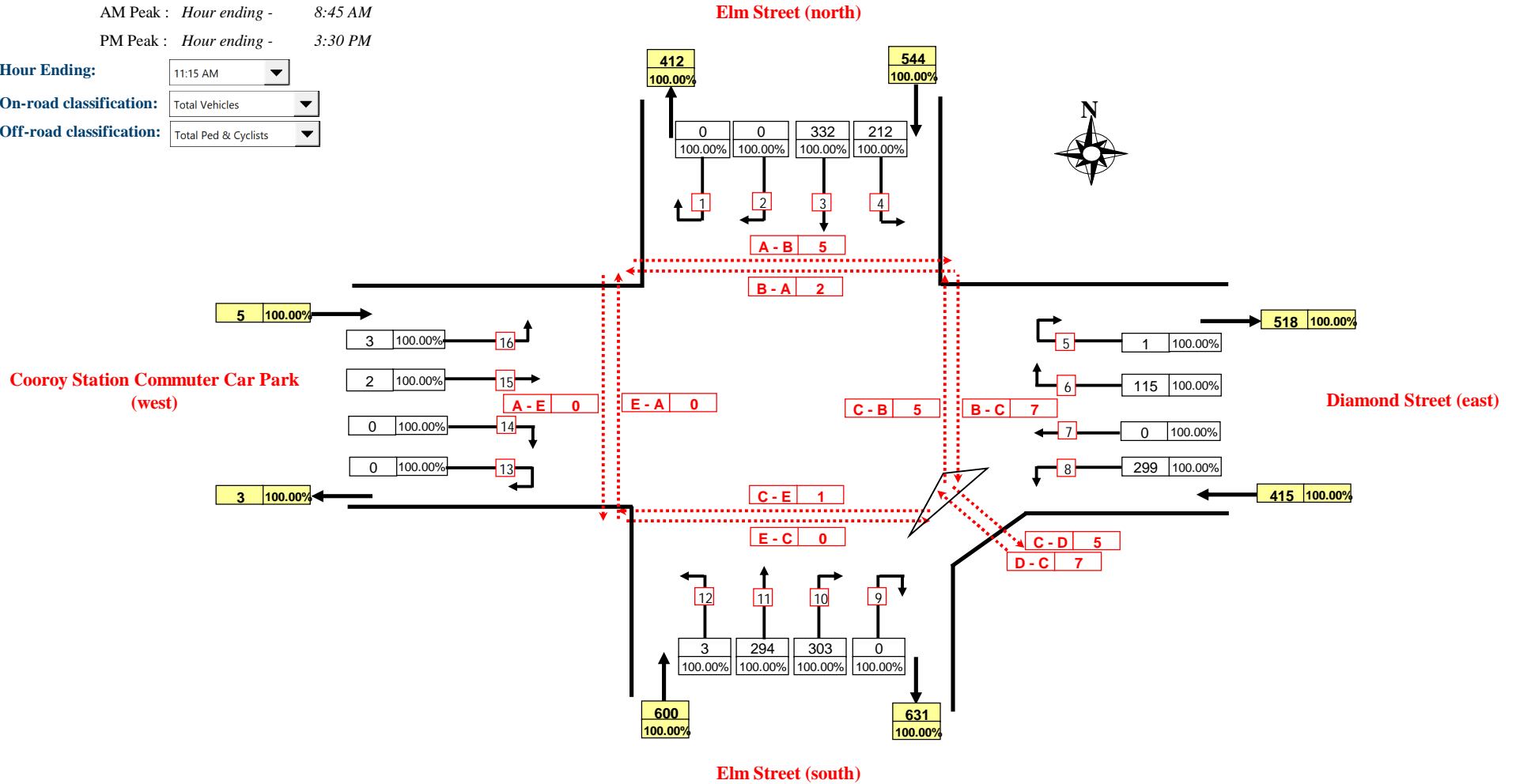
AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

Hour Ending: 11:15 AM

On-road classification: Total Vehicles

Off-road classification: Total Ped & Cyclists



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

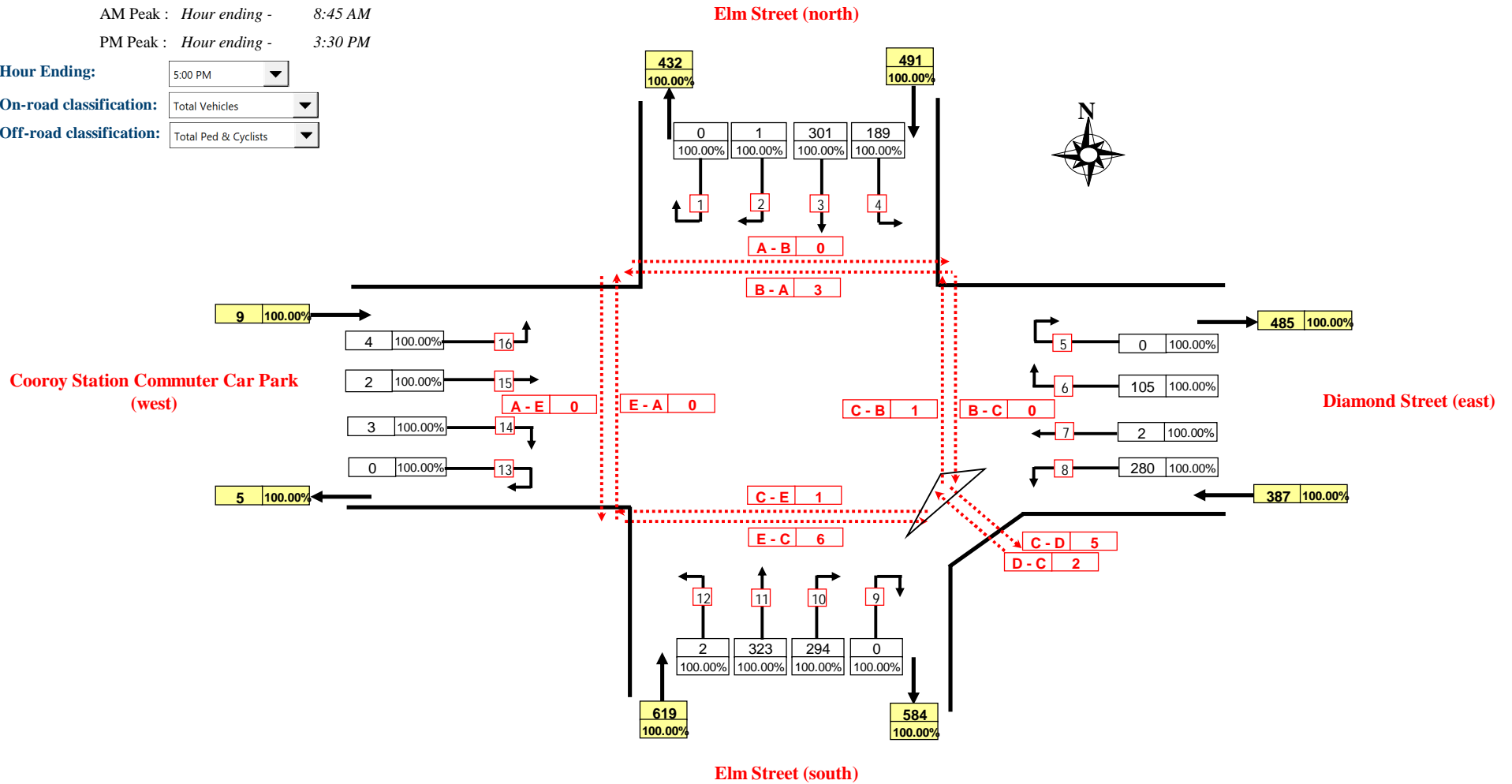
AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

Hour Ending: 5:00 PM

On-road classification: Total Vehicles

Off-road classification: Total Ped & Cyclists

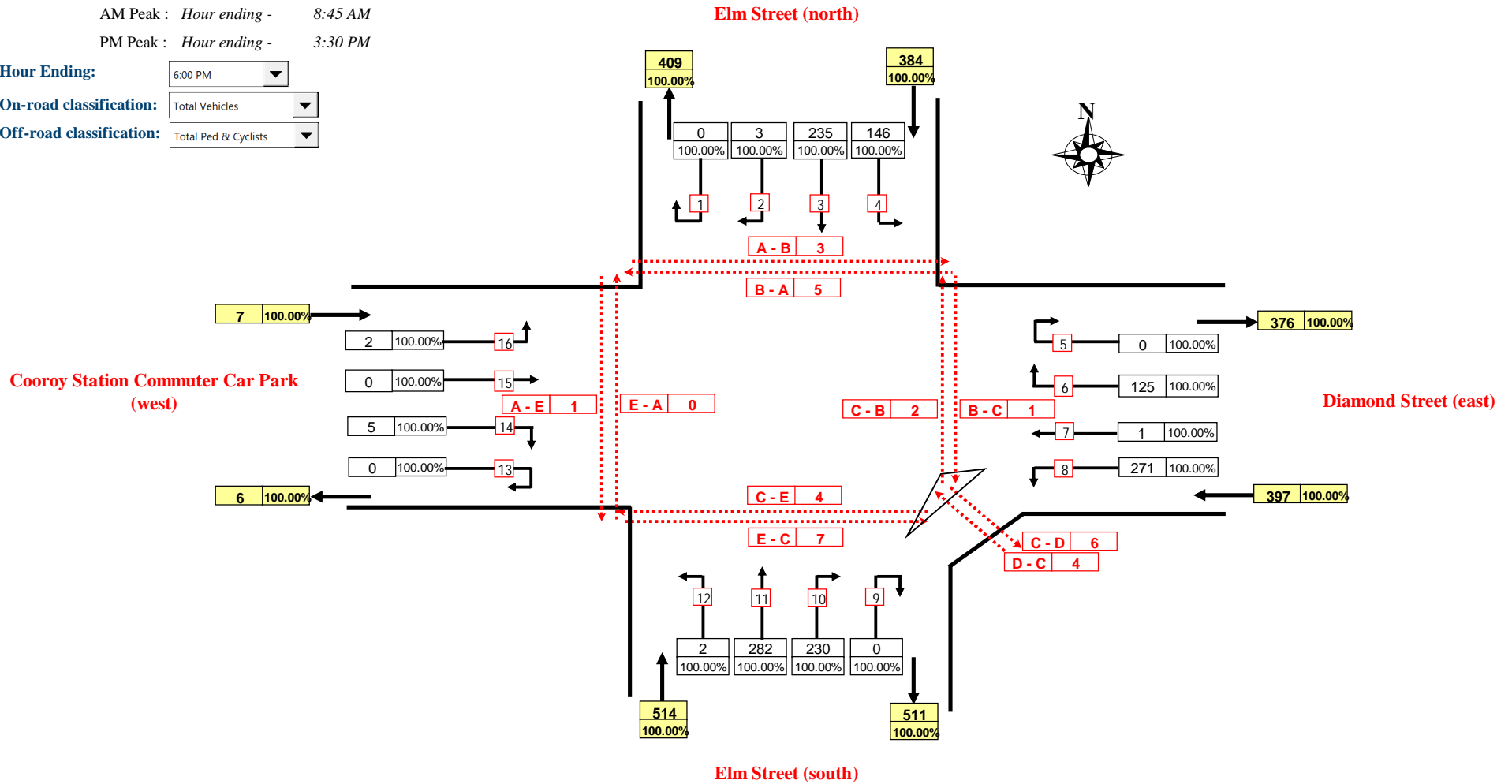


Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

Hour Ending: 6:00 PM
On-road classification: Total Vehicles
Off-road classification: Total Ped & Cyclists



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

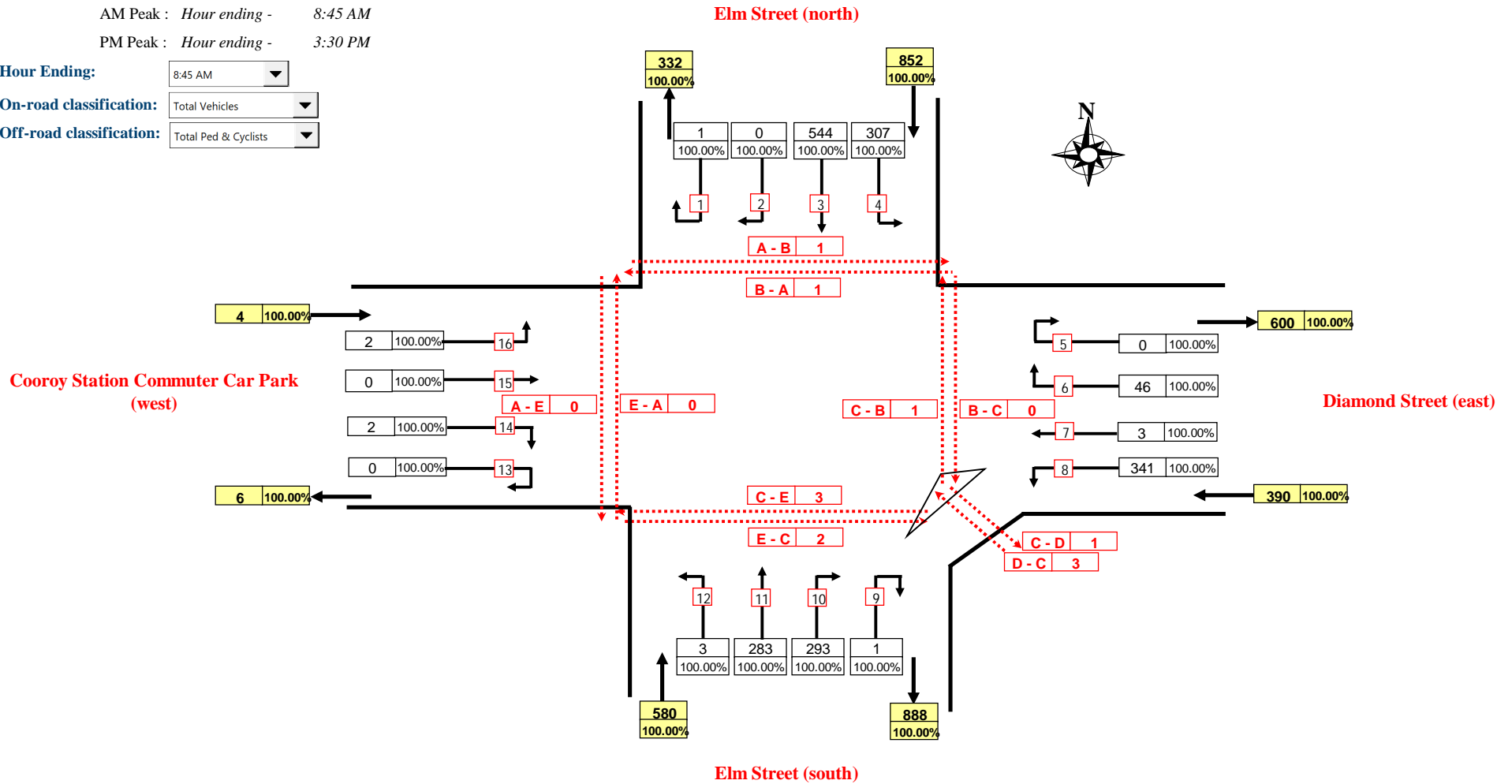
AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

Hour Ending: 8:45 AM

On-road classification: Total Vehicles

Off-road classification: Total Ped & Cyclists

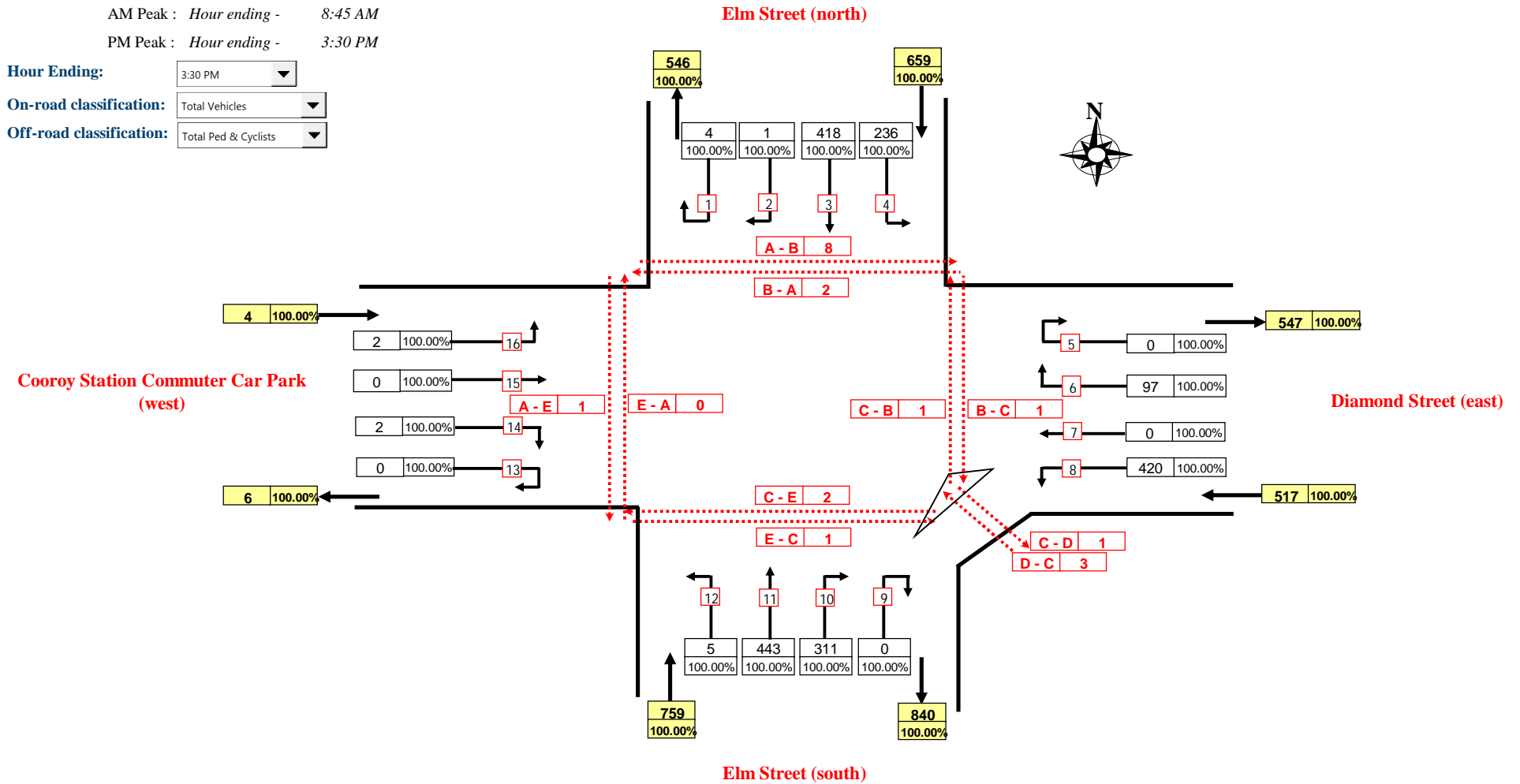


Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

AUSTRAFFIC VIDEO INTERSECTION COUNT

Site No.: 1 **Weather:** Fine
Location: Elm Street/Diamond Street, Lake Macdonlad (Sunshine Coast)
Day/Date: Friday, 25 October 2024
Summary: 12 Hour Volumes : 6:00 AM to 6:00 PM
 AM Peak : Hour ending - 8:45 AM
 PM Peak : Hour ending - 3:30 PM

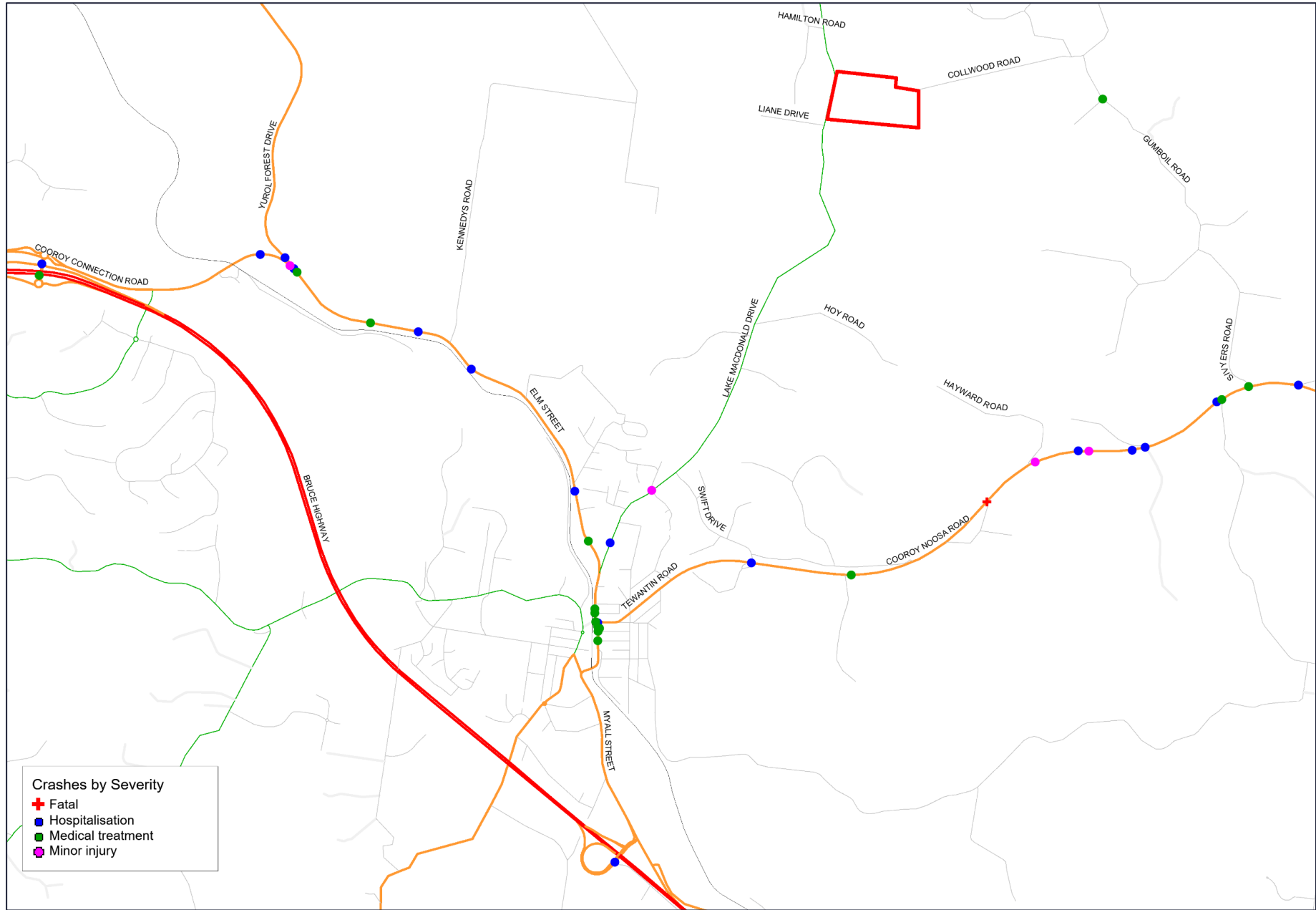
Hour Ending: 3:30 PM
On-road classification: Total Vehicles
Off-road classification: Total Ped & Cyclists



Note: 3.28% = proportion of selected vehicle classification as a percentage of total vehicles

Appendix B

Crash Details and Summary Tables



Crash Severity / Crash Conditions

Severity	Atmospheric Condition		No. of Crashes
	Clear	Raining	
Fatal	1		1
Hospitalisation	13	3	16
Medical treatment	17	1	18
Minor injury	4		4
Total	35	4	39

Crash Severity / Year

Severity	Crash Year						No. of Crashes
	2018	2019	2020	2021	2022	2023	
Fatal			1				1
Hospitalisation		5	2	1	4	4	16
Medical treatment	1	4	3	3	6	1	18
Minor injury				2	1	1	4
Total	1	9	6	6	11	6	39

Table 7-1: Study Area - Crash Definition for Coding Accidents (DCA) Codes

DCA	Description	Severity				No. of Crashes
		Fatal	Hospitalisation	Medical treatment	Minor injury	
3	Pedn: Far Side Vehicle Hit From Left			1		1
9	Pedn: Hit While Boarding/Alighting			1		1
104	Vehs Adjacent Approach: Thru-Right		1	1		2
201	Vehs Opposite Approach: Head On	1	4	1		6
202	Vehs Opposite Approach: Thru-Right		1	1	1	3
300	Vehs Same Direction: Other		1			1
301	Vehs Same Direction: Rear End			1	2	3
302	Vehs Same Direction: Left Rear		1	2		3
303	Vehs Same Direction: Right Rear			4		4
308	Vehs Same Direction: Right Turn S/Swipe			1		1
408	Vehs Manoeuvring: Entering From Footway			1		2
506	Vehs Overtaking: Overtake-Right Turn		1	1		2
701	Off Path-Straight: Left Off Cway				1	1
703	Off Path-Straight: Left Off Cway Hit Obj		1			1
705	Off Path-Straight: Out Of Control On Cway		1			1
803	Off Path-Curve: Off Cway Rt Bend Hit Obj		1	2		3
804	Off Path-Curve: Off Cway Lt Bend Hit Obj		2	1		3

DCA	Description	Severity				No. of Crashes
		Fatal	Hospitalisation	Medical treatment	Minor injury	
806	Vehicle Left-Turning At I/S (Or Driveway)		1			1
Total		1	16	18	4	39

Appendix C

John Holland Construction Program

DD/20240731 LMDIP-001 - CPA Programme For Approval Rev D Inc Design and Approvals

Activity ID	Activity Name	Original Duration	Start	Finish	CPABL Start	CPABL Finish	Variance Between CPA BL Finish	Total Float	Physical % Complete	2025																																				2026												2027												2028												2029																																															
										J				A				S				O				N				D				J				F				M				A				M				J				J				A				S				O				N				D				J				F				M				A				M				J				J				A				S				O				N				D			
										6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																																																															
ST3-C2-MP-5040	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Makeup - Cure - Pour 1	2	05-Aug-27	06-Aug-27	22-Aug-26	23-Aug-26	-348	290	0%																																																																																																																								
ST3-C2-MP-5080	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Makeup - Pour - Pour 2	1	05-Aug-27	05-Aug-27	24-Aug-26	24-Aug-26	-215	171	0%																																																																																																																								
ST3-C2-MP-5100	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Makeup - Cure - Pour 2	2	06-Aug-27	07-Aug-27	25-Aug-26	26-Aug-26	-346	290	0%																																																																																																																								
Mass Pours																																																																																														18	05-Aug-27	09-Sep-27	24-Aug-26	24-Sep-26	-151	117																													
Lift 1 - Pours 1 to 2																																																																																														6	05-Aug-27	18-Aug-27	24-Aug-26	30-Aug-26	-154	120																													
ST3-C2-MA-6000	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 1	3	05-Aug-27	12-Aug-27	24-Aug-26	26-Aug-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6060	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 2	3	06-Aug-27	13-Aug-27	25-Aug-26	27-Aug-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6020	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 1	1	13-Aug-27	13-Aug-27	27-Aug-26	27-Aug-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6040	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 1	2	14-Aug-27	15-Aug-27	28-Aug-26	29-Aug-26	-351	288	0%																																																																																																																								
ST3-C2-MA-6080	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 2	1	16-Aug-27	16-Aug-27	28-Aug-26	28-Aug-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6100	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 2	2	17-Aug-27	18-Aug-27	29-Aug-26	30-Aug-26	-353	286	0%																																																																																																																								
Lift 2 - Pours 3 to 4										4	16-Aug-27	22-Aug-27	28-Aug-26	05-Sep-26	-151	121																																																																																																																	
ST3-C2-MA-6120	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 3	3	16-Aug-27	18-Aug-27	28-Aug-26	01-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6180	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 4	3	17-Aug-27	19-Aug-27	31-Aug-26	02-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6140	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 3	1	19-Aug-27	19-Aug-27	02-Sep-26	02-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6200	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 4	1	20-Aug-27	20-Aug-27	03-Sep-26	03-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6160	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 3	2	20-Aug-27	21-Aug-27	03-Sep-26	04-Sep-26	-351	288	0%																																																																																																																								
ST3-C2-MA-6220	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 4	2	21-Aug-27	22-Aug-27	04-Sep-26	05-Sep-26	-351	288	0%																																																																																																																								
Lift 3 - Pours 5 to 6										4	20-Aug-27	28-Aug-27	03-Sep-26	12-Sep-26	-151	120																																																																																																																	
ST3-C2-MA-6240	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 5	3	20-Aug-27	24-Aug-27	03-Sep-26	08-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6300	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 6	3	23-Aug-27	25-Aug-27	04-Sep-26	09-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6260	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 5	1	25-Aug-27	25-Aug-27	09-Sep-26	09-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6320	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 6	1	26-Aug-27	26-Aug-27	10-Sep-26	10-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6280	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 5	2	26-Aug-27	27-Aug-27	10-Sep-26	11-Sep-26	-350	286	0%																																																																																																																								
ST3-C2-MA-6340	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 6	2	27-Aug-27	28-Aug-27	11-Sep-26	12-Sep-26	-350	288	0%																																																																																																																								
Lift 4 - Pours 7 to 8										5	26-Aug-27	03-Sep-27	10-Sep-26	18-Sep-26	-151	119																																																																																																																	
ST3-C2-MA-6360	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 7	3	26-Aug-27	30-Aug-27	10-Sep-26	14-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6420	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 8	3	27-Aug-27	31-Aug-27	11-Sep-26	15-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6380	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 7	1	31-Aug-27	31-Aug-27	15-Sep-26	15-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6440	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 8	1	01-Sep-27	01-Sep-27	16-Sep-26	16-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6400	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 7	2	01-Sep-27	02-Sep-27	16-Sep-26	17-Sep-26	-350	287	0%																																																																																																																								
ST3-C2-MA-6460	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 8	2	02-Sep-27	03-Sep-27	17-Sep-26	18-Sep-26	-350	286	0%																																																																																																																								
Lift 5 - Pours 9 to 10										5	01-Sep-27	09-Sep-27	16-Sep-26	24-Sep-26	-151	117																																																																																																																	
ST3-C2-MA-6480	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 9	3	01-Sep-27	03-Sep-27	16-Sep-26	18-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6540	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Form & Prep - Pour 10	3	02-Sep-27	06-Sep-27	17-Sep-26	21-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6500	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 9	1	06-Sep-27	06-Sep-27	21-Sep-26	21-Sep-26	-215	172	0%																																																																																																																								
ST3-C2-MA-6560	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Pour - Pour 10	1	07-Sep-27	07-Sep-27	22-Sep-26	22-Sep-26	-215	171	0%																																																																																																																								
ST3-C2-MA-6520	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 9	2	07-Sep-27	08-Sep-27	22-Sep-26	23-Sep-26	-350	284	0%																																																																																																																								
ST3-C2-MA-6580	Cell Construct- LH Spillway - Mass Conc - Cell 2 - Mass - Cure - Pour 10	2	08-Sep-27	09-Sep-27	23-Sep-26	24-Sep-26	-350	283	0%																																																																																																																								
Cell 4 - Righthand Spillway										165	21-Jan-27	06-Feb-28	05-Feb-26	18-Feb-27	-154	37																																																																																																																	
Piling										83	21-Jan-27	03-Jun-27	05-Feb-26	16-Jun-26	-216	34																																																																																																																	
ST3-C4-1000	Cell Construct- RH Spillway - Cell 4 - Piling - SebutPiling Template & Mobilise Rig	6	21-Jan-27	01-Feb-27	05-Feb-26	12-Feb-26	-216	34	0%																																																																																																																								
ST3-C4-1020	Cell Construct- RH Spillway - Cell 4 - Piling - FRP Guidewall	7	22-Jan-27	03-Feb-27	06-Feb-26	16-Feb-26	-216	34	0%																																																																																																																								
ST3-C4-1040	Cell Construct- RH Spillway - Cell 4 - Piling - Excavate + Pour Piles [1 rig between soft/hard 6&6]	75	04-Feb-27	03-Jun-27	17-Feb-26	16-Jun-26	-216	34	0%																																																																																																																								
Excavate + Capping Beam										80	04-Jun-27	12-Nov-27	17-Jun-26	24-Nov-26	-153	35																																																																																																																	
ST3-C4-3140	Cell Construct- RH Spillway - Cell 4 - Excav - Local	15	04-Jun-27	25-Jun-27	17-Jun-26	08-Jul-26	-216	57	0%																																																																																																																								
ST3-C4-3100	Cell Construct- RH Spillway - Cell 4 - Excav - Breakback Secant Piles	15	08-Jun-27	29-Jun-27	19-Jun-26	10-Jul-26	-216	57	0%																																																																																																																								
ST3-C4-3080	Cell Construct- RH Spillway - Cell 4 - Concrete - FRP Capping Beam	15	10-Jun-27	01-Jul-27	23-Jun-26	14-Jul-26	-216	57	0%																																																																																																																								
ST3-C4-3120	Cell Construct- RH Spillway - Cell 4 - Concrete - Cure Capping Beam (14 dy strength gain prior to excav)	14	02-Jul-27	15-Jul-27	15-Jul-26	28-Jul-26	-352	88	0%																																																																																																																								
ST3-C4-3160	Cell Construct- RH Spillway - Cell 4 - Excav - Install Corner Bracing	14	16-Jul-27	05-Aug-27	29-Jul-26	20-Aug-26	-217	55	0%																																																																																																																								
ST3-C4-2000	Cell Construct- RH Spillway - Cell 4 - Excav - Strip Working Platform	2	06-Aug-27	12-Aug-27	21-Aug-26	24-Aug-26	-217	55	0%																																																																																																																								
ST3-C4-3000	Cell Construct- RH Spillway - Cell 4 - Excav - Free Dig Excavation	5	13-Aug-27	19-Aug-27	25-Aug-26	31-Aug-26	-217	55	0%																																																																																																																								
ST3-C4-3200	Cell Construct- RH Spillway - Cell 4 - Excav - Free Dig + Clam Shell Excavation	16	20-Aug-27	10-Sep-27	01-Sep-26	23-Sep-26	-217	55	0%																																																																																																																								
ST3-C4-3180	Cell Construct- RH Spillway - Cell 4 - Excav - Hydro Blast Secant Piles	7	03-Sep-27	13-Sep-27	16-Sep-26	24-Sep-26	-217	55	0%																																																																																																																								
ST3-C4-3020	Cell Construct- RH Spillway - Cell 4 - Excav - Foundation Detail Excavation	36	14-Sep-27	10-Nov-27	25-Sep-26	20-Nov-26	-217	55	0%																																																																																																																								
ST3-C4-3220	Cell Construct- RH Spillway - Cell 4 - Excav - Foundation Preparation	9	27-Oct-27	11-Nov-27	11-Nov-26	23-Nov-26	-217	56	0%																																																																																																																								
ST3-C4-3060	Cell Construct- RH Spillway - Cell 4 - Excav - Inspection + Approval to Commence with Mass Concrete	9	27-Oct-27	11-Nov-27	11-Nov-26	23-Nov-26	-217	55	0%																																																																																																																								
ST3-C4-3040	Cell Construct- RH Spillway - Cell 4 - Concrete - Place Dental Concrete	9	28-Oct-27	12-Nov-27	12-Nov-26	24-Nov-26	-217	55	0%																																																																																																																								
Mass Concrete										30	15-Nov-27	06-Feb-28	25-Nov-26	18-Feb-27	-154	37																																																																																																																	
Cell Preparation										5	15-Nov-27	19-Nov-27	25-Nov-26	01-Dec-26	-217	55																																																																																																																	
ST3-C4-CP-5020	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Install 250 Supercast Water Stop to Joint & Upstream Alignment	5	15-Nov-27	19-Nov-27	25-Nov-26	01-Dec-26	-217	55	0%																																																																																																																								
ST3-C4-CP-5000	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Fix Reo Cage to Upstream Alignment of Cell	3	15-Nov-27	17-Nov-27	25-Nov-26	27-Nov-26	-217	57	0%																																																																																																																								
Makeup Pours										6	22-Nov-27	02-Dec-27	02-Dec-26	12-Dec-26	-154	46																																																																																																																	
ST3-C4-MP-5000	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Makeup - Form & Prep - Pour 1	3	22-Nov-27	24-Nov-27	02-Dec-26	04-Dec-26	-217	55	0%																																																																																																																								
ST3-C4-MP-5060	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Makeup - Form & Prep - Pour 2	3	23-Nov-27	25-Nov-27	03-Dec-26	07-Dec-26	-217	55	0%																																																																																																																								
ST3-C4-MP-5120	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Makeup - Form & Prep - Pour 3	3	24-Nov-27	26-Nov-27	04-Dec-26	08-Dec-26	-217	55	0%																																																																																																																								
ST3-C4-MP-5180	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Makeup - Form & Prep - Pour 4	3	25-Nov-27	29-Nov-27	07-Dec-26	09-Dec-26	-217	55	0%																																																																																																																								
ST3-C4-MP-5020	Cell Construct- RH Spillway - Mass Conc - Cell 4 - Makeup - Pour - Pour 1	1	25-Nov-27	25-Nov-27	07-Dec-26	07-Dec-26	-217	75	0%																																																																																																																								

Date	Revision	Checked	Approved
03-May-24	LMDIP - Progressed DD:03/05/24		
31-Jul-24	LMDIP - Progressed DD:31/07/24		

Rev D including Agreed Changes with Seqwater - Currently Incorporating Design and Approvals Programme

P11383-PST-TOC-P2-5a-8
LMDIP Report Layout
TASK filter: Works to Complete.
18 of 25



Appendix D

John Holland Heavy Vehicle Data

LAKE MACDONALD DAM IMPROVEMENT PROJECT - HV VOLUME STUDY

WORKS	TRUCK TYPE	UNIT	QUANTITY	TOTAL NO OF HV	START DATE	END DATE	MONTHS	NUMBER OF WEEKS	DAYS OF WORK	TOTAL WORK DAYS	DAILY NO OF HV - TWO WAY	START TIME	END TIME	SCHOOL RESTRICTED	DAILY HOURS	HOURLY FLOW (TWO-WAY)	HOURLY FLOW (TWO-WAY) ROUNDED	ROUTE	SITE ACCESS	
GENERAL SITE RUNNING																				
Daily Deliveries - Consumables etc	Rigid Truck 15t	no	2	2	01-Mar-25	22-Nov-29	57.57	246.71	5	1234	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Daily Deliveries - Consumables etc	Semi Trailer	no	1	1	01-Mar-25	22-Nov-29	57.57	246.71	5	1234	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Cooroy Noosa Rd/Elm/LMD	Collwood Rd	
Daily Deliveries - Fuel	Fuel Truck	no	1	1	01-Mar-25	22-Nov-29	57.57	246.71	5	1234	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Daily Deliveries - Fuel	Fuel Truck	no	1	1	01-Mar-25	22-Nov-29	57.57	246.71	5	1234	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Cooroy Noosa Rd/Elm/LMD	Collwood Rd	
PHASE 1 SITE SET UP - EARLY WORKS																				
P&E Mobilisation - TGS	Semi trailer	no	10	10	21-Oct-24	06-Nov-24	0.53	2.29	5	11	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Hardstands and Laydown Areas	Truck and Trailer 30t	t	14,000	467	01-Nov-24	10-Feb-25	3.37	14.43	5	72	14	6:30:00 AM	5:00:00 PM	NO	10.50	1.33	2	Bruce/Elm/LMD	Collwood Rd	
Hardstands and Laydown Areas	Truck and Trailer 30t	t	1,000	34	01-Nov-24	10-Feb-25	3.37	14.43	5	72	2	6:30:00 AM	5:00:00 PM	NO	10.50	0.19	1	Bruce/Elm/LMD	Hardstand 3	
Site Facility Set up and mobilisation -TGS	Semi trailer	no	50	50	19-Nov-24	20-Dec-24	1.03	4.43	5	22	6	6:30:00 AM	5:00:00 PM	YES	7.83	0.77	1	Bruce/Elm/LMD	Collwood Rd	
Haul and Access Roads	Truck and Trailer 30t	t	4,765	159	19-Nov-24	10-Feb-25	2.77	11.86	5	59	6	6:30:00 AM	5:00:00 PM	NO	10.50	0.57	1	Bruce/Elm/LMD	Collwood Rd	
Tree removal subcontractor - TGS	Semi trailer	no	20	20	01-Nov-24	10-Dec-24	1.30	5.57	5	28	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Reservoir lowering - material deliveries - TGS (20M TRAILER)	Semi trailer	no	15	15	10-Dec-24	20-Jan-25	1.37	5.86	5	29	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Reservoir lowering - pipe welding mobilisation - TGS	Semi trailer	no	10	10	05-Dec-24	10-Dec-24	0.17	0.71	5	4	6	6:30:00 AM	5:00:00 PM	YES	7.83	0.77	1	Bruce/Elm/LMD	Collwood Rd	
UPSTREAM COFFERDAM																				
P&E Mobilisation	Semi trailer	no	15	15	01-Mar-25	01-Apr-25	1.03	4.43	5	22	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
P&E Mobilisation	Semi trailer	no	5	5	01-Mar-25	01-Apr-25	1.03	4.43	5	22	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Hardstand 3	
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	50	50	01-Mar-25	01-Apr-25	1.03	4.43	5	22	6	6:30:00 AM	5:00:00 PM	YES	7.83	0.77	1	Bruce/Elm/LMD	Collwood Rd	
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	20	20	01-Mar-25	01-Apr-25	1.03	4.43	5	22	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Hardstand 3	
Rock deliveries	Truck and Trailer 30t	t	48,714	1,624	01-Feb-25	01-Sep-25	7.07	30.29	5	151	22	6:30:00 AM	5:00:00 PM	NO	10.50	2.10	3	Bruce/Elm/LMD	Collwood Rd	
Rock deliveries	Truck and Trailer 30t	t	8,597	287	01-Feb-25	01-Sep-25	7.07	30.29	5	151	4	6:30:00 AM	5:00:00 PM	NO	10.50	0.38	1	Bruce/Elm/LMD	Hardstand 3	
Rock bag deliveries	Truck and Trailer 30t	no	1,477	369	01-May-25	01-Sep-25	4.10	17.57	5	88	10	6:30:00 AM	5:00:00 PM	NO	10.50	0.95	1	Bruce/Elm/LMD	Collwood Rd	
Rock bag deliveries	Truck and Trailer 30t	no	1,477	369	01-May-25	01-Sep-25	4.10	17.57	5	88	10	6:30:00 AM	5:00:00 PM	NO	10.50	0.95	1	Bruce/Elm/LMD	Hardstand 3	
P&E Demobilisation	Semi trailer	no	15	15	27-Sep-25	19-Oct-25	0.73	3.14	5	16	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
P&E Demobilisation	Semi trailer	no	5	5	27-Sep-25	19-Oct-25	0.73	3.14	5	16	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Hardstand 3	
PHASE 2 SITE SET UP																				
P&E Mobilisation	Semi trailer	no	5	5	01-Mar-25	10-Mar-25	0.30	1.29	5	6	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Hardstands and Laydown Areas	Truck and Trailer 30t	t	8,773	293	01-Mar-25	15-Apr-25	1.50	6.43	5	32	20	6:30:00 AM	5:00:00 PM	NO	10.50	1.90	2	Bruce/Elm/LMD	Collwood Rd	
Haul and Access Roads	Truck and Trailer 30t	t	2,000	67	01-Mar-25	15-Apr-25	1.50	6.43	5	32	6	6:30:00 AM	5:00:00 PM	NO	10.50	0.57	1	Bruce/Elm/LMD	Collwood Rd	
Fencing subcontractor	Semi trailer	no	50	50	02-May-25	15-Jun-25	1.47	6.29	5	31	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Batch plant establishment	Semi trailer	no	25	25	24-Jun-25	25-Jul-25	1.03	4.43	5	22	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
P&E Demobilisation	Semi trailer	no	15	15	15-May-25	25-Jul-25	2.37	10.14	5	51	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
U/S AND D/S CUT OFF WALL																				
P&E Mobilisation	Semi trailer	no	3	3	10-Jun-25	22-Jun-25	0.40	1.71	5	9	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Sheetpiling - Subcontractor	Semi trailer	no	25	25	23-Jun-25	02-Sep-25	2.37	10.14	5	51	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
P&E Demobilisation	Semi trailer	no	3	3	02-Sep-25	20-Sep-25	0.60	2.57	5	13	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
SPILLWAY DEMOLITION/WORKING PLATFORM																				
P&E Mobilisation	Semi trailer	no	12	12	15-Feb-26	01-Mar-26	0.47	2.00	5	10	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Working platform material deliveries	Truck and Trailer 30t	t	1,500	50	20-Mar-26	23-Apr-26	1.13	4.86	6	29	4	6:30:00 AM	5:00:00 PM	NO	10.50	0.38	1	Bruce/Elm/LMD	Collwood Rd	
P&E Demobilisation	Semi trailer	no	12	12	06-May-26	15-May-26	0.30	1.29	5	6	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
DAM CONSTRUCTION																				
Geotechnical Investigation Subcontractor - Mob	Semi trailer	no	3	3	01-May-26	06-May-26	0.17	0.71	5	4	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Geotechnical Investigation Subcontractor - Demob	Semi trailer	no	3	3	26-May-26	02-Jun-26	0.23	1.00	5	5	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Secant Piling Subcontractor - Mob	Semi trailer	no	30	30	15-May-26	02-Jun-26	0.60	2.57	5	13	6	6:30:00 AM	5:00:00 PM	YES	7.83	0.77	1	Bruce/Elm/LMD	Collwood Rd	
Secant Piling Subcontractor - Demob	Semi trailer	no	30	30	03-Jun-27	15-Jun-27	1.04	1.71	5	9	8	6:30:00 AM	5:00:00 PM	YES	7.83	1.02	2	Bruce/Elm/LMD	Collwood Rd	
Secant Piling Subcontractor - Cage Deliveries	Semi trailer	no	260	260	15-May-26	01-Apr-27	10.70	45.86	5	229	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Secant Piling Subcontractor - Concrete deliveries	6m3 agitator	m3	8,610	1,435	20-May-26	08-Jun-27	12.80	54.86	5	274	12	6:30:00 AM	5:00:00 PM	NO	10.50	1.14	2	Cooroy Noosa Rd/Elm/LMD	Collwood Rd	
Cell excavation - Mob	Semi trailer	no	12	12	01-Sep-26	15-Sep-26	0.47	2.00	5	10	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Cell excavation - Demob	Semi trailer	no	12	12	23-Oct-27	05-Nov-27	0.43	1.86	5	9	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Capping beam - Reo deliveries	Semi trailer	t	325	16	15-Sep-26	06-Apr-27	6.77	29.00	5	145	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Capping beam - Concrete deliveries	6m3 agitator	m3	1,140	190	10-Oct-26	06-Aug-27	10.00	42.86	5	214	2	6:30:00 AM	5:00:00 PM	NO	10.50	0.19	1	Cooroy Noosa Rd/Elm/LMD	Collwood Rd	
Mass concrete - Mob	Semi trailer	no	25	25	05-Jan-27	01-Feb-27	0.90	3.86	5	19	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Mass concrete - Cement and flyash for batch plant	Cement Silo - 50t	t	6,294	126	05-Jan-27	01-Apr-28	15.07	64.57	5	323	2	6:30:00 AM	5:00:00 PM	NO	10.50	0.19	1	Bruce/Elm/LMD	Collwood Rd	
Mass concrete - Aggregate and sand	Truck and Trailer 30t	t	59,514	1,984	05-Jan-27	01-Apr-28	15.07	64.57	5	323	14	6:30:00 AM	5:00:00 PM	NO	10.50	1.33	2	Bruce/Elm/LMD	Collwood Rd	
Mass concrete - Demob	Semi trailer	no	25	25	17-Jan-28	01-Apr-28	2.50	10.71	5	54	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
Foundation Grouting SC - Mob	Semi trailer	no	12	12	20-Mar-27	05-Apr-27	0.53	2.29	5	11	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
Foundation Grouting SC - Demob	Semi trailer	no	12	12	10-Feb-28	20-Feb-28	0.33	1.43	5	7	4	6:30:00 AM	5:00:00 PM	YES	7.83	0.51	1	Bruce/Elm/LMD	Collwood Rd	
OUTLET TOWER WORKS																				
FRP - Reo deliveries	Semi trailer	t	38	2	15-Feb-27	01-Mar-27	0.47	2.00	5	10	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
FRP - Concrete deliveries	6m3 agitator	m3	331	56	15-Mar-27	24-Sep-27	6.43	27.57	5	138	2	6:30:00 AM	5:00:00 PM	NO	10.50	0.19	1	Bruce/Elm/LMD	Collwood Rd	
M&E Deliverables	Semi trailer	no	30	30	01-Sep-27	01-Nov-27	2.03	8.71	5	44	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
EROSION PROTECTION																				
Material deliveries	Truck and Trailer 30t	t	34,254	1,142	01-Feb-28	15-Jul-28	5.50	23.57	5	118	20	6:30:00 AM	5:00:00 PM	NO	10.50	1.90	2	Bruce/Elm/LMD	Collwood Rd	
SPILLWAY WORKS																				
FRP - Reo Deliveries	Semi trailer	t	500	25	02-May-27	02-May-28	12.20	52.29	5	261	2	6:30:00 AM	5:00:00 PM	YES	7.83	0.26	1	Bruce/Elm/LMD	Collwood Rd	
FRP - Concrete deliveries	6m3 agitator	m3	2,499	417	02-May-27	02-May-28	12.20	52.29	5	261	4	6:30:00 AM	5:00:00 PM	NO	10.50	0.38	1	Cooroy Noosa Rd/Elm/LMD	Collwood Rd	
LEFT EMBANKMENT																				
Material Deliveries	Truck and Trailer 30t	t	26,497	884	02-May-27	17-Oct-27	5.60	24.0	5	120	16	6:30:00 AM	5:00:00 PM	YES	7.83	2.04	3	Bruce/Elm/LMD	Hardstand 3	
Shear walls	6m3 agitator	m3	443	74	11-May-27	01-Jul-27	1.70	7.3	5	36	6	6:30:00 AM	5:0							

LAKE MACDONALD DAM IMPROVEMENT PROJECT - HV VOLUME STUDY

						2027												
						JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
						01-Jan-27	01-Feb-27	01-Mar-27	01-Apr-27	01-May-27	01-Jun-27	01-Jul-27	01-Aug-27	01-Sep-27	01-Oct-27	01-Nov-27	01-Dec-27	01-Jan-28
WORKS	TRUCK TYPE	UNIT	QUANTITY	TOTAL NO OF HV	START DATE	END DATE												
GENERAL SITE RUNNING																		
Daily Deliveries - Consumables etc	Rigid Truck 15t	no	2	2	01-Mar-25	22-Nov-29	2	2	2	2	2	2	2	2	2	2	2	2
Daily Deliveries - Consumables etc	Semi Trailer	no	1	1	01-Mar-25	22-Nov-29	2	2	2	2	2	2	2	2	2	2	2	2
Daily Deliveries - Fuel	Fuel Truck	no	1	1	01-Mar-25	22-Nov-29	2	2	2	2	2	2	2	2	2	2	2	2
Daily Deliveries - Fuel	Fuel Truck	no	1	1	01-Mar-25	22-Nov-29	2	2	2	2	2	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS																		
P&E Mobilisation - TGS	Semi trailer	no	10	10	21-Oct-24	06-Nov-24	0	0	0	0	0	0	0	0	0	0	0	0
Hardstands and Laydown Areas	Truck and Trailer 30t	t	14,000	467	01-Nov-24	10-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0
Hardstands and Laydown Areas	Truck and Trailer 30t	t	1,000	34	01-Nov-24	10-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0
Site Facility Set up and mobilisation -TGS	Semi trailer	no	50	50	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0	0	0	0	0	0
Haul and Access Roads	Truck and Trailer 30t	t	4,765	159	19-Nov-24	10-Feb-25	0	0	0	0	0	0	0	0	0	0	0	0
Tree removal subcontractor - TGS	Semi trailer	no	20	20	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0	0	0	0	0	0
Reservoir lowering - material deliveries - TGS (20M TRAILER)	Semi trailer	no	15	15	10-Dec-24	20-Jan-25	0	0	0	0	0	0	0	0	0	0	0	0
Reservoir lowering - pipe welding mobilisation - TGS	Semi trailer	no	10	10	05-Dec-24	10-Dec-24	0	0	0	0	0	0	0	0	0	0	0	0
UPSTREAM COFFERDAM																		
P&E Mobilisation	Semi trailer	no	15	15	01-Mar-25	01-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
P&E Mobilisation	Semi trailer	no	5	5	01-Mar-25	01-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	50	50	01-Mar-25	01-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	20	20	01-Mar-25	01-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
Rock deliveries	Truck and Trailer 30t	t	48,714	1,624	01-Feb-25	01-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
Rock deliveries	Truck and Trailer 30t	t	8,597	287	01-Feb-25	01-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
Rock bag deliveries	Truck and Trailer 30t	no	1,477	369	01-May-25	01-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
Rock bag deliveries	Truck and Trailer 30t	no	1,477	369	01-May-25	01-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	15	15	27-Sep-25	19-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	5	5	27-Sep-25	19-Oct-25	0	0	0	0	0	0	0	0	0	0	0	0
PHASE 2 SITE SET UP																		
P&E Mobilisation	Semi trailer	no	5	5	01-Mar-25	10-Mar-25	0	0	0	0	0	0	0	0	0	0	0	0
Hardstands and Laydown Areas	Truck and Trailer 30t	t	8,773	293	01-Mar-25	15-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
Haul and Access Roads	Truck and Trailer 30t	t	2,000	67	01-Mar-25	15-Apr-25	0	0	0	0	0	0	0	0	0	0	0	0
Fencing subcontractor	Semi trailer	no	50	50	02-May-25	15-Jun-25	0	0	0	0	0	0	0	0	0	0	0	0
Batch plant establishment	Semi trailer	no	25	25	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	15	15	15-May-25	25-Jul-25	0	0	0	0	0	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL																		
P&E Mobilisation	Semi trailer	no	3	3	10-Jun-25	22-Jun-25	0	0	0	0	0	0	0	0	0	0	0	0
Sheetpiling - Subcontractor	Semi trailer	no	25	25	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	3	3	02-Sep-25	20-Sep-25	0	0	0	0	0	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM																		
P&E Mobilisation	Semi trailer	no	12	12	15-Feb-26	01-Mar-26	0	0	0	0	0	0	0	0	0	0	0	0
Working platform material deliveries	Truck and Trailer 30t	t	1,500	50	20-Mar-26	23-Apr-26	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	12	12	06-May-26	15-May-26	0	0	0	0	0	0	0	0	0	0	0	0
DAM CONSTRUCTION																		
Geotechnical Investigation Subcontractor - Mob	Semi trailer	no	3	3	01-May-26	06-May-26	0	0	0	0	0	0	0	0	0	0	0	0
Geotechnical Investigation Subcontractor - Demob	Semi trailer	no	3	3	26-May-26	02-Jun-26	0	0	0	0	0	0	0	0	0	0	0	0
Secant Piling Subcontractor - Mob	Semi trailer	no	30	30	15-May-26	02-Jun-26	0	0	0	0	0	0	0	0	0	0	0	0
Secant Piling Subcontractor - Demob	Semi trailer	no	30	30	03-Jun-27	15-Jun-27	0	0	0	0	0	0	0	0	0	0	0	0
Secant Piling Subcontractor - Cage Deliveries	Semi trailer	no	260	260	15-May-26	01-Apr-27	4	4	4	4	4	4	4	4	4	4	4	4
Secant Piling Subcontractor - Concrete deliveries	6m3 agitator	m3	8,610	1,435	20-May-26	08-Jun-27	12	12	12	12	12	12	12	12	12	12	12	12
Cell excavation - Mob	Semi trailer	no	12	12	01-Sep-26	15-Sep-26	0	0	0	0	0	0	0	0	0	0	0	0
Cell excavation - Demob	Semi trailer	no	12	12	23-Oct-27	05-Nov-27	0	0	0	0	0	0	0	0	0	0	0	0
Capping beam - Reo deliveries	Semi trailer	t	325	16	15-Sep-26	06-Apr-27	2	2	2	2	2	2	2	2	2	2	2	2
Capping beam - Concrete deliveries	6m3 agitator	m3	1,140	190	10-Oct-26	06-Aug-27	2	2	2	2	2	2	2	2	2	2	2	2
Mass concrete - Mob	Semi trailer	no	25	25	05-Jan-27	01-Feb-27	0	0	0	0	0	0	0	0	0	0	0	0
Mass concrete - Cement and flyash for batch plant	Cement Silo - 50t	t	6,294	126	05-Jan-27	01-Apr-28	2	2	2	2	2	2	2	2	2	2	2	2
Mass concrete - Aggregate and sand	Truck and Trailer 30t	t	59,514	1,984	05-Jan-27	01-Apr-28	12	12	12	12	12	12	12	12	12	12	12	12
Mass concrete - Demob	Semi trailer	no	25	25	17-Jan-28	01-Apr-28	0	0	0	0	0	0	0	0	0	0	0	0
Foundation Grouting SC - Mob	Semi trailer	no	12	12	20-Mar-27	05-Apr-27	0	0	4	4	4	4	4	4	4	4	4	4
Foundation Grouting SC - Demob	Semi trailer	no	12	12	10-Feb-28	20-Feb-28	0	0	0	0	0	0	0	0	0	0	0	0
OUTLET TOWER WORKS																		
FRP - Reo deliveries	Semi trailer	t	38	2	15-Feb-27	01-Mar-27	0	2	0	0	0	0	0	0	0	0	0	0
FRP - Concrete deliveries	6m3 agitator	m3	331	56	15-Mar-27	24-Sep-27	0	0	2	2	2	2	2	2	2	2	2	2
M&E Deliverables	Semi trailer	no	30	30	01-Sep-27	01-Nov-27	0	0	0	0	0	0	0	0	0	0	0	0
EROSION PROTECTION																		
Material deliveries	Truck and Trailer 30t	t	34,254	1,142	01-Feb-28	15-Jul-28	0	0	0	0	0	0	0	0	0	0	0	0
SPILLWAY WORKS																		
FRP - Reo Deliveries	Semi trailer	t	500	25	02-May-27	02-May-28	0	0	0	2	2	2	2	2	2	2	2	2
FRP - Concrete deliveries	6m3 agitator	m3	2,499	417	02-May-27	02-May-28	0	0	0	4	4	4	4	4	4	4	4	4
LEFT EMBANKMENT																		
Material Deliveries	Truck and Trailer 30t	t	26,497	884	02-May-27	17-Oct-27	0	0	0	0	16	16	16	16	16	16	16	16
Shear walls	6m3 agitator	m3	443	74	11-May-27	01-Jul-27	0	0	0	0	4	4	4	4	4	4	4	4
RIGHT EMBANKMENT																		
Material Deliveries	Truck and Trailer 30t	t	37,398	1,247	07-Dec-27	30-Aug-28	0	0	0	0	0	0	0	0	0	0	0	14
Cut off walls and shear walls	6m3 agitator	m3	3,339	557	08-Jun-26	17-Jan-27	8	0	0	0	0	0	0	0	0	0	0	0
LOWER OGEE																		
FRP - Reo deliveries	Semi trailer	t	1,103	55	04-Jan-28	02-Jun-28	0	0	0	0	0	0	0	0	0	0	0	2
FRP - Concrete deliveries	6m3 agitator	m3	5,514	919	02-Feb-28	02-Aug-28	0	0	0	0	0	0	0	0	0	0	0	0
UPPER LABYRINTH																		
FRP - Reo deliveries	Semi trailer	t	566	28	02-Sep-27	03-Jun-28	0	0	0	0	0	0	0	0	2	2	2	2
FRP - Concrete deliveries	6m3 agitator	m3	2,830	472	02-Sep-27	03-Jun-28	0	0	0	0	0	0	0	0	6	6	6	6
SADDLE DAM																		
FRP - Concrete deliveries	6m3 agitator	m3	402	67	02-Nov-26	21-Dec-26	0	0	0	0	0	0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES																		
Building SC - Covered under main site facilities	Semi trailer	no	25	25	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0	2	2	2	2	2
REMOVAL OF UCD																		
P&E Demobilisation	Semi trailer	no	15	15	01-Aug-28	07-Aug-28	0	0	0	0	0	0	0	0	0	0	0	0
P&E Demobilisation	Semi trailer	no	5	5	01-Aug-28	07-Aug-28	0	0	0	0	0	0	0	0	0	0	0	0
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	50	50	07-Aug-28	10-Jan-29	0	0	0	0	0	0	0	0	0	0	0	0
Sheetpile, tie-bar and waler deliveries	Semi trailer	no	20	20	07-Aug-28	10-Jan-29	0	0	0	0	0	0	0	0	0	0	0	0
Rock deliveries	Truck and Trailer 30t	t	48,714	1,624	07-Aug-28	28-Feb-29	0	0	0	0								

LAKE MACDONALD DAM IMPROVEMENT PROJECT - HV VOLUME STUDY

	2024					2025										
	NOV 01-Nov-24	DEC 01-Dec-24	JAN 01-Jan-25	FEB 01-Feb-25	MAR 01-Mar-25	APR 01-Apr-25	MAY 01-May-25	JUN 01-Jun-25	JUL 01-Jul-25	AUG 01-Aug-25	SEP 01-Sep-25	OCT 01-Oct-25	NOV 01-Nov-25	DEC 01-Dec-25	JAN 01-Jan-26	FEB 01-Feb-26
Summaries	maximum	average														
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	10	16	2	0	14	0	6	14	8	2	8	4	0	4
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	22	22	22	48	50	50	46	46	46	46	0	0	0	0
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	94.0	36.3	32	38	24	48	72	58	60	68	62	56	16	12	8	12
Rolling 3-month average - total volumes (two-way)	84.7	36.4	17.0	24.0	31.3	36.7	48.0	59.3	63.3	62.0	63.3	62.0	44.7	28.0	12.0	9.3
Reduced during school hrs - northern route	0.0															
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	22	22	22	48	50	50	46	46	46	46	0	0	0	0
Sub-total	50.0	10.8	22	22	22	48	50	50	46	46	46	46	0	0	0	0
rolling 3month average	49.3	11.0	11.0	14.7	22.0	30.7	40.0	49.3	48.7	47.3	46.0	46.0	30.7	15.3	0.0	0.0
Reduced during school hrs - eastern route	0.0															
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	26.0	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rolling 3-month average - total volumes (two-way)	24.7	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Restricted during school hrs - northern route	0.0															
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	10	16	2	0	14	0	6	14	8	2	8	4	0	4
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rolling 3-month average - total volumes (two-way)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Restricted during school hrs - eastern route	0.0															
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	0	0	0	0	2	2	2	2	2	2	2	2	2	2
Sub-total	4.0	3.3	0	0	0	0	4	4	4	4	4	4	4	4	4	4
Rolling 3-month average - total volumes (two-way)	4.0	3.3	0.0	0.0	0.0	0.0	1.3	2.7	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total	62.0	21.1	22	38	22	48	54	54	50	50	50	50	4	4	4	4
Rolling 3-month average - total volumes (two-way)	57.3	21.2	12.0	20.7	27.3	36.0	41.3	52.0	52.7	51.3	50.0	50.0	34.7	19.3	4.0	4.0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - HV VOLUME STUDY

		2026																
		MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
		01-Mar-26	01-Apr-26	01-May-26	01-Jun-26	01-Jul-26	01-Aug-26	01-Sep-26	01-Oct-26	01-Nov-26	01-Dec-26	01-Jan-27	01-Feb-27	01-Mar-27	01-Apr-27	01-May-27	01-Jun-27	
Summaries	maximum	average																
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	0	0	12	20	20	20	20	22	26	26	22	14	14	14	22	22
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	0	0	18	12	4	4	10	6	6	6	10	8	10	6	2	10
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	6	6	0	0	0	0	0	0	0	0	12	12	12	12	12	12
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
Total	94.0	36.3	14	14	38	40	32	38	36	40	40	54	44	48	44	64	72	72
Rolling 3-month average - total volumes (two-way)	84.7	36.4	11.3	13.3	22.0	30.7	36.7	34.7	34.0	35.3	38.0	38.7	44.7	46.0	48.7	45.3	52.0	60.0
Reduced during school hrs - northern route	0.0																	
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	6	6	0	0	0	0	0	0	0	0	12	12	12	12	12	12
Sub-total	50.0	10.8	6	6	0	0	0	0	0	0	0	0	14	14	16	16	16	16
rolling 3month average	49.3	11.0	2.0	4.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.3	14.7	15.3	16.0	16.0
Reduced during school hrs - eastern route	0.0																	
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	0	0	12	20	20	20	20	22	26	26	22	14	14	14	22	22
Sub-total	26.0	6.9	0	0	12	20	20	20	20	22	26	26	22	14	14	14	22	22
Rolling 3-month average - total volumes (two-way)	24.7	6.9	0.0	0.0	4.0	10.7	17.3	20.0	20.0	20.7	22.7	24.7	24.7	20.7	16.7	14.0	16.7	19.3
Restricted during school hrs - northern route	0.0																	
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	0	0	18	12	4	4	10	6	6	6	10	8	10	6	2	10
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
Sub-total	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rolling 3-month average - total volumes (two-way)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Restricted during school hrs - eastern route	0.0																	
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Sub-total	4.0	3.3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Rolling 3-month average - total volumes (two-way)	4.0	3.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Total	62.0	21.1	10	10	16	24	24	24	24	26	30	30	40	32	34	34	42	42
Rolling 3-month average - total volumes (two-way)	57.3	21.2	6.0	8.0	12.0	16.7	21.3	24.0	24.0	24.7	26.7	28.7	33.3	34.0	35.3	33.3	36.7	39.3

LAKE MACDONALD DAM IMPROVEMENT PROJECT - HV VOLUME STUDY

			2027													2028				
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
			01-Jul-27	01-Aug-27	01-Sep-27	01-Oct-27	01-Nov-27	01-Dec-27	01-Jan-28	01-Feb-28	01-Mar-28	01-Apr-28	01-May-28	01-Jun-28	01-Jul-28	01-Aug-28	01-Sep-28	01-Oct-28	01-Nov-28	
Summaries	maximum	average																		
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	6	6	10	10	10	10	10	24	24	24	24	20	14	14	0	0	0	
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	2	2	8	12	10	6	10	14	8	6	6	4	0	16	4	4	8	
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	12	12	12	12	12	12	12	32	32	20	20	20	20	0	0	0	0	
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	16	16	16	16	0	14	14	14	14	14	14	14	14	52	38	38	38	
Total	94.0	36.3	48	48	58	60	42	52	56	94	88	72	72	66	56	90	50	50	54	
Rolling 3-month average - total volumes (two-way)	84.7	36.4	61.3	56.0	51.3	55.3	53.3	51.3	50.0	67.3	79.3	84.7	77.3	70.0	64.7	70.7	65.3	63.3	51.3	
Reduced during school hrs - northern route	0.0																			
6m3 agitator - NO - Bruce/Elm/LMD	2.0	0.2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cement Silo - 50t - NO - Bruce/Elm/LMD	2.0	0.4	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	
Semi trailer - NO - Bruce/Elm/LMD	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Truck and Trailer 30t - NO - Bruce/Elm/LMD	50.0	10.1	12	12	12	12	12	12	12	32	32	20	20	20	20	0	0	0	0	
Sub-total	50.0	10.8	16	16	16	14	14	14	14	34	34	20	20	20	20	0	0	0	0	
rolling 3month average	49.3	11.0	16.0	16.0	16.0	15.3	14.7	14.0	14.0	20.7	27.3	29.3	24.7	20.0	20.0	13.3	6.7	0.0	0.0	
Reduced during school hrs - eastern route	0.0																			
6m3 agitator - NO - Cooroy Noosa Rd/Elm/LMD	26.0	6.9	6	6	10	10	10	10	10	24	24	24	24	20	14	14	0	0	0	
Sub-total	26.0	6.9	6	6	10	10	10	10	10	24	24	24	24	20	14	14	0	0	0	
Rolling 3-month average - total volumes (two-way)	24.7	6.9	16.7	11.3	7.3	8.7	10.0	10.0	10.0	14.7	19.3	24.0	24.0	22.7	19.3	16.0	9.3	4.7	0.0	
Restricted during school hrs - northern route	0.0																			
Fuel Truck - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Rigid Truck 15t - YES - Bruce/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Semi trailer - YES - Bruce/Elm/LMD	18.0	5.2	2	2	8	12	10	6	10	14	8	6	6	4	0	16	4	4	8	
Truck and Trailer 30t - YES - Bruce/Elm/LMD	52.0	7.0	16	16	16	16	0	14	14	14	14	14	14	14	14	52	38	38	38	
Sub-total	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rolling 3-month average - total volumes (two-way)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Restricted during school hrs - eastern route	0.0																			
Fuel Truck - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Semi Trailer - YES - Cooroy Noosa Rd/Elm/LMD	2.0	1.6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Sub-total	4.0	3.3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Rolling 3-month average - total volumes (two-way)	4.0	3.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Total	62.0	21.1	26	26	30	28	28	28	28	62	62	48	48	44	38	78	4	4	4	
Rolling 3-month average - total volumes (two-way)	57.3	21.2	36.7	31.3	27.3	28.0	28.7	28.0	28.0	39.3	50.7	57.3	52.7	46.7	43.3	33.3	20.0	8.7	4.0	

Appendix E

John Holland Personal Data

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

											2024			
											NOV	DEC	JAN	FEB
											01-Nov-24	01-Dec-24	01-Jan-25	01-Feb-25
	Classification	Weekly paid hours	Number	Start Date	End Date	Total Days	Days of Week	Total Work Days	Arrival Time	Departure Time				
Project Staff (white collar)							5		6:00- 6:30 AM	6:00- 6:30 PM	29	29	30	32
Project Workforce (blue collar)							5		5:30- 6:30 AM	5:00- 6:00 PM	4	4	4	4
GENERAL LABOUR														
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	265.43	5	1327	6:00- 6:30 AM	5:00- 5:15 PM	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	265.43	5	1327	6:00- 6:30 AM	5:00- 5:15 PM	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	263.86	5	1319	6:00- 6:30 AM	5:00- 5:15 PM	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	263.86	5	1319	6:00- 6:30 AM	5:00- 5:15 PM	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	253.14	5	1266	6:00- 6:30 AM	5:00- 5:15 PM	0	0	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	156.57	5	783	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	156.57	5	783	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	177.86	5	889	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
PHASE 1 SITE SET UP - EARLY WORKS														
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	15.14	5	76	6:00- 6:30 AM	5:00- 5:15 PM	3	3	3	3
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	4.43	5	22	6:00- 6:30 AM	5:00- 5:15 PM	4	4	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	4.43	5	22	6:00- 6:30 AM	5:00- 5:15 PM	1	1	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	5.57	5	28	6:00- 6:30 AM	5:00- 5:15 PM	4	4	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	10.29	5	51	6:00- 6:30 AM	5:00- 5:15 PM	0	4	4	4
UPSTREAM COFFERDAM														
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	28.00	5	140	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	28.71	5	144	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	10.86	5	54	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
PHASE 2 SITE SET UP														
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	6.29	5	31	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	4.43	5	22	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
U/S AND D/S CUT OFF WALL														
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	10.14	5	51	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM														
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	8.00	5	40	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	8.00	5	40	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	8.00	5	40	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
DAM CONSTRUCTION														
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	3.86	5	19	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	54.00	5	270	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	57.57	5	288	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	93.29	5	466	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	52.29	5	261	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	44.43	5	222	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
OUTLET TOWER WORKS														
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	28.57	5	143	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	10.00	5	50	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	10.00	5	50	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	11.71	5	59	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	11.71	5	59	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
EROSION PROTECTION														
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	24.86	5	124	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
SPILLWAY WORKS														
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	52.14	5	261	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	52.14	5	261	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	52.14	5	261	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
LEFT EMBANKMENT														
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	83.57	5	418	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	4.29	5	21	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

	Classification	Weekly paid hours	Number	Start Date	End Date	Total Days	Days of Week	Total Work Days	Arrival Time	Departure Time	2024			
											NOV	DEC	JAN	FEB
											01-Nov-24	01-Dec-24	01-Jan-25	01-Feb-25
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	4.29	5	21	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	4.29	5	21	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
RIGHT EMBANKMENT						0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	50.00	5	250	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4					0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	27.29	5	136	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	27.29	5	136	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	27.29	5	136	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
LOWER OGEE											0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	21.29	5	106	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	21.29	5	106	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	21.29	5	106	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
UPPER LABYRINTH											0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	39.29	5	196	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	39.29	5	196	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	39.29	5	196	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
SADDLE DAM											0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	9.29	5	46	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	7.14	5	36	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	7.14	5	36	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	7.14	5	36	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
DAM INSTRUMENTATION											0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	2.14	5	11	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	18.57	5	93	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
SEQWATER PERMANENT FACILITIES											0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	21.43	5	107	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
COMMISSIONING / PRECOMMISSIONING											0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	46.57	5	233	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	46.57	5	233	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
REMOVAL OF UCD											0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	13.14	5	66	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	13.14	5	66	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48				0.00	5	0	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
DEMOBILISATION											0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	51.29	5	256	6:00- 6:30 AM	5:00- 5:15 PM	0	0	0	0
Plant Operator - Dry hire	CW4	48									0	0	0	0
TOTAL PROJECT WORKFORCE			47								16	20	13	13
Sub-Contractor Personal (blue collar)			34								12	16	9	9
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71								45	49	43	45

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2025						
						MAR	APR	MAY	JUN	JUL	AUG	SEP
						01-Mar-25	01-Apr-25	01-May-25	01-Jun-25	01-Jul-25	01-Aug-25	01-Sep-25
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						31	30	30	30	31	31	31
Project Workforce (blue collar)						4	4	4	4	4	4	16
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	0	0	0	0	0	0	0
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	0	0	0	0	0	0	0
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	0	0	0	0	0	2	2
PHASE 1 SITE SET UP - EARLY WORKS												
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM												
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	12	12	12	12	12	12
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	8	8	8	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	10	10
PHASE 2 SITE SET UP												
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	8	8	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	4	4	0	0
U/S AND D/S CUT OFF WALL												
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	6	6	6	6
SPILLWAY DEMOLITION/WORKING PLATFORM												
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION												
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	0	0	0	0	0	0	12
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	0	0	0
OUTLET TOWER WORKS												
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION												
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS												
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
LEFT EMBANKMENT												
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2025						
						MAR	APR	MAY	JUN	JUL	AUG	SEP
						01-Mar-25	01-Apr-25	01-May-25	01-Jun-25	01-Jul-25	01-Aug-25	01-Sep-25
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			6	26	34	44	36	44	56
Sub-Contractor Personal (blue collar)			34			2	22	30	40	32	40	40
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			37	56	64	74	67	75	87

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

	Classification	Weekly paid hours	Number	Start Date	End Date	OCT	NOV	DEC	JAN	FEB	MAR	APR
						01-Oct-25	01-Nov-25	01-Dec-25	01-Jan-26	01-Feb-26	01-Mar-26	01-Apr-26
Project Staff (white collar)						31	31	34	34	33	33	35
Project Workforce (blue collar)						16	16	16	18	18	18	18
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	0	0	0	1	1	1	1
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	0	0	0	1	1	1	1
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	12	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	8	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	10	0	0	0	0	0	0
PHASE 2 SITE SET UP						0	0	0	0	0	0	0
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	5	5
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	2	2
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	5	5
DAM CONSTRUCTION						0	0	0	0	0	0	0
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	12	12	12	12	12	12	12
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	0	0	0
OUTLET TOWER WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
LEFT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0	0	0	0	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	6

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

	Classification	Weekly paid hours	Number	Start Date	End Date	OCT	NOV	DEC	JAN	FEB	MAR	APR
						01-Oct-25	01-Nov-25	01-Dec-25	01-Jan-26	01-Feb-26	01-Mar-26	01-Apr-26
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	1
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	2
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			50	20	20	22	30	42	51
Sub-Contractor Personal (blue collar)			34			34	4	4	4	12	24	33
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			81	51	54	56	63	75	86

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2026						
						MAY	JUN	JUL	AUG	SEP	OCT	NOV
						01-May-26	01-Jun-26	01-Jul-26	01-Aug-26	01-Sep-26	01-Oct-26	01-Nov-26
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						35	35	35	36	36	36	36
Project Workforce (blue collar)						18	18	18	18	18	18	18
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP						0	0	0	0	0	0	0
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	5	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	2	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	5	0	0	0	0	0	0
DAM CONSTRUCTION						0	0	0	0	0	0	0
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	6	6	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	12	12	12	12	12	12
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	6	6	6
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	12	12	12	12	12	12	12
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	0	0	0
OUTLET TOWER WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
LEFT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	8	8	8	8	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	6	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2026						
						MAY	JUN	JUL	AUG	SEP	OCT	NOV
						01-May-26	01-Jun-26	01-Jul-26	01-Aug-26	01-Sep-26	01-Oct-26	01-Nov-26
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	1	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	2	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	6	6	6	6	6	6
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	1	1	1	1	1	1
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	2	2	2	2	2	2
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	6	6
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	1	1
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	2	2
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			57	57	51	51	57	74	74
Sub-Contractor Personal (blue collar)			34			39	39	33	33	39	56	56
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			92	92	86	87	93	110	110

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						20						
						DEC	JAN	FEB	MAR	APR	MAY	JUN
						01-Dec-26	01-Jan-27	01-Feb-27	01-Mar-27	01-Apr-27	01-May-27	01-Jun-27
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						36	36	36	36	36	34	34
Project Workforce (blue collar)						18	30	30	30	30	30	30
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS												
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM												
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP												
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL												
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM												
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION												
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	12	12	12	12	12	12	12
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	6	6	6	6	6	6	6
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	12	12	12	12	12	12	12
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	12	12	12	12	12	12
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	8	8	8
OUTLET TOWER WORKS												
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	8	8	8	8	8
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION												
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS												
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	16	16	16
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	1	1	1
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	2	2	2
LEFT EMBANKMENT												
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	8	8	8	8	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						DEC	JAN	FEB	MAR	APR	MAY	JUN
						01-Dec-26	01-Jan-27	01-Feb-27	01-Mar-27	01-Apr-27	01-May-27	01-Jun-27
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	6	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	1	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	2	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	8	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	6	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	1	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	2	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	2
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			74	60	68	68	95	95	97
Sub-Contractor Personal (blue collar)			34			56	30	38	38	65	65	67
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			110	96	104	104	131	129	131

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						27						
						JUL	AUG	SEP	OCT	NOV	DEC	JAN
						01-Jul-27	01-Aug-27	01-Sep-27	01-Oct-27	01-Nov-27	01-Dec-27	01-Jan-28
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						34	34	34	29	29	29	29
Project Workforce (blue collar)						30	18	18	18	18	18	18
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS												
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM												
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP												
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL												
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM												
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION												
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	6	6	6	6	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	12	0	0	0	0	0	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	12	12	12	12	12	12	12
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	8	8	8	8	8	8	8
OUTLET TOWER WORKS												
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	8	8	8	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	1	1	1	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	3	3	3	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	4	4	4	4
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	6	6	6	6
EROSION PROTECTION												
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	6	6
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS												
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	16	16	16	16	16	16	16
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	1	1	1	1	1	1	1
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	2	2	2	2	2	2	2
LEFT EMBANKMENT												
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	8	8	8	8	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						27						
						JUL	AUG	SEP	OCT	NOV	DEC	JAN
						01-Jul-27	01-Aug-27	01-Sep-27	01-Oct-27	01-Nov-27	01-Dec-27	01-Jan-28
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	8	8	8	8	8	8
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	12
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	1
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	2
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	12	12	12	12	12	12
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	1	1	1	1	1	1
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	2	2	2	2	2	2
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	4	4	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	2	2	2	2	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	8	8	8	8	8
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	4	4	4
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	4	4	4
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			85	96	108	114	106	104	119
Sub-Contractor Personal (blue collar)			34			55	78	90	96	88	86	101
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			119	130	142	143	135	133	148

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2028						
						FEB	MAR	APR	MAY	JUN	JUL	AUG
						01-Feb-28	01-Mar-28	01-Apr-28	01-May-28	01-Jun-28	01-Jul-28	01-Aug-28
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						29	29	15	14	13	12	9
Project Workforce (blue collar)						6	6	6	6	6	6	6
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	1	1
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	2	2
PHASE 1 SITE SET UP - EARLY WORKS												
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM												
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP												
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL												
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM												
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION												
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	0	0	0	0	0	0	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	8	0	0	0	0	0	0
OUTLET TOWER WORKS												
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION												
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	6	6	6	6	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS												
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	16	16	16	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	1	1	1	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	2	2	2	0	0	0	0
LEFT EMBANKMENT												
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2028						
						FEB	MAR	APR	MAY	JUN	JUL	AUG
						01-Feb-28	01-Mar-28	01-Apr-28	01-May-28	01-Jun-28	01-Jul-28	01-Aug-28
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	8	8	8	8	8	8	8
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	12	12	12	12	12	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	1	1	1	1	1	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	2	2	2	2	2	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	12	12	12	12	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	1	1	1	1	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	2	2	2	2	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	8	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	4	4	4	4	4	4	4
Electrician	SC	48	4	09-Nov-27	30-Sep-28	4	4	4	4	4	4	4
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	12	12
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			97	81	81	62	41	46	46
Sub-Contractor Personal (blue collar)			34			91	75	75	56	35	40	40
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			126	110	96	76	54	58	55

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

	Classification	Weekly paid hours	Number	Start Date	End Date	SEP	OCT	NOV	DEC	JAN	FEB	MAR
						01-Sep-28	01-Oct-28	01-Nov-28	01-Dec-28	01-Jan-29	01-Feb-29	01-Mar-29
Project Staff (white collar)						7	7	7	7	7	7	7
Project Workforce (blue collar)						6	6	14	14	14	12	12
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	0	0
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	1	1	1	1	1	0	0
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	2	2	2	2	2	0	0
PHASE 1 SITE SET UP - EARLY WORKS						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP						0	0	0	0	0	0	0
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION						0	0	0	0	0	0	0
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	0	0	0	0	0	0	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	0	0	0
OUTLET TOWER WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
LEFT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

	Classification	Weekly paid hours	Number	Start Date	End Date	SEP	OCT	NOV	DEC	JAN	FEB	MAR
						01-Sep-28	01-Oct-28	01-Nov-28	01-Dec-28	01-Jan-29	01-Feb-29	01-Mar-29
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	4	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	4	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	12	12	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	8	8	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	0	0	8	8	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			38	30	18	18	18	14	14
Sub-Contractor Personal (blue collar)			34			32	24	4	4	4	2	2
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			45	37	25	25	25	21	21

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2029						
						APR	MAY	JUN	JUL	AUG	SEP	OCT
						01-Apr-29	01-May-29	01-Jun-29	01-Jul-29	01-Aug-29	01-Sep-29	01-Oct-29
	Classification	Weekly paid hours	Number	Start Date	End Date							
Project Staff (white collar)						7	7	7	7	7	7	7
Project Workforce (blue collar)						12	12	12	12	12	12	12
GENERAL LABOUR												
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1	1	1	1	1	1	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1	1	1	1	1	1	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2	2	2	2	2	2	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	0	0	0	0	0	0	0
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	0	0	0	0	0	0	0
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	0	0	0	0	0	0	0
PHASE 1 SITE SET UP - EARLY WORKS												
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0	0	0	0	0	0	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0	0	0	0	0	0	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0	0	0	0	0	0	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0	0	0	0	0	0	0
UPSTREAM COFFERDAM												
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0	0	0	0	0	0	0
PHASE 2 SITE SET UP												
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0	0	0	0	0	0	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0	0	0	0	0	0	0
U/S AND D/S CUT OFF WALL												
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0	0	0	0	0	0	0
SPILLWAY DEMOLITION/WORKING PLATFORM												
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Welder	SC	48	2	20-Mar-26	15-May-26	0	0	0	0	0	0	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0	0	0	0	0	0	0
DAM CONSTRUCTION												
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0	0	0	0	0	0	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0	0	0	0	0	0	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0	0	0	0	0	0	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	0	0	0	0	0	0	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0	0	0	0	0	0	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0	0	0	0	0	0	0
OUTLET TOWER WORKS												
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0	0	0	0	0	0	0
EROSION PROTECTION												
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SPILLWAY WORKS												
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0	0	0	0	0	0	0
LEFT EMBANKMENT												
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0	0	0	0	0	0	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						2029						
						APR	MAY	JUN	JUL	AUG	SEP	OCT
						01-Apr-29	01-May-29	01-Jun-29	01-Jul-29	01-Aug-29	01-Sep-29	01-Oct-29
	Classification	Weekly paid hours	Number	Start Date	End Date							
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0	0	0	0	0	0	0
RIGHT EMBANKMENT						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4					0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0	0	0	0	0	0	0
LOWER OGEE						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0	0	0	0	0	0	0
UPPER LABYRINTH						0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0	0	0	0	0	0	0
SADDLE DAM						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0	0	0	0	0	0	0
DAM INSTRUMENTATION						0	0	0	0	0	0	0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
SEQWATER PERMANENT FACILITIES						0	0	0	0	0	0	0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0	0	0	0	0	0	0
COMMISSIONING / PRECOMMISSIONING						0	0	0	0	0	0	0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0	0	0	0	0	0	0
REMOVAL OF UCD						0	0	0	0	0	0	0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0	0	0	0	0	0	0
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
DEMOBILISATION						0	0	0	0	0	0	0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	8	8	8	8	8	8	8
Plant Operator - Dry hire	CW4	48				0	0	0	0	0	0	0
TOTAL PROJECT WORKFORCE			47			14	14	14	14	14	14	14
Sub-Contractor Personal (blue collar)			34			2	2	2	2	2	2	2
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			21	21	21	21	21	21	21

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

						NOV
						01-Nov-29
	Classification	Weekly paid hours	Number	Start Date	End Date	
Project Staff (white collar)						2
Project Workforce (blue collar)						12
GENERAL LABOUR						
Mark Omeley - Leading Hand	CW4	48	1	21-Oct-24	22-Nov-29	1
Peter Eisman - Carpenter	CW4	48	1	21-Oct-24	22-Nov-29	1
Concretor 1	CW4	48	1	01-Nov-24	22-Nov-29	1
Plant Operator 1	CW5	48	1	01-Nov-24	22-Nov-29	1
Fish survey and salvage	SC	48	2	15-Jan-25	22-Nov-29	2
Rigger	CW4	48	1	05-Jan-26	05-Jan-29	0
Crane Operator	CW5	48	1	05-Jan-26	05-Jan-29	0
Batch Plant Operator	SC	48	2	09-Aug-25	05-Jan-29	0
PHASE 1 SITE SET UP - EARLY WORKS						0
Plant Operator - Wet hire	SC	48	3	01-Nov-24	15-Feb-25	0
Site facilities subcontractor	SC	48	4	19-Nov-24	20-Dec-24	0
Crane Operator - Wet hire	SC	48	1	19-Nov-24	20-Dec-24	0
Tree removal subcontractor	SC	48	4	01-Nov-24	10-Dec-24	0
Reservoir lowering - subcontractor	SC	48	4	10-Dec-24	20-Feb-25	0
UPSTREAM COFFERDAM						0
Sheetpiling - Subcontractor	SC	48	12	06-Apr-25	19-Oct-25	0
Plant Operator - Wet hire	SC	48	8	01-Apr-25	19-Oct-25	0
Plant Operator - Dry hire	CW4	48				0
Structural worker, Concretor	SC	48	10	04-Aug-25	19-Oct-25	0
PHASE 2 SITE SET UP						0
Fencing subcontractor	SC	48	8	02-May-25	15-Jun-25	0
Batch plant establishment	SC	48	4	24-Jun-25	25-Jul-25	0
U/S AND D/S CUT OFF WALL						0
Sheetpiling - Subcontractor	SC	48	6	23-Jun-25	02-Sep-25	0
SPILLWAY DEMOLITION/WORKING PLATFORM						0
Plant Operator - Wet hire	SC	48	5	20-Mar-26	15-May-26	0
Welder	SC	48	2	20-Mar-26	15-May-26	0
Plant Operator - Wet hire - n/s	SC	48	5	20-Mar-26	15-May-26	0
DAM CONSTRUCTION						0
Geotechnical Investigation Subcontractor	SC	48	6	06-May-26	02-Jun-26	0
Secant Piling Subcontractor	SC	48	12	02-Jun-26	15-Jun-27	0
Plant operator - cell excavation - wet hire	SC	48	6	15-Sep-26	23-Oct-27	0
Capping beam - FRP	CW4	48	12	21-Sep-25	06-Jul-27	0
Mass concrete - concretor	CW4	48	12	16-Jan-27	17-Jan-28	0
Foundation Grouting SC	SC	48	8	05-Apr-27	10-Feb-28	0
OUTLET TOWER WORKS						0
FRP - Subcontractor	SC	48	8	19-Feb-27	07-Sep-27	0
Crane Operator - Wet hire	SC	48	1	01-Sep-27	10-Nov-27	0
Rigger/dogman	SC	48	3	01-Sep-27	10-Nov-27	0
Mechanical Fitter	SC	48	4	17-Oct-27	07-Jan-28	0
Electrician	SC	48	6	17-Oct-27	07-Jan-28	0
EROSION PROTECTION						0
Plant Operator - Wet hire	SC	48	6	05-Dec-27	27-May-28	0
Plant Operator - Dry hire	CW4	48				0
SPILLWAY WORKS						0
FRP - Subcontractor	SC	48	16	26-Apr-27	25-Apr-28	0
Crane Operator - Wet hire	SC	48	1	26-Apr-27	25-Apr-28	0
Rigger/dogman	SC	48	2	26-Apr-27	25-Apr-28	0
LEFT EMBANKMENT						0
Plant Operator - Wet hire	SC	48	8	28-Feb-26	06-Oct-27	0
Plant Operator - Dry hire	CW4	48				0
FRP - Subcontractor	SC	48	6	02-Apr-26	02-May-26	0

LAKE MACDONALD DAM IMPROVEMENT PROJECT - PERSONNEL PLAN

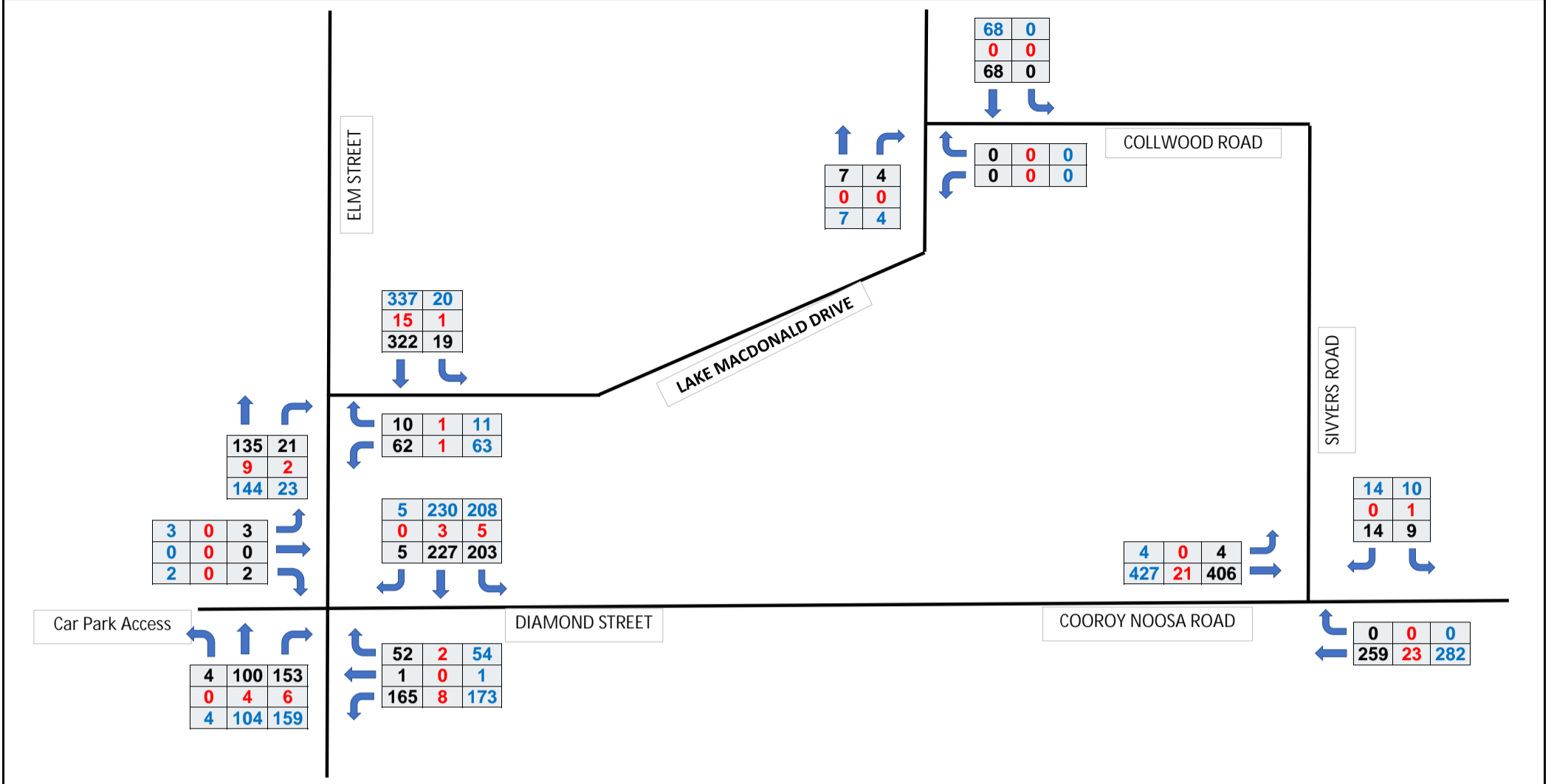
						NOV 01-Nov-29
	Classification	Weekly paid hours	Number	Start Date	End Date	
Crane Operator - Wet hire	SC	48	1	02-Apr-26	02-May-26	0
Rigger/dogman	SC	48	2	02-Apr-26	02-May-26	0
RIGHT EMBANKMENT						0
Plant Operator - Wet hire	SC	48	8	30-Aug-27	14-Aug-28	0
Plant Operator - Dry hire	CW4					0
FRP - Subcontractor	SC	48	6	08-Jun-26	16-Dec-26	0
Crane Operator - Wet hire	SC	48	1	08-Jun-26	16-Dec-26	0
Rigger/dogman	SC	48	2	08-Jun-26	16-Dec-26	0
LOWER OGEE						0
FRP - Subcontractor	SC	48	12	24-Jan-28	21-Jun-28	0
Crane Operator - Wet hire	SC	48	1	24-Jan-28	21-Jun-28	0
Rigger/dogman	SC	48	2	24-Jan-28	21-Jun-28	0
UPPER LABYRINTH						0
FRP - Subcontractor	SC	48	12	29-Aug-27	30-May-28	0
Crane Operator - Wet hire	SC	48	1	29-Aug-27	30-May-28	0
Rigger/dogman	SC	48	2	29-Aug-27	30-May-28	0
SADDLE DAM						0
Plant Operator - Wet hire	SC	48	8	16-Oct-26	20-Dec-26	0
Plant Operator - Dry hire	CW4	48				0
FRP - Subcontractor	SC	48	6	23-Oct-26	12-Dec-26	0
Crane Operator - Wet hire	SC	48	1	23-Oct-26	12-Dec-26	0
Rigger/dogman	SC	48	2	23-Oct-26	12-Dec-26	0
DAM INSTRUMENTATION						0
Electrician - SC	SC	48	4	24-Oct-27	08-Nov-27	0
Plant Operator - Wet hire	SC	48	2	15-Jun-27	23-Oct-27	0
Plant Operator - Dry hire	CW4	48				0
SEQWATER PERMANENT FACILITIES						0
Building SC	SC	48	8	06-Sep-27	03-Feb-28	0
COMMISSIONING / PRECOMMISSIONING						0
Mechanical Fitter	SC	48	4	09-Nov-27	30-Sep-28	0
Electrician	SC	48	4	09-Nov-27	30-Sep-28	0
REMOVAL OF UCD						0
Sheetpiling - Subcontractor	SC	48	12	24-Jul-28	24-Oct-28	0
Plant Operator - Wet hire	SC	48	8	24-Jul-28	24-Oct-28	0
Plant Operator - Dry hire	CW4	48				0
DEMOBILISATION						0
Plant Operator - Wet hire	SC	48	8	28-Nov-28	22-Nov-29	8
Plant Operator - Dry hire	CW4	48				0
TOTAL PROJECT WORKFORCE			47			14
Sub-Contractor Personal (blue collar)			34			2
TOTAL WORKFORCE+STAFF+SUBCONTRACTORS			71			16

Appendix F

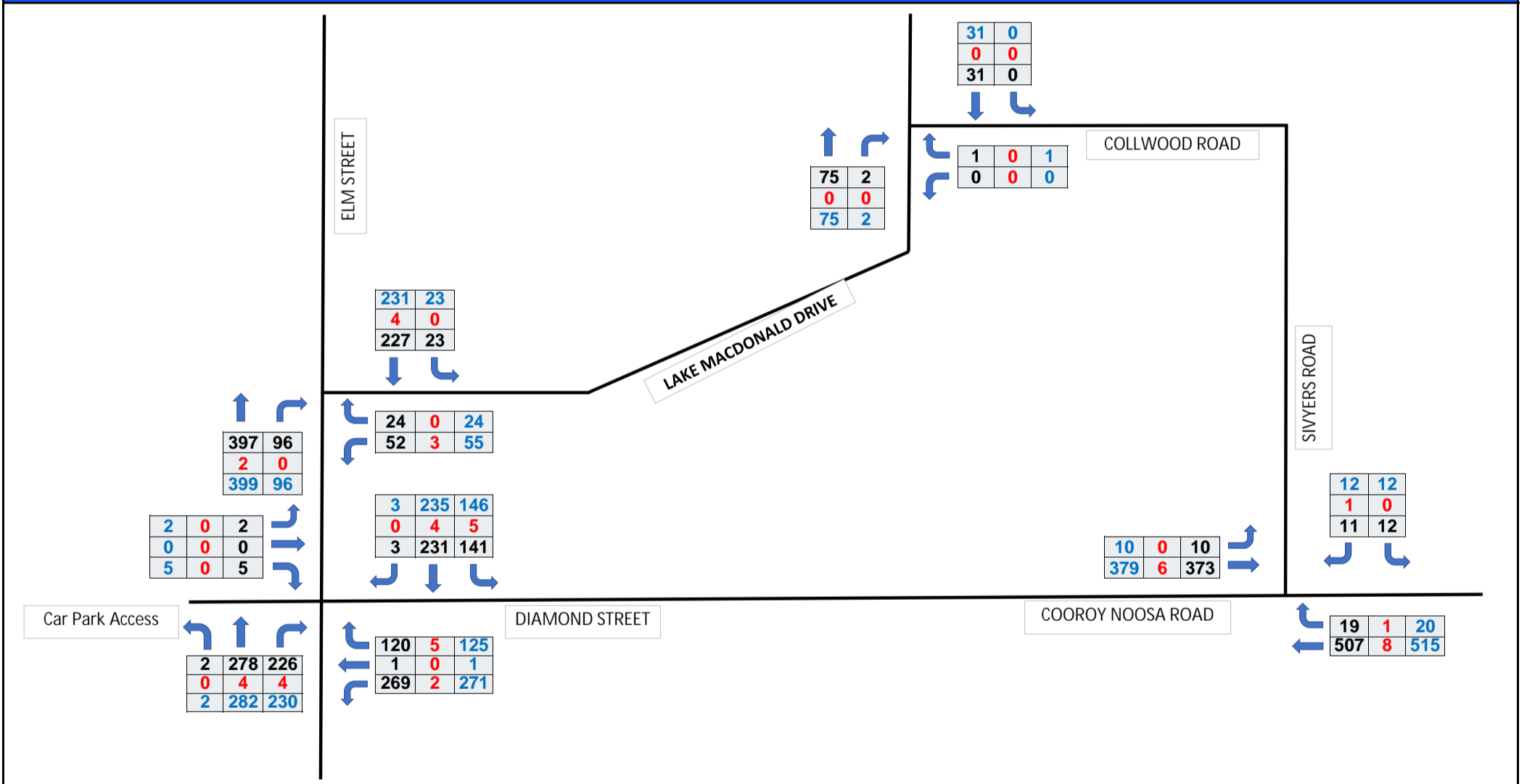
Traffic Flow Diagrams

F-1 2028 Base – Without Project Traffic Flow Diagrams

2023 AND 2024 BASE - 6AM TO 7AM TRAFFIC VOLUMES (based volumes for LV worker analysis time period)



2023 AND 2024 BASE - 500PM TO 600PM TRAFFIC VOLUMES (based volumes for LV worker analysis time period)




Comments

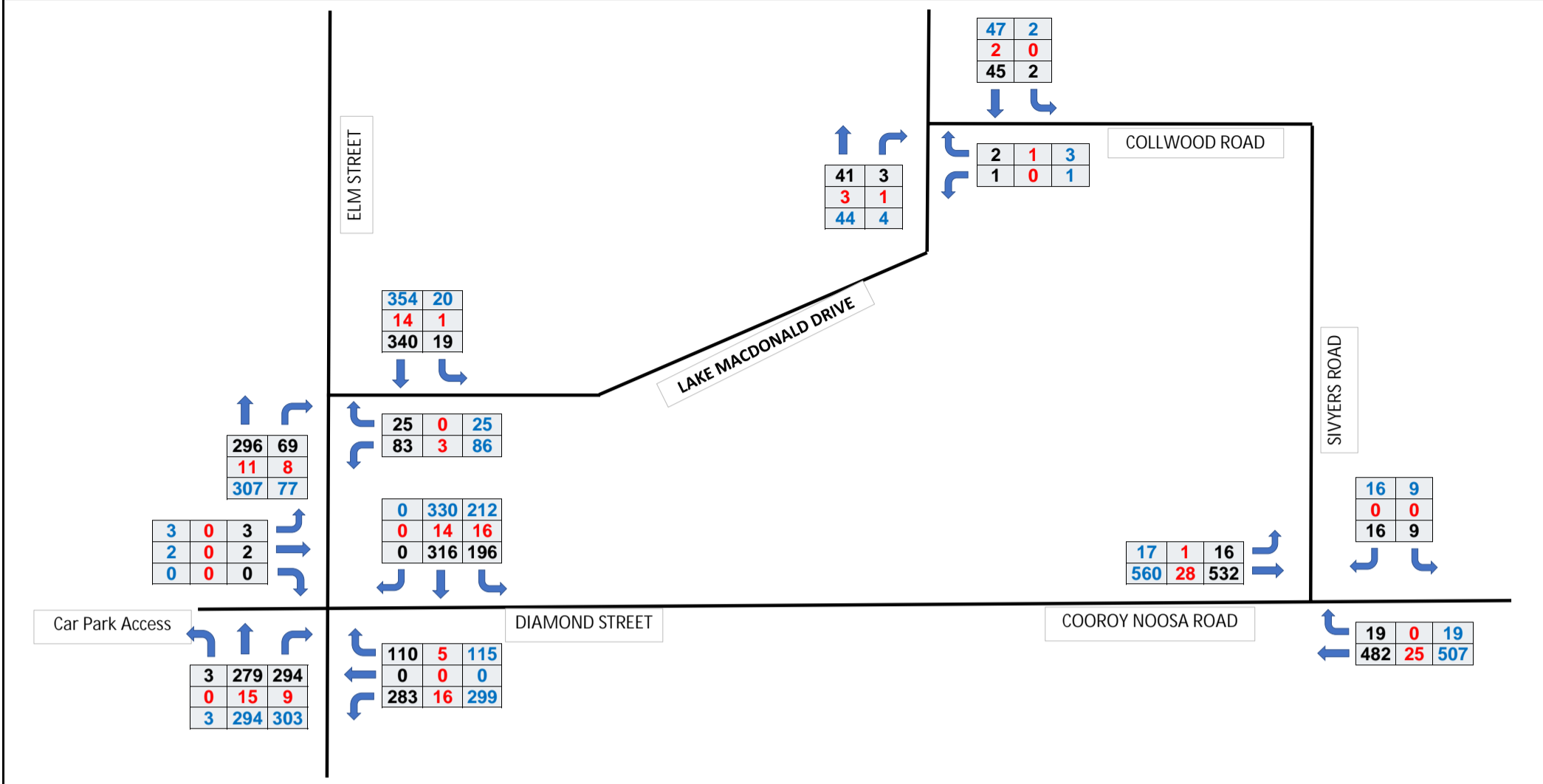
Lake MacDonald Drive intersections with Collwood Road and Elm Street - traffic data sourced from 2023 surveys
 Cooroy Noosa Road and Sivyers Road intersection / Elm Street and Diamond Street - traffic source from 2024 surveys

KEY

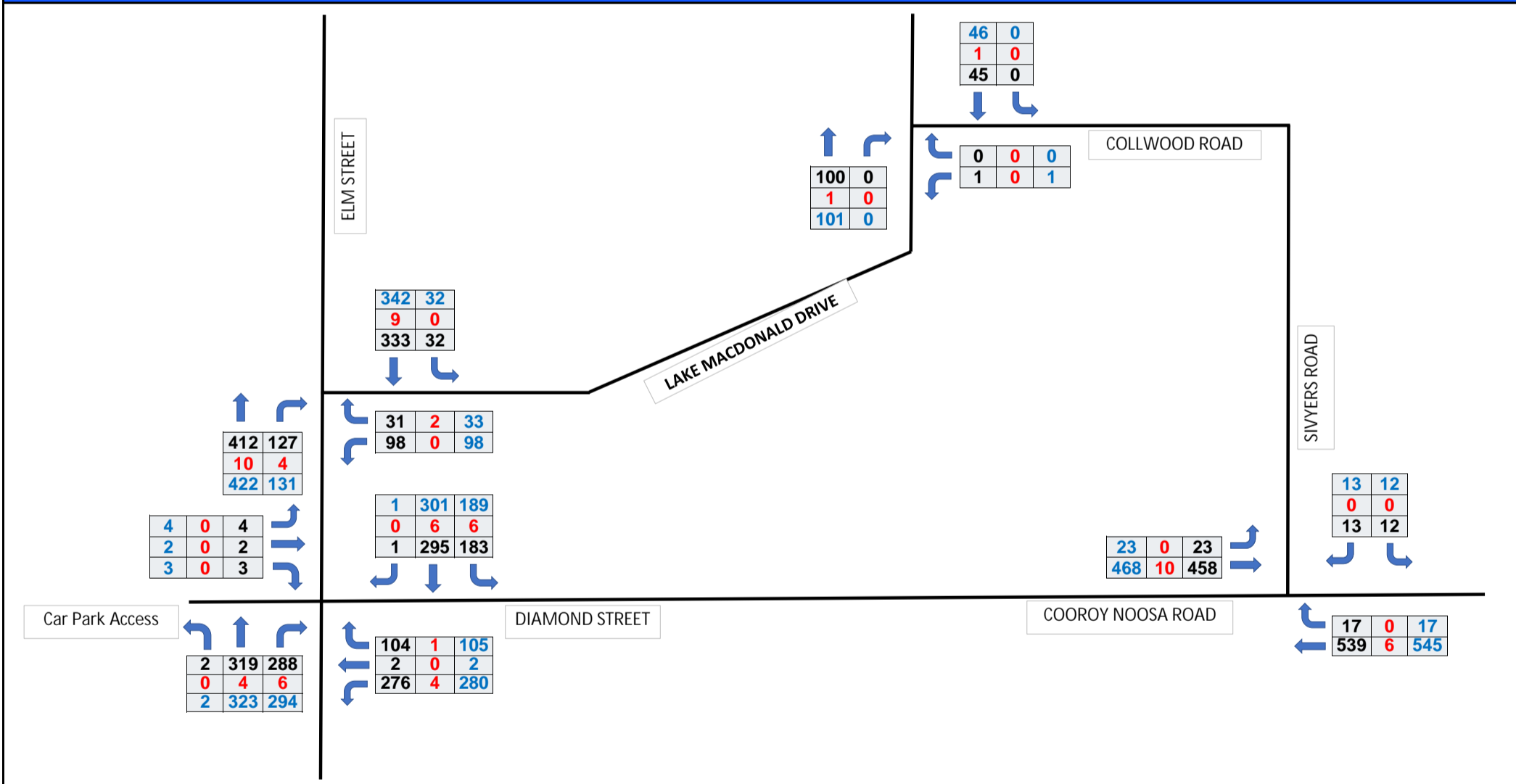
- 0 Light vehicles
- 0 Heavy vehicles
- 0 Total vehicles

PROJECT		PROJECT MANAGEMENT				PROJECT NUMBER	
Lake MacDonald Dam Upgrade		DESIGN	CHECK	APPROVE		30035740	
CLIENT		TC	AB	HS		SHEET TITLE	
Seqwater		ISSUE / REVISION			2023 Base Traffic Demands AM and PM Peak Periods (base for LV worker analysis)		
		I/R	DATE	DESCRIPTION	SHEET NUMBER		
		A	16/09/2024	Draft v.1 TIA	30035740_TFD_001		
		B	2/10/2024	TIA_rev A			
		C	31/10/2024	TIA rev B			

2023 AND 2024 BASE - 1015AM TO 1115AM TRAFFIC VOLUMES (based volumes for HV vehicle analysis time period)




2023 AND 2024 BASE - 400PM TO 500PM TRAFFIC VOLUMES (based volumes for HV vehicle analysis time period)



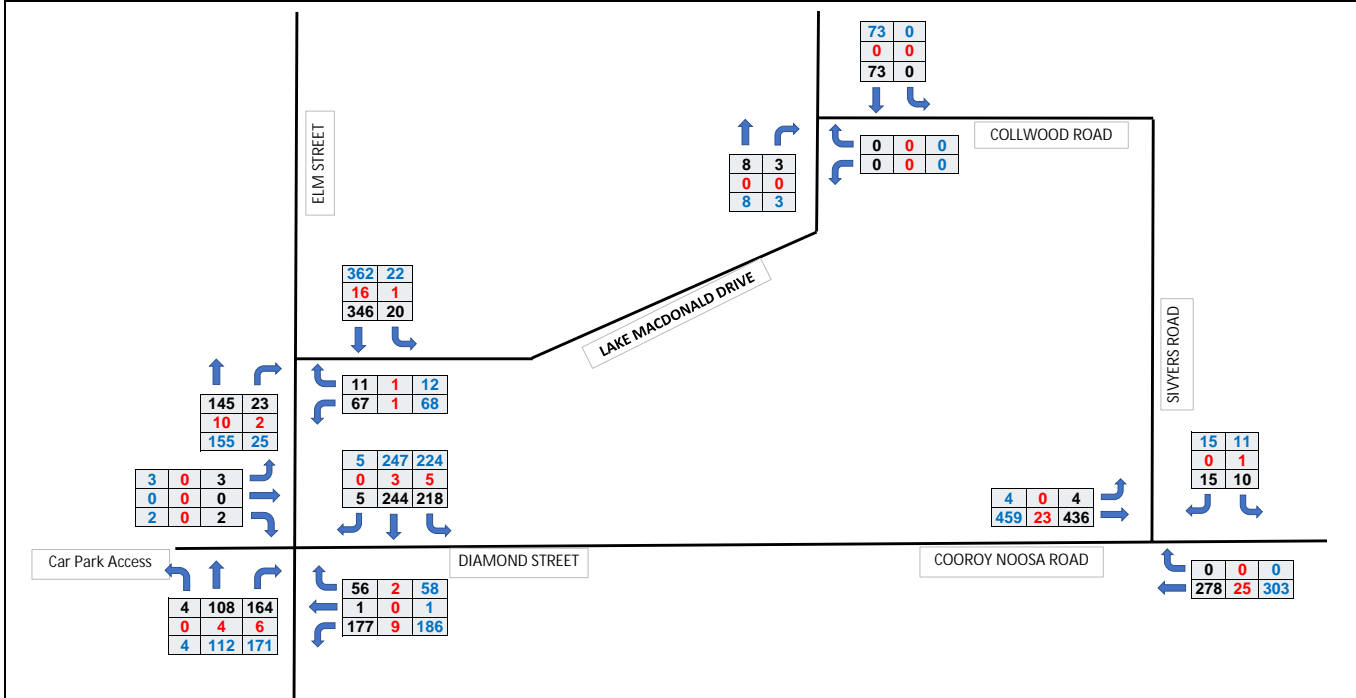
Comments

Lake MacDonald Drive intersections with Collwood Road and Elm Street - traffic data sourced from 2023 surveys
 Cooroy Noosa Road and Sivyers Road intersection / Elm Street and Diamond Street - traffic source from 2024 surveys

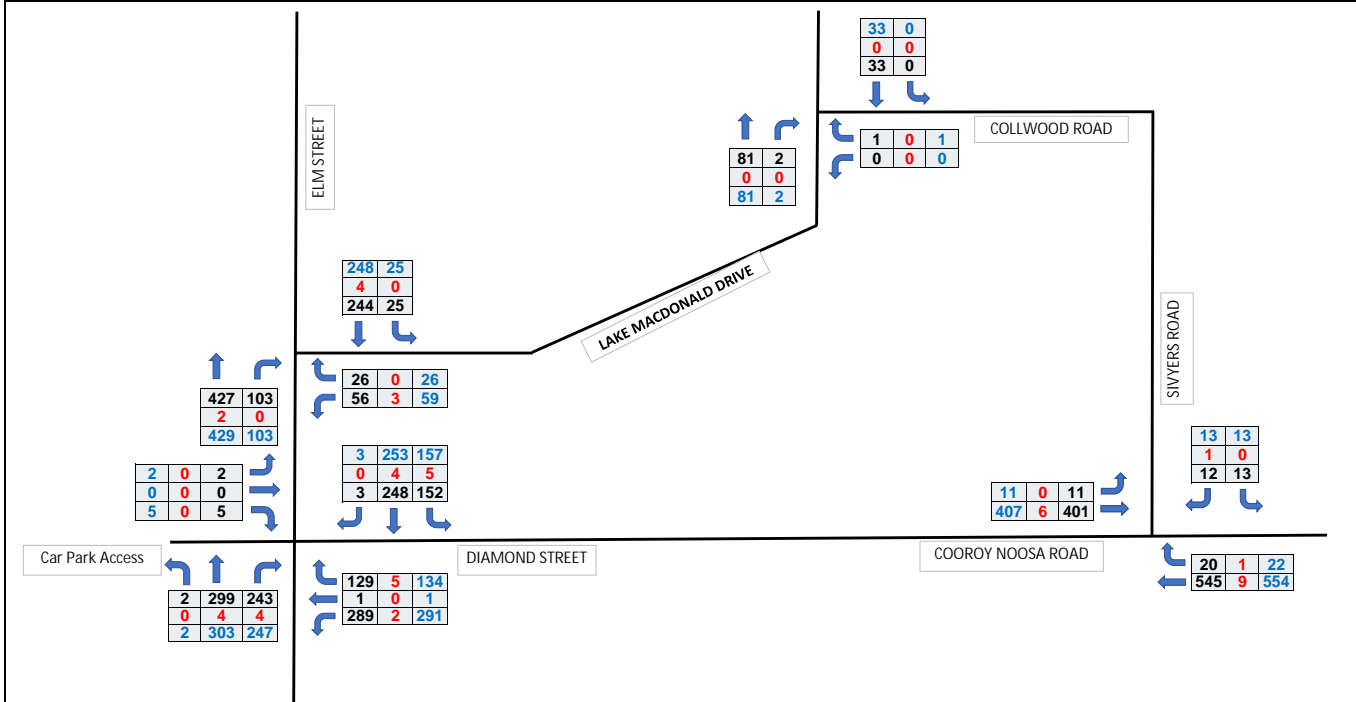
KEY	
0	Light vehicles
0	Heavy vehicles
0	Total vehicles

PROJECT		PROJECT MANAGEMENT				PROJECT NUMBER	
Lake MacDonald Dam Upgrade		DESIGN	CHECK	APPROVE		30035740	
CLIENT		TC	AB	HS		SHEET TITLE	
Seqwater		ISSUE / REVISION			2023 Base Traffic Demands AM and PM Peak Periods (base for HV const. veh analysis)		
		I/R	DATE	DESCRIPTION	SHEET NUMBER		
		A	16/09/2024	Draft v.1 TIA	30035740_TFD_001		
		B	2/10/2024	TIA_rev A			
		C	31/10/2024	TIA rev B			

2028 FUTURE BASE - 6AM TO 7AM TRAFFIC VOLUMES (based volumes for LV worker analysis time period)



2028 FUTURE BASE - 500PM TO 600PM TRAFFIC VOLUMES (based volumes for LV worker analysis time period)



Comments

Compound Growth Factor of 1.5% per year applied to survey data to derive 2028 future base demands

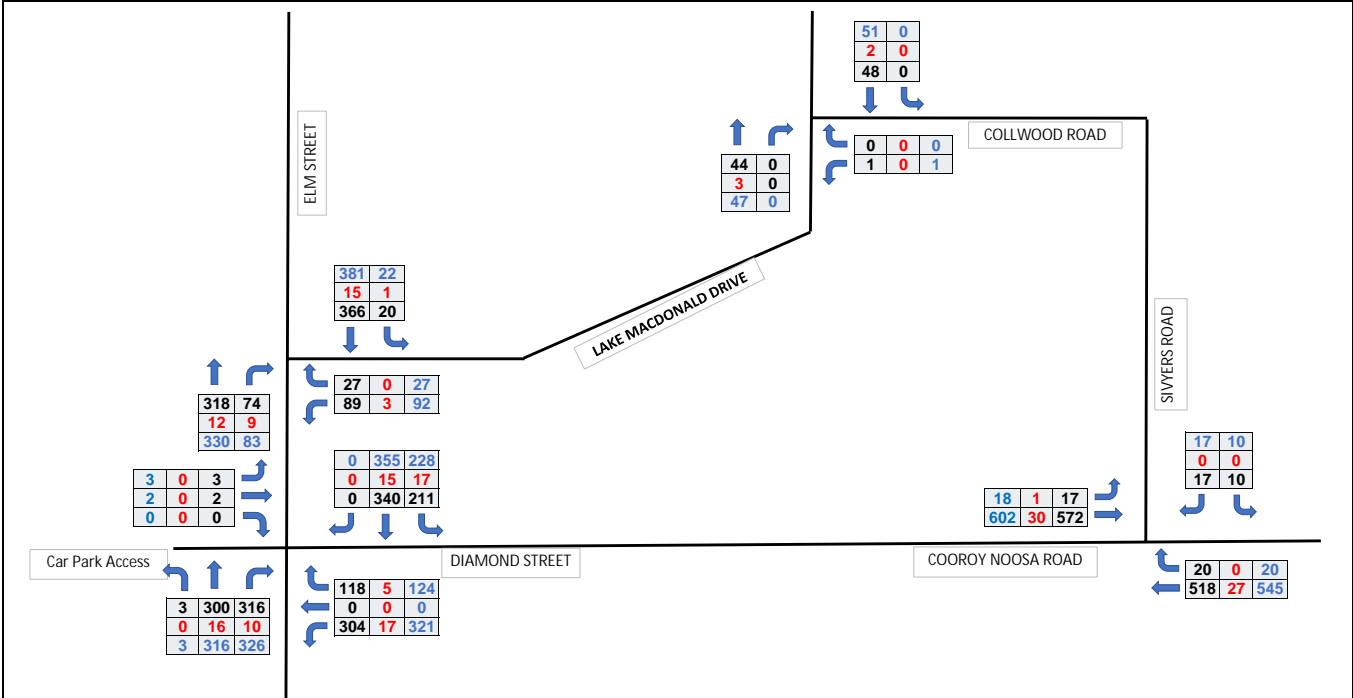
KEY

- 0 Light vehicles
- 0 Heavy vehicles
- 0 Total vehicles

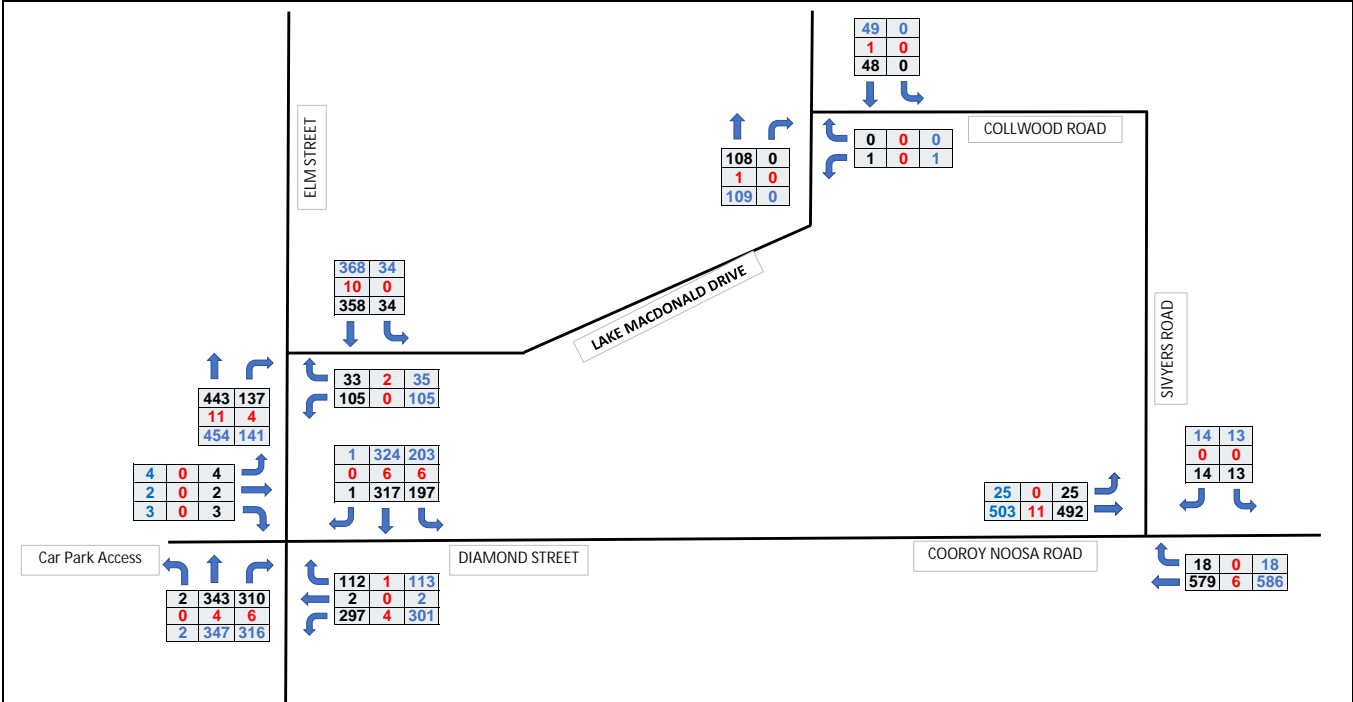
PROJECT		PROJECT MANAGEMENT			PROJECT NUMBER
Lake Macdonald Dam Upgrade		DESIGN	CHECK	APPROVE	
CLIENT		ISSUE / REVISION			SHEET TITLE
Seqwater		I/R	DATE	DESCRIPTION	2028 Future Base Traffic Demands AM and PM Peak Periods (base for LV worker analysis)
		A	16/09/2024	Draft v.1 TIA	SHEET NUMBER
		B	2/10/2024	TIA rev A	30035740_TFD_003
		C	31/10/2024	TIA rev B	



2028 FUTURE BASE - 1015AM TO 1115AM TRAFFIC VOLUMES (based volumes for HV vehicle analysis time period)



2028 FUTURE BASE - 400PM TO 500PM TRAFFIC VOLUMES (based volumes for HV vehicle analysis time period)

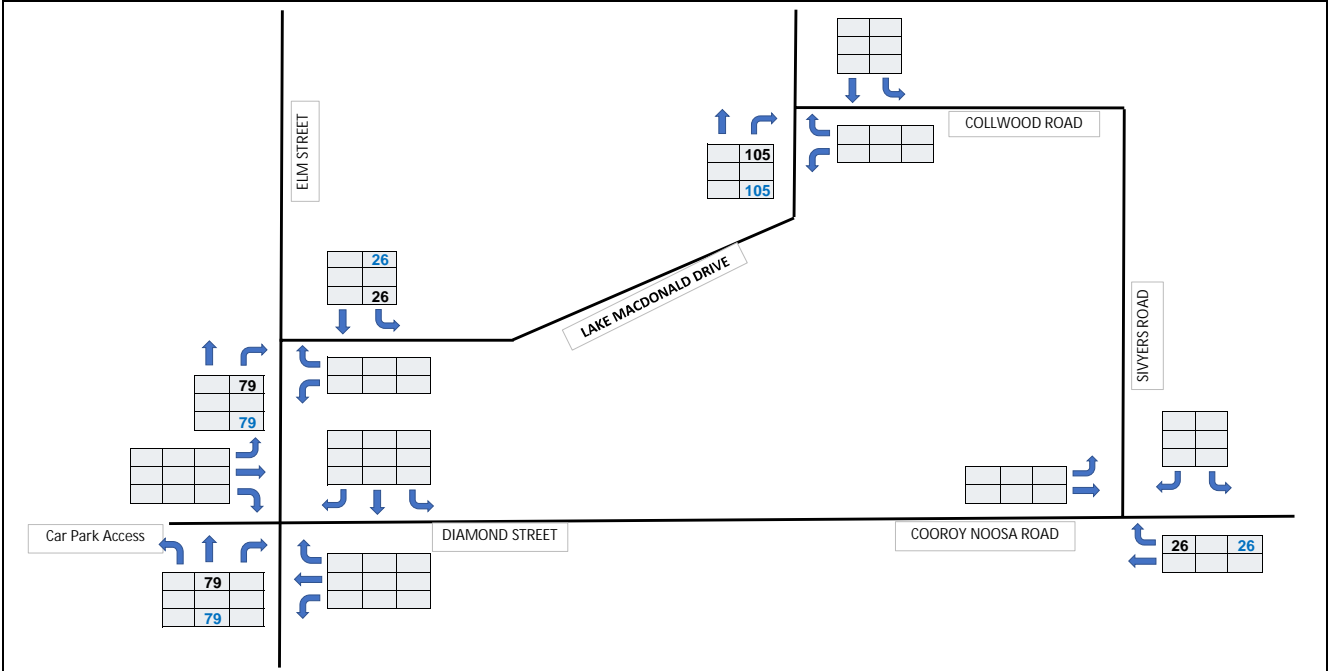


Comments				KEY			
Compound Growth Factor of 1.5% per year applied to survey data to derive 2028 future base demands				0	Light vehicles		
				1	Heavy vehicles		
				2	Total vehicles		
PROJECT			PROJECT MANAGEMENT			PROJECT NUMBER	
Lake Macdonald Dam Upgrade			DESIGN	CHECK	APPROVE	30035740	
			TC	AB	HS	SHEET TITLE	
CLIENT			ISSUE / REVISION			2028 Future Base Traffic Demands AM and PM Peak Periods (base for HV const. veh analysis)	
Seqwater			I/R	DATE	DESCRIPTION	SHEET NUMBER	
			A	16/09/2024	Draft v.1 TIA	30035740_TFD_004	
			B	2/10/2024	TIA_rev A		
			C	31/10/2024	TIA rev B		

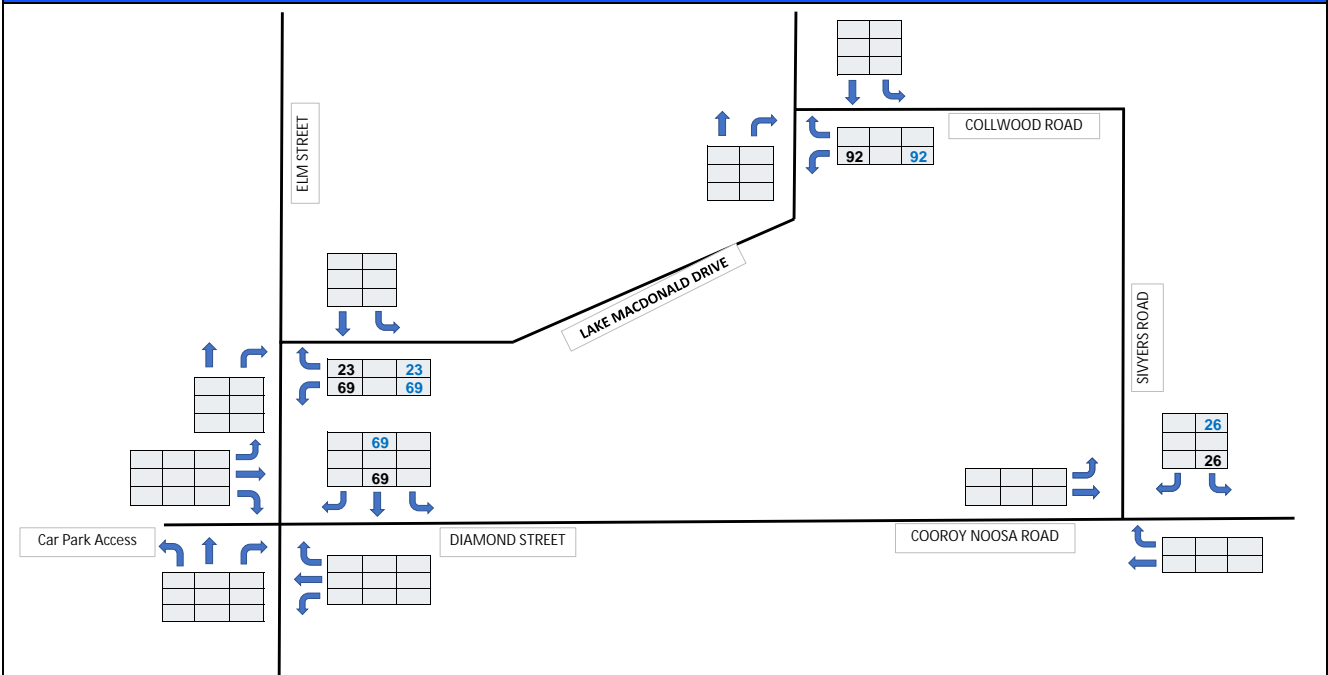


F-2 2028 With Project Traffic Flow Diagrams

2028 CONSTRUCTION TRAFFIC - WORKER LV ARRIVALS - 6AM TO 7AM TRAFFIC VOLUMES




2028 CONSTRUCTION TRAFFIC - WORKER LV DEPARTURES - 500PM TO 600PM TRAFFIC VOLUMES



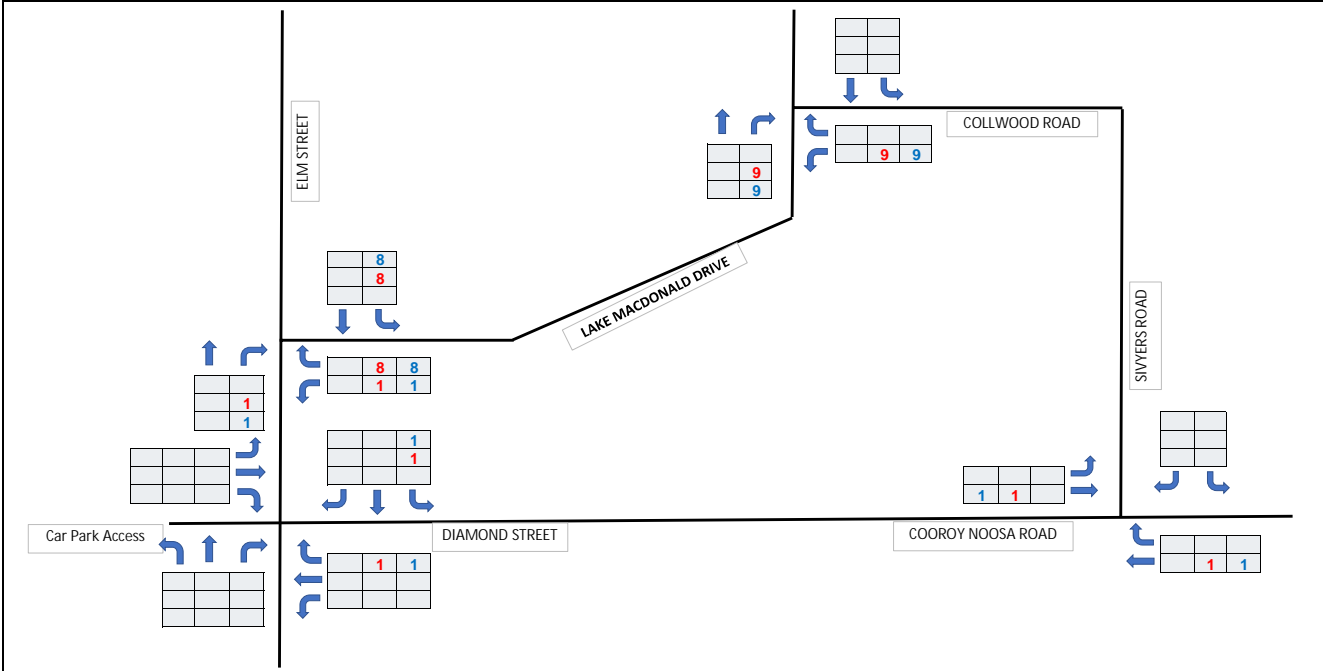
Comments

KEY

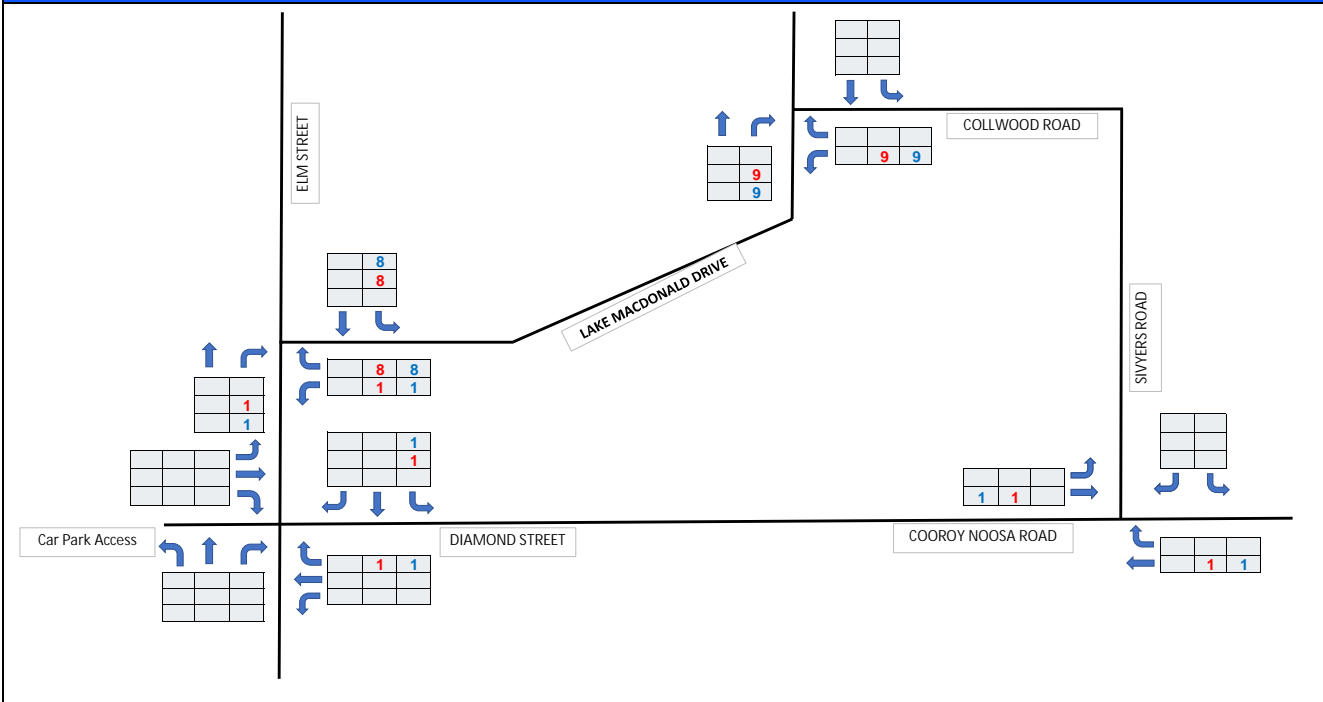
- 0 Light vehicles
- 0 Heavy vehicles
- 0 Total vehicles

PROJECT		PROJECT MANAGEMENT				PROJECT NUMBER	
Lake MacDonald Dam Upgrade		DESIGN	CHECK	APPROVE		30035740	
		TC	AB	HS		SHEET TITLE	
CLIENT		ISSUE / REVISION			2028 Construction Worker (LV) Traffic Demands AM and PM Peak Periods		
Seqwater		I/R	DATE	DESCRIPTION	SHEET NUMBER		
		A	16/09/2024	Draft v.1 TIA	30035740_TFD_005		
		B	2/10/2024	TIA_rev A			
		C	31/10/2024	TIA_rev B			

2028 CONSTRUCTION HEAVY VEHICLE TRAFFIC - 1015AM TO 1115AM





2028 CONSTRUCTION HEAVY VEHICLE TRAFFIC - 400PM TO 500PM TRAFFIC VOLUMES



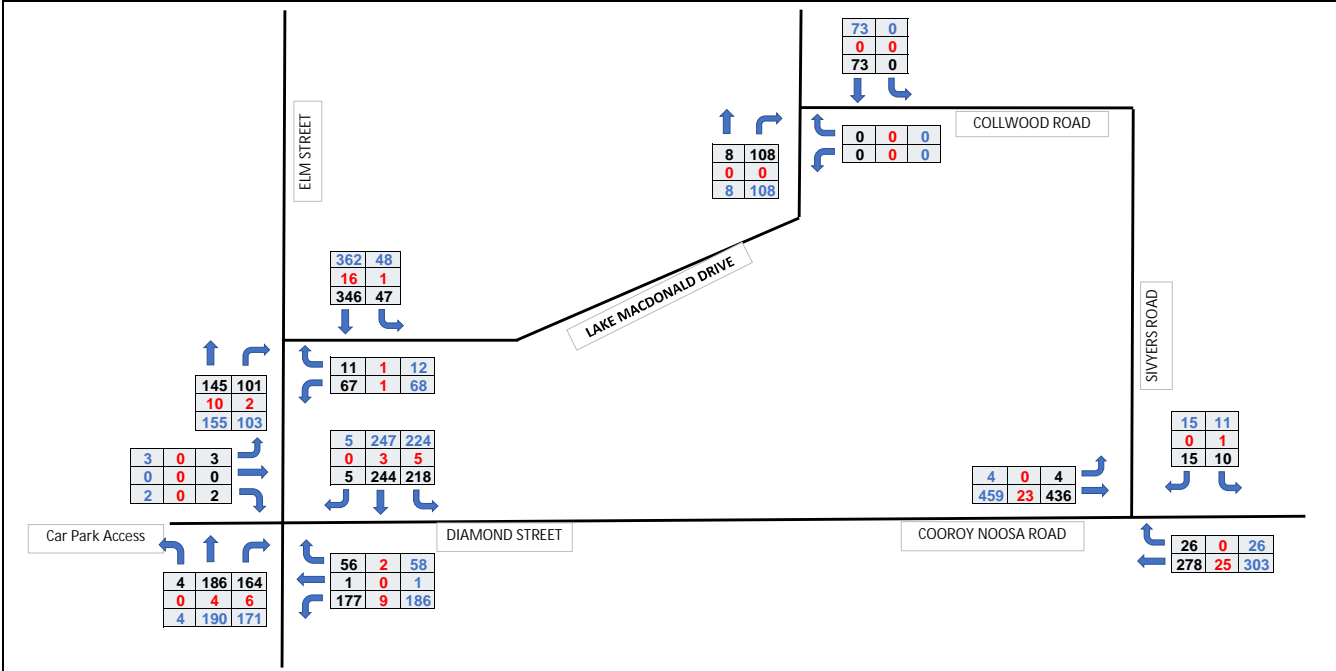
Comments

KEY

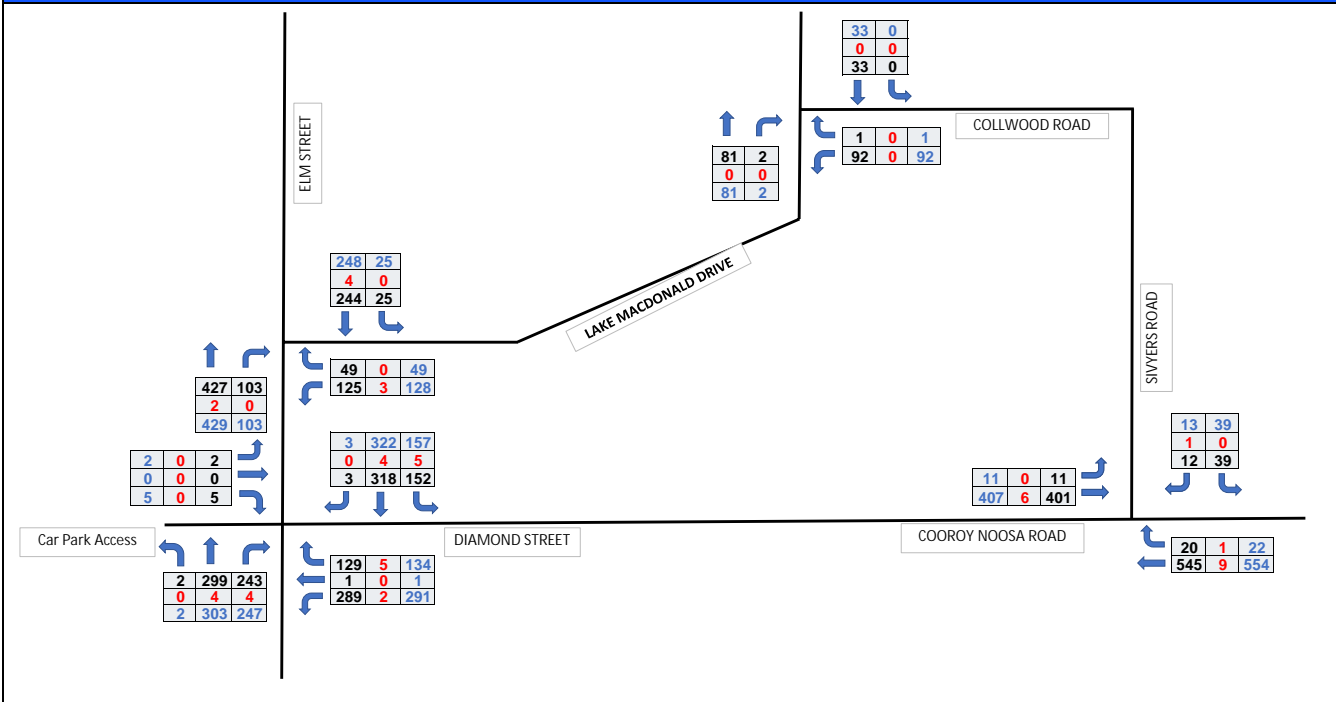
- 0 Light vehicles
- 0 Heavy vehicles
- 0 Total vehicles

PROJECT		PROJECT MANAGEMENT			 an  company	PROJECT NUMBER	
Lake Macdonald Dam Upgrade		DESIGN	CHECK	APPROVE		30035740	
		TC	AB	HS		SHEET TITLE	
CLIENT		ISSUE / REVISION				2028 Construction Traffic (HV) Traffic Demands AM and PM Peak Periods	
Seqwater		IR	DATE	DESCRIPTION	SHEET NUMBER		
		A	16/09/2024	Draft v.1 TIA	30035740_TFD_006		
		B	2/10/2024	TIA_rev A			
C	31/10/2024	TIA_rev B					


2028 FUTURE BASE WITH DEV (LV WORKER ARRIVAL) - 6AM TO 7AM TRAFFIC VOLUMES



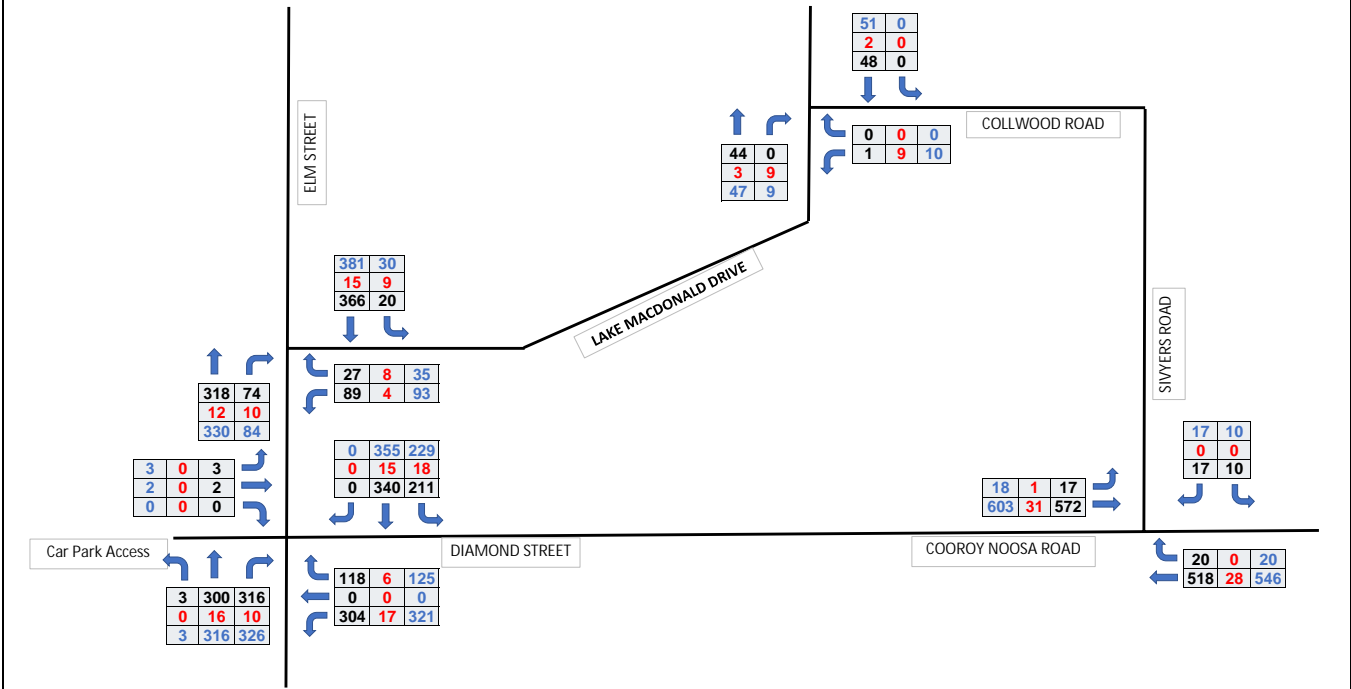
2028 FUTURE BASE WITH DEV (LV WORKER DEPARTURE) - 500PM TO 600PM TRAFFIC VOLUME



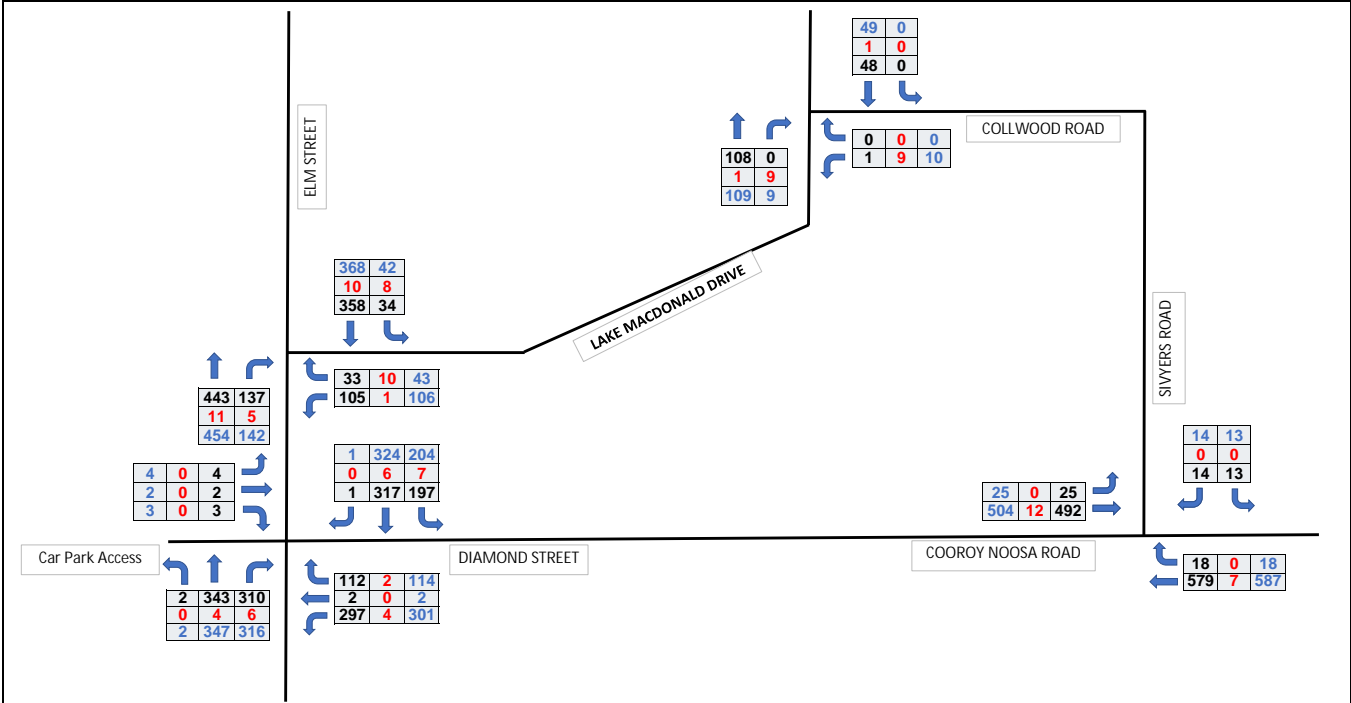
Comments	KEY		
	0	Light vehicles	
	0	Heavy vehicles	
	0	Total vehicles	


PROJECT		PROJECT MANAGEMENT				PROJECT NUMBER	
Lake Macdonald Dam Upgrade		DESIGN	CHECK	APPROVE		30035740	
		TC	AB	HS		SHEET TITLE	
CLIENT		ISSUE / REVISION				2028 Future Base with Dev (LV) Traffic Demands AM and PM Peak Periods	
Seqwater		J/R	DATE	DESCRIPTION	SHEET NUMBER		
		A	16/09/2024	Draft v.1 TIA	30035740_TFD_007		
		B	2/10/2024	TIA_rev A			
		C	31/10/2024	TIA rev B			

2028 FUTURE BASE WITH CONSTRUCTION HEAVY VEHICLE TRAFFIC - 1015AM TO 1115AM



2028 FUTURE BASE WITH CONSTRUCTION HEAVY VEHICLE TRAFFIC - 400PM TO 500PM TRAFFIC VOLUMES



Comments				KEY	
				0	Light vehicles
				0	Heavy vehicles
				0	Total vehicles
PROJECT		PROJECT MANAGEMENT		PROJECT NUMBER	
Lake Macdonald Dam Upgrade		DESIGN	CHECK	30035740	
		TC	AB	HS	
CLIENT		ISSUE / REVISION		SHEET TITLE	
Seqwater		I/R	DATE	2028 Future Base with Dev (HV) Traffic Demands AM and PM Peak Periods	
		A	16/09/2024	Draft v.1 TIA	
		B	2/10/2024	TIA rev A	
		C	31/10/2024	TIA rev B	
				SHEET NUMBER	
				30035740_TFD_008	

Appendix G

SIDRA Results including intersection layouts

G-1 2028 Base – Without Project SIDRA results

USER REPORT FOR SITE

 Project: SIDRA Models_04-11-24

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Template: Unsignalised

 Site: 101 [1A - Lake MD & Collwood Rd Priority_2028 Base_AM 6-7am (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

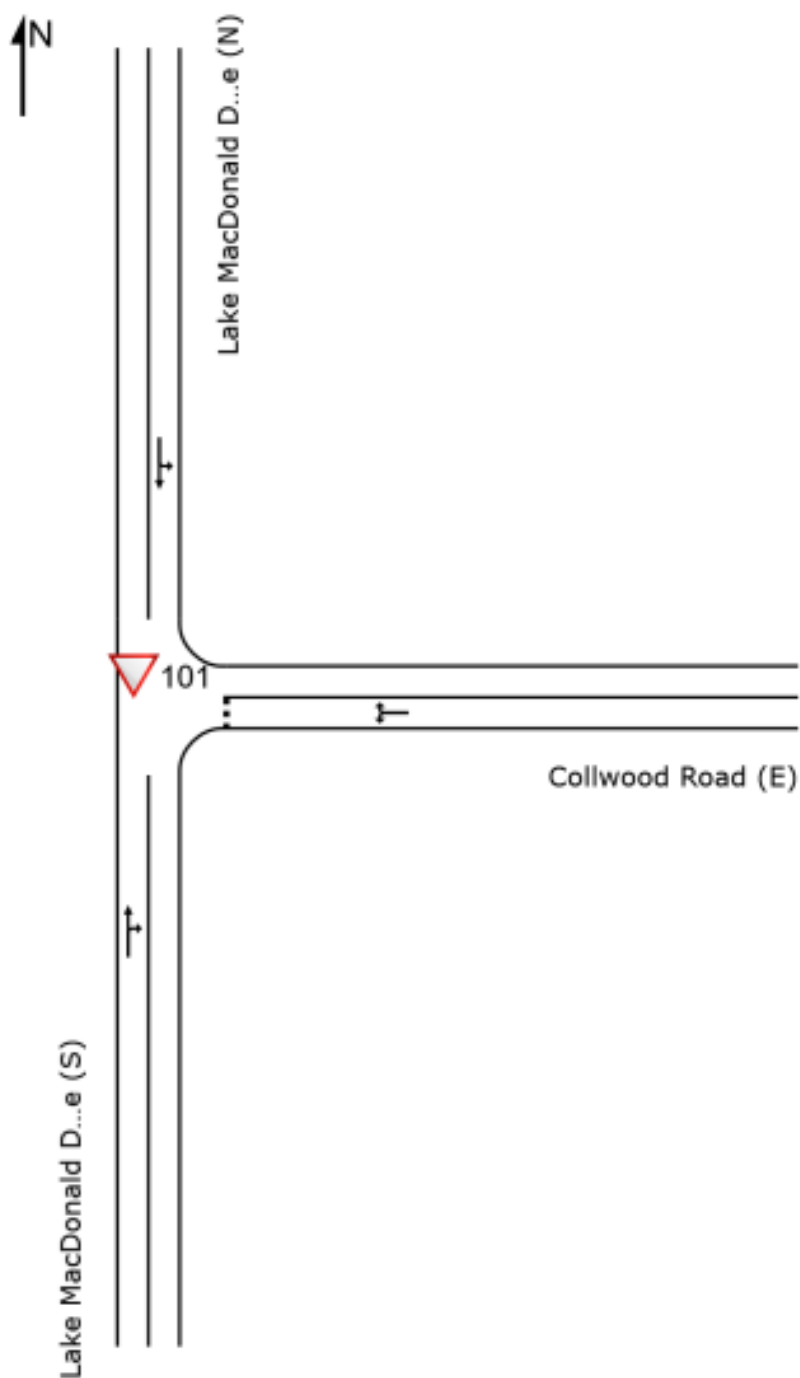
New Site

Site Category: (None)

Give-Way (Two-Way)

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	8	0.0	8	0.0	0.006	0.1	LOS A	0.0	0.1	0.09	0.18	0.09	65.4
3	R2	All MCs	3	0.0	3	0.0	0.006	5.7	LOS A	0.0	0.1	0.09	0.18	0.09	43.4
Approach			11	0.0	11	0.0	0.006	1.6	NA	0.0	0.1	0.09	0.18	0.09	59.8
East: Collwood Road (E)															
4	L2	All MCs	1	0.0	1	0.0	0.001	0.1	LOS A	0.0	0.0	0.12	0.11	0.12	41.0
6	R2	All MCs	1	0.0	1	0.0	0.001	0.8	LOS A	0.0	0.0	0.12	0.11	0.12	46.1
Approach			2	0.0	2	0.0	0.001	0.5	LOS A	0.0	0.0	0.12	0.11	0.12	43.4
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.039	7.0	LOS A	0.0	0.0	0.00	0.31	0.00	42.3
8	T1	All MCs	73	0.0	73	0.0	0.039	2.0	LOS A	0.0	0.0	0.00	0.31	0.00	75.5
Approach			74	0.0	74	0.0	0.039	2.1	NA	0.0	0.0	0.00	0.31	0.00	75.1
All Vehicles			87	0.0	87	0.0	0.039	2.0	NA	0.0	0.1	0.01	0.29	0.01	72.2

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

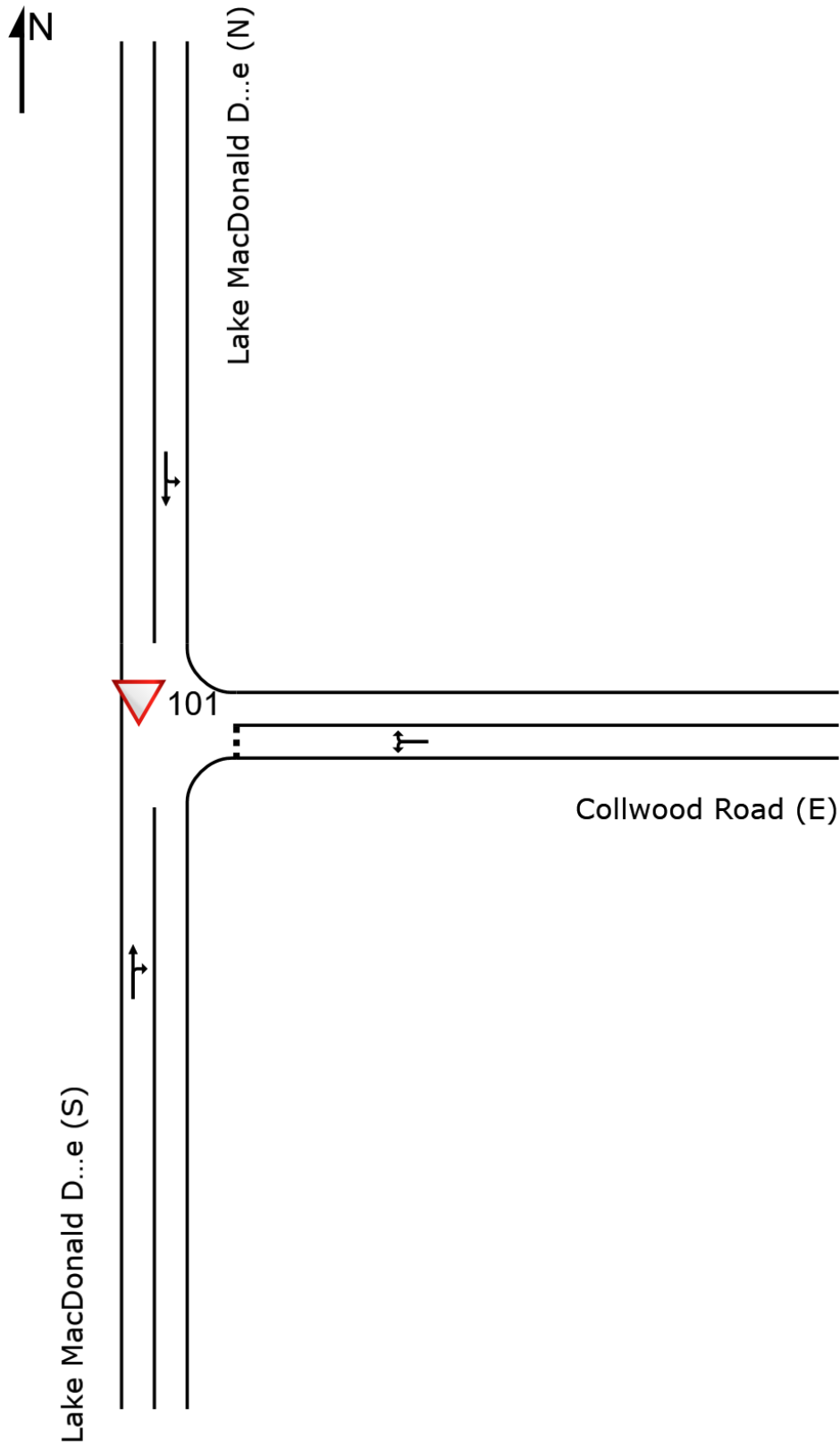
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1B - Lake MD & Collwood Rd Priority_2028 Base_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	81	0.0	81	0.0	0.043	0.0	LOS A	0.0	0.1	0.01	0.02	0.01	67.5
3	R2	All MCs	2	0.0	2	0.0	0.043	5.5	LOS A	0.0	0.1	0.01	0.02	0.01	45.0
Approach			83	0.0	83	0.0	0.043	0.1	NA	0.0	0.1	0.01	0.02	0.01	67.0
East: Collwood Road (E)															
4	L2	All MCs	1	0.0	1	0.0	0.001	0.1	LOS A	0.0	0.0	0.10	0.10	0.10	41.1
6	R2	All MCs	1	0.0	1	0.0	0.001	0.9	LOS A	0.0	0.0	0.10	0.10	0.10	46.2
Approach			2	0.0	2	0.0	0.001	0.5	LOS A	0.0	0.0	0.10	0.10	0.10	43.5
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.018	7.0	LOS A	0.0	0.0	0.00	0.32	0.00	42.3
8	T1	All MCs	33	0.0	33	0.0	0.018	2.0	LOS A	0.0	0.0	0.00	0.32	0.00	75.4
Approach			34	0.0	34	0.0	0.018	2.2	NA	0.0	0.0	0.00	0.32	0.00	74.4
All Vehicles			119	0.0	119	0.0	0.043	0.7	NA	0.0	0.1	0.01	0.10	0.01	68.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

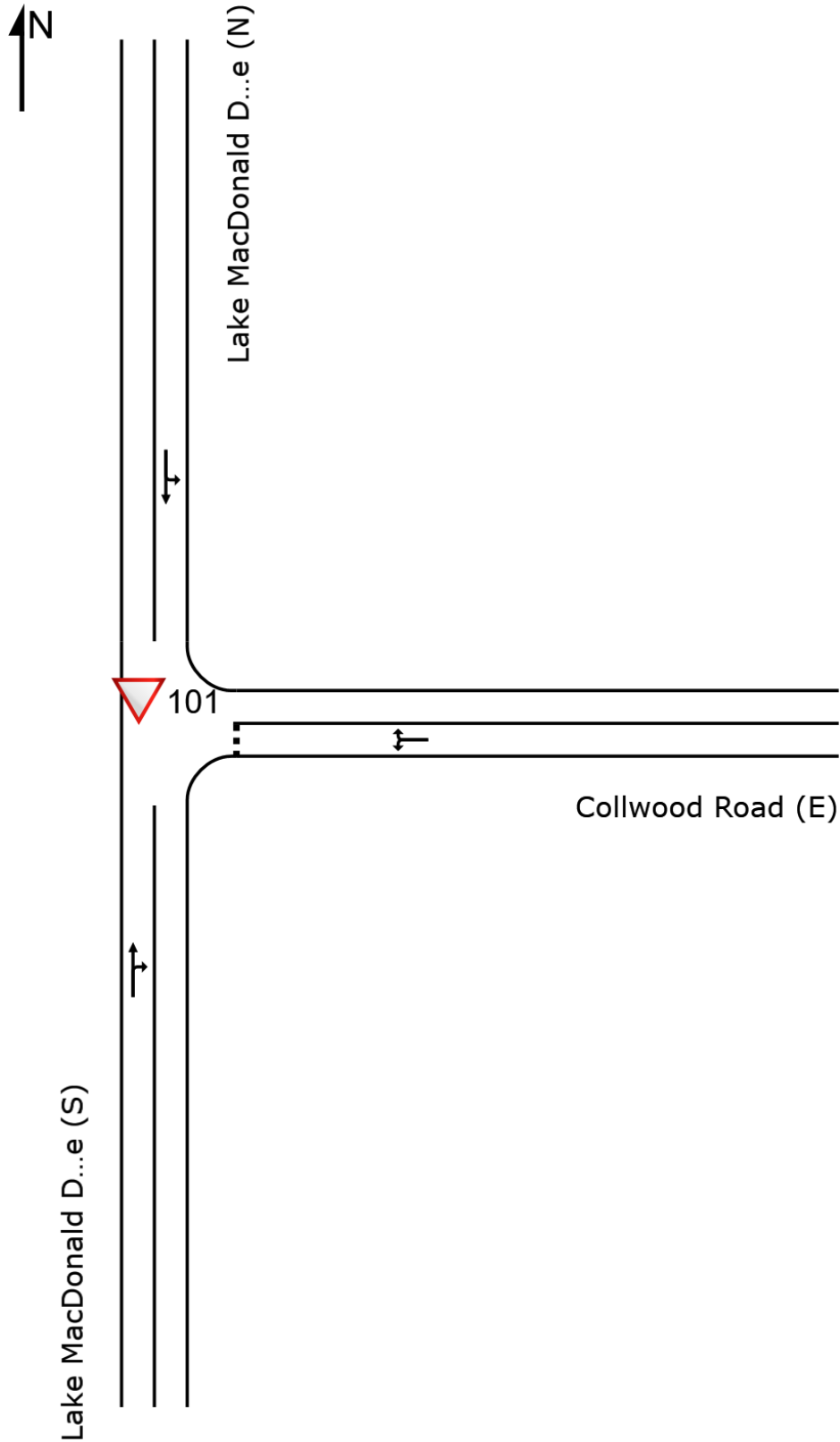
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1C - Lake MD & Collwood Rd Priority_2028 Base_AM 1015-1115am (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	47	6.4	47	6.4	0.026	0.0	LOS A	0.0	0.0	0.01	0.01	0.01	67.4
3	R2	All MCs	1	0.0	1	0.0	0.026	5.5	LOS A	0.0	0.0	0.01	0.01	0.01	45.0
Approach			48	6.3	48	6.3	0.026	0.1	NA	0.0	0.0	0.01	0.01	0.01	66.9
East: Collwood Road (E)															
4	L2	All MCs	1	0.0	1	0.0	0.001	0.1	LOS A	0.0	0.0	0.11	0.10	0.11	41.0
6	R2	All MCs	1	0.0	1	0.0	0.001	0.9	LOS A	0.0	0.0	0.11	0.10	0.11	46.2
Approach			2	0.0	2	0.0	0.001	0.5	LOS A	0.0	0.0	0.11	0.10	0.11	43.4
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.027	7.0	LOS A	0.0	0.0	0.00	0.31	0.00	57.7
8	T1	All MCs	50	4.0	50	4.0	0.027	2.0	LOS A	0.0	0.0	0.00	0.31	0.00	75.4
Approach			51	3.9	51	3.9	0.027	2.1	NA	0.0	0.0	0.00	0.31	0.00	75.1
All Vehicles			101	5.0	101	5.0	0.027	1.1	NA	0.0	0.0	0.01	0.17	0.01	70.4

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

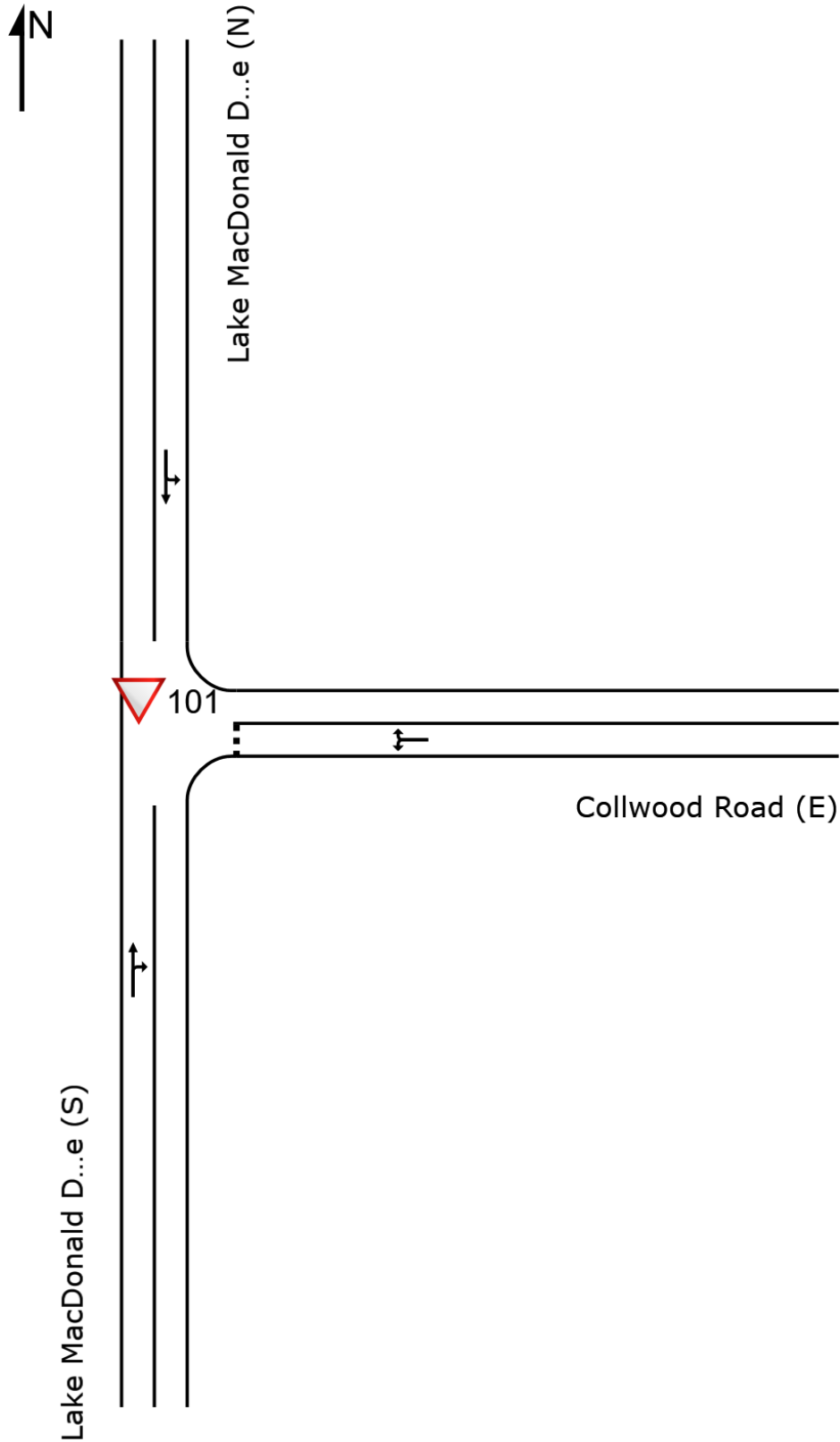
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1D - Lake MD & Collwood Rd Priority_2028 Base_PM 4-5pm (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	109	0.9	109	0.9	0.058	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	67.6
3	R2	All MCs	1	0.0	1	0.0	0.058	5.5	LOS A	0.0	0.0	0.00	0.01	0.00	45.1
Approach			110	0.9	110	0.9	0.058	0.1	NA	0.0	0.0	0.00	0.01	0.00	67.4
East: Collwood Road (E)															
4	L2	All MCs	1	0.0	1	0.0	0.001	0.1	LOS A	0.0	0.0	0.12	0.11	0.12	41.0
6	R2	All MCs	1	0.0	1	0.0	0.001	0.9	LOS A	0.0	0.0	0.12	0.11	0.12	46.1
Approach			2	0.0	2	0.0	0.001	0.5	LOS A	0.0	0.0	0.12	0.11	0.12	43.4
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.026	7.0	LOS A	0.0	0.0	0.00	0.32	0.00	57.7
8	T1	All MCs	49	2.0	49	2.0	0.026	2.0	LOS A	0.0	0.0	0.00	0.32	0.00	75.4
Approach			50	2.0	50	2.0	0.026	2.1	NA	0.0	0.0	0.00	0.32	0.00	75.2
All Vehicles			162	1.2	162	1.2	0.058	0.7	NA	0.0	0.0	0.00	0.10	0.00	69.3

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

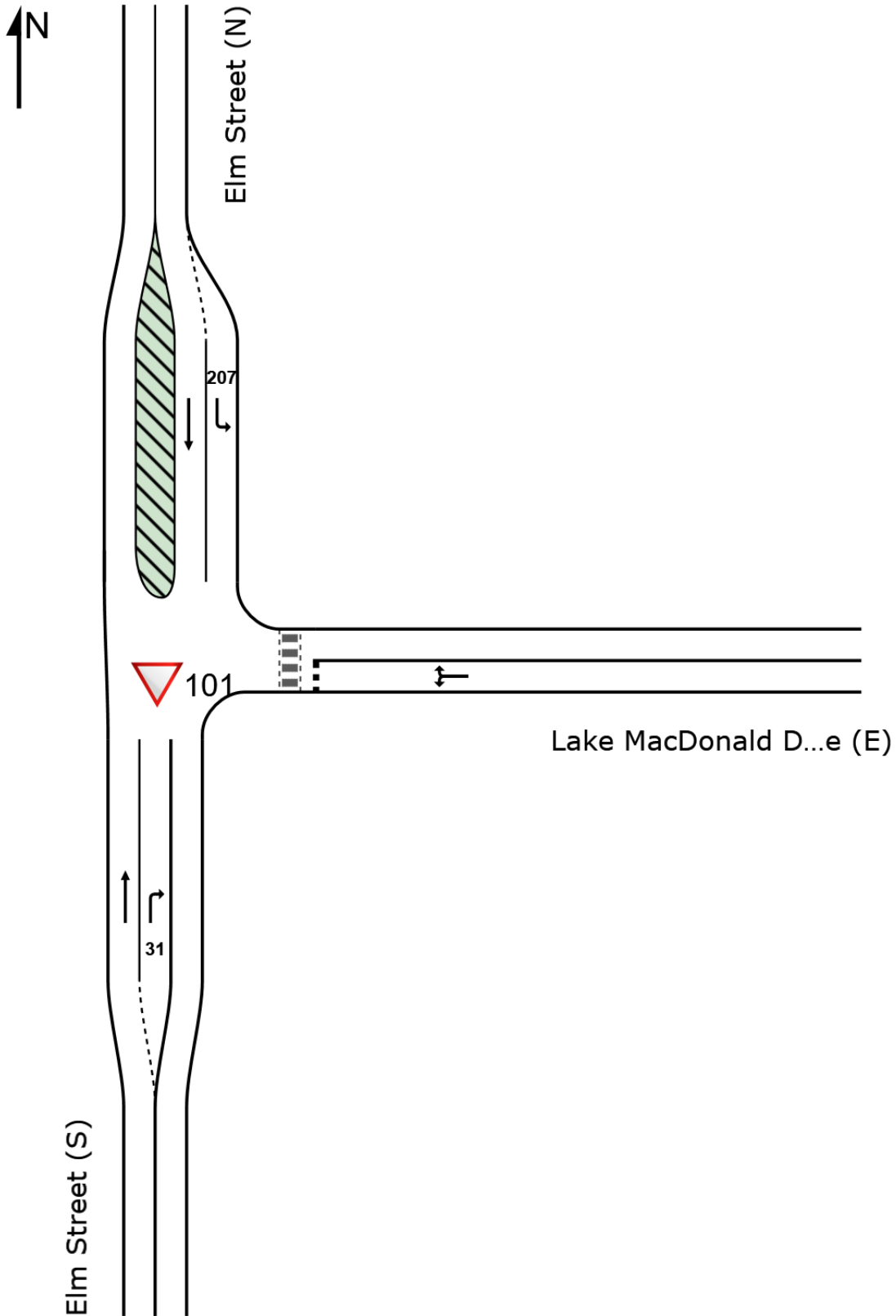
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▼ Site: 101 [2A - Elm Street & Lake MD Priority_2028 Base_AM 6-7am (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	155	6.5	155	6.5	0.084	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	25	8.0	25	8.0	0.028	7.5	LOS A	0.1	0.8	0.44	0.65	0.44	50.8
Approach			180	6.7	180	6.7	0.084	1.1	NA	0.1	0.8	0.06	0.09	0.06	58.5
East: Lake MacDonald Drive (E)															
4	L2	All MCs	68	1.5	68	1.5	0.108	7.7	LOS A	0.4	3.0	0.50	0.70	0.50	50.7
6	R2	All MCs	12	8.3	12	8.3	0.108	12.9	LOS B	0.4	3.0	0.50	0.70	0.50	50.4
Approach			80	2.5	80	2.5	0.108	8.5	LOS A	0.4	3.0	0.50	0.70	0.50	50.6
North: Elm Street (N)															
7	L2	All MCs	21	4.8	21	4.8	0.012	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	362	4.4	362	4.4	0.194	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			383	4.4	383	4.4	0.194	0.4	NA	0.0	0.0	0.00	0.03	0.00	59.5
All Vehicles			643	4.8	643	4.8	0.194	1.6	NA	0.4	3.0	0.08	0.13	0.08	57.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

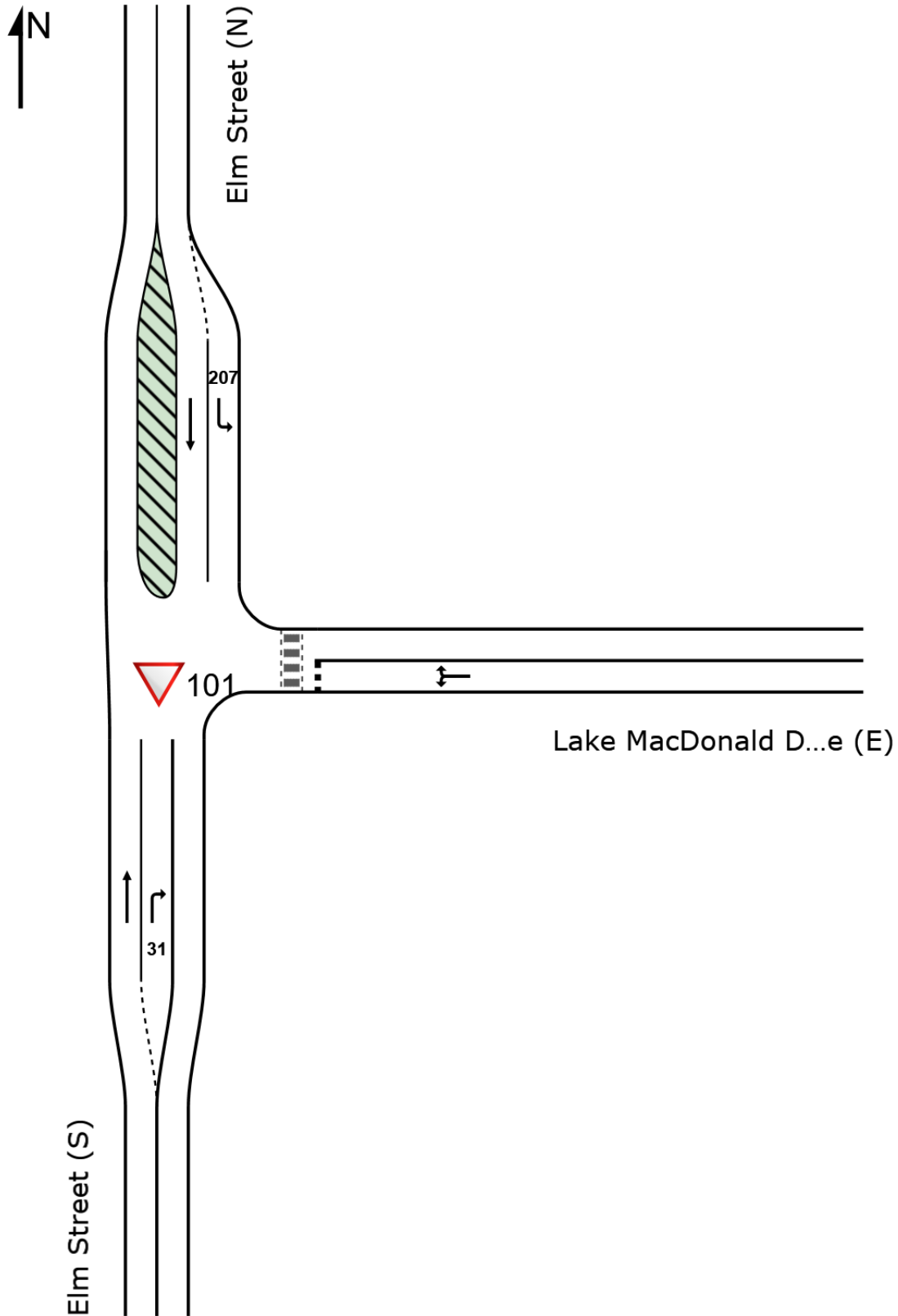
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
South: Elm Street (S)															
2	T1	All MCs	429	0.5	429	0.5	0.224	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	103	0.0	103	0.0	0.094	6.7	LOS A	0.4	2.6	0.37	0.63	0.37	51.6
Approach			532	0.4	532	0.4	0.224	1.3	NA	0.4	2.6	0.07	0.12	0.07	58.1
East: Lake MacDonald Drive (E)															
4	L2	All MCs	59	5.1	59	5.1	0.142	7.0	LOS A	0.6	4.0	0.55	0.68	0.55	49.5
6	R2	All MCs	26	0.0	26	0.0	0.142	17.0	LOS C	0.6	4.0	0.55	0.68	0.55	49.7
Approach			85	3.5	85	3.5	0.142	10.0	LOS B	0.6	4.0	0.55	0.68	0.55	49.5
North: Elm Street (N)															
7	L2	All MCs	25	0.0	25	0.0	0.014	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	248	1.6	248	1.6	0.131	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			273	1.5	273	1.5	0.131	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
All Vehicles			890	1.0	890	1.0	0.224	1.9	NA	0.6	4.0	0.10	0.15	0.10	57.5

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

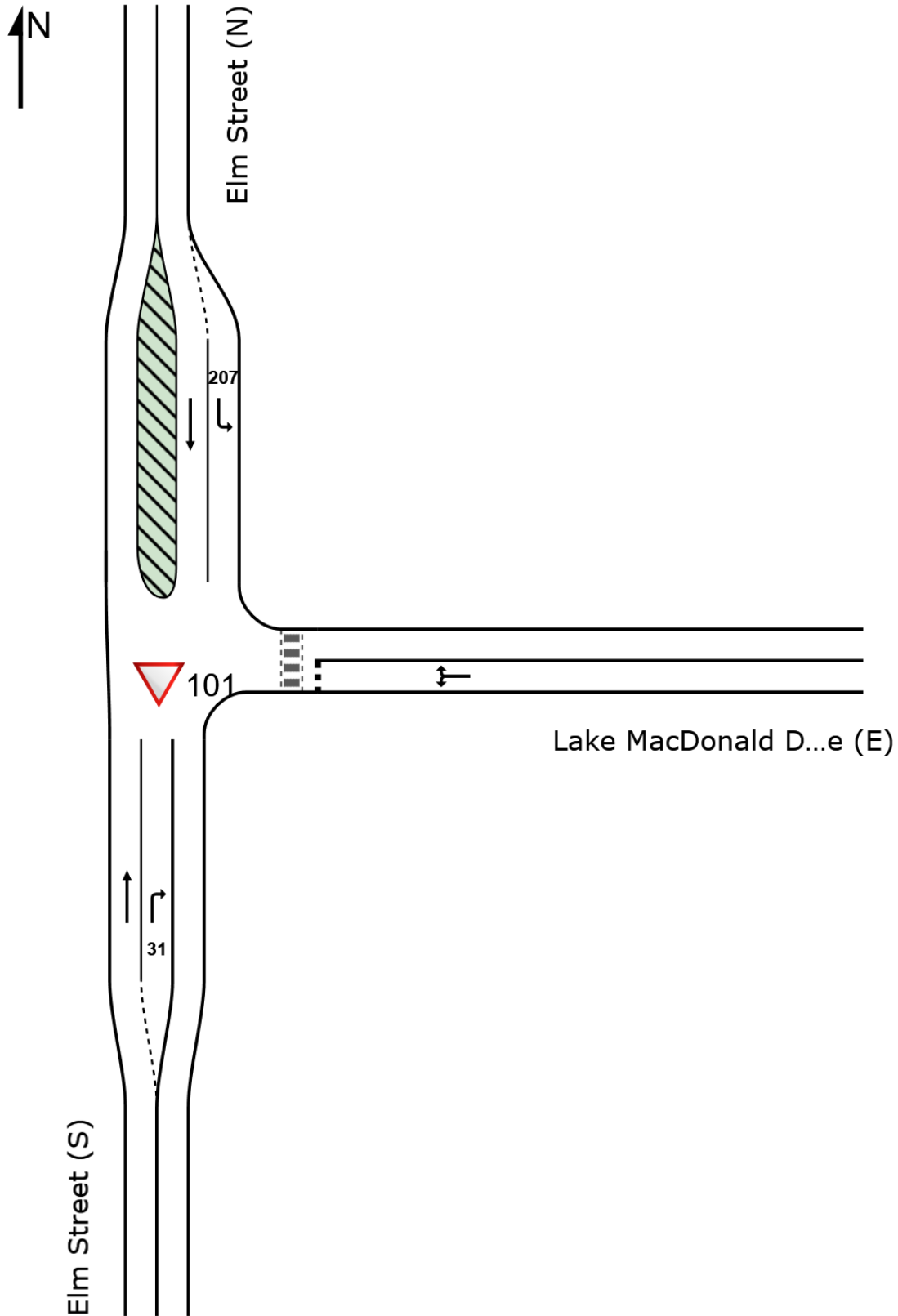
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▼ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base_AM 1015-1115am (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	330	3.6	330	3.6	0.176	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	83	10.8	83	10.8	0.097	8.0	LOS A	0.4	2.9	0.47	0.70	0.47	50.4
Approach			413	5.1	413	5.1	0.176	1.6	NA	0.4	2.9	0.09	0.14	0.09	57.7
East: Lake MacDonald Drive (E)															
4	L2	All MCs	92	3.3	92	3.3	0.199	8.1	LOS A	0.8	5.7	0.59	0.76	0.59	49.4
6	R2	All MCs	27	0.0	27	0.0	0.199	17.9	LOS C	0.8	5.7	0.59	0.76	0.59	49.5
Approach			119	2.5	119	2.5	0.199	10.3	LOS B	0.8	5.7	0.59	0.76	0.59	49.4
North: Elm Street (N)															
7	L2	All MCs	21	4.8	21	4.8	0.012	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.7
8	T1	All MCs	381	3.9	381	3.9	0.204	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			402	4.0	402	4.0	0.204	0.3	NA	0.0	0.0	0.00	0.03	0.00	59.5
All Vehicles			934	4.3	934	4.3	0.204	2.2	NA	0.8	5.7	0.12	0.17	0.12	57.2

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

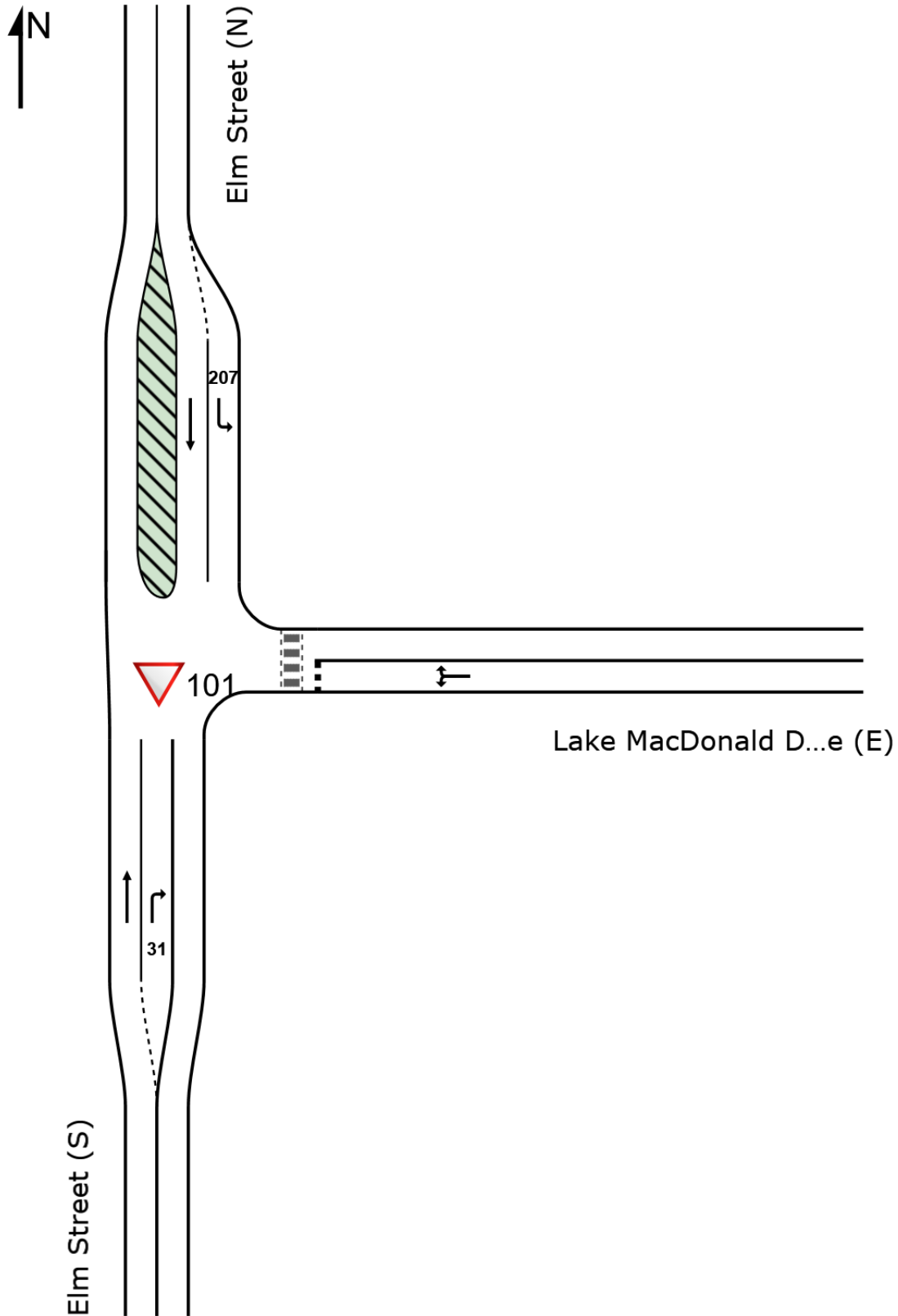
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▼ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base_PM 4-5pm (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
2	T1	All MCs	454	2.4	454	2.4	0.240	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	141	2.8	141	2.8	0.154	7.7	LOS A	0.6	4.4	0.48	0.71	0.48	50.8
Approach			595	2.5	595	2.5	0.240	1.9	NA	0.6	4.4	0.11	0.17	0.11	57.5
East: Lake MacDonald Drive (E)															
4	L2	All MCs	105	0.0	105	0.0	0.300	8.6	LOS A	1.3	9.5	0.68	0.83	0.80	47.4
6	R2	All MCs	35	5.7	35	5.7	0.300	28.4	LOS D	1.3	9.5	0.68	0.83	0.80	47.2
Approach			140	1.4	140	1.4	0.300	13.6	LOS B	1.3	9.5	0.68	0.83	0.80	47.4
North: Elm Street (N)															
7	L2	All MCs	34	0.0	34	0.0	0.019	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	368	2.7	368	2.7	0.195	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			402	2.5	402	2.5	0.195	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
All Vehicles			1137	2.4	1137	2.4	0.300	2.8	NA	1.3	9.5	0.14	0.21	0.16	56.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

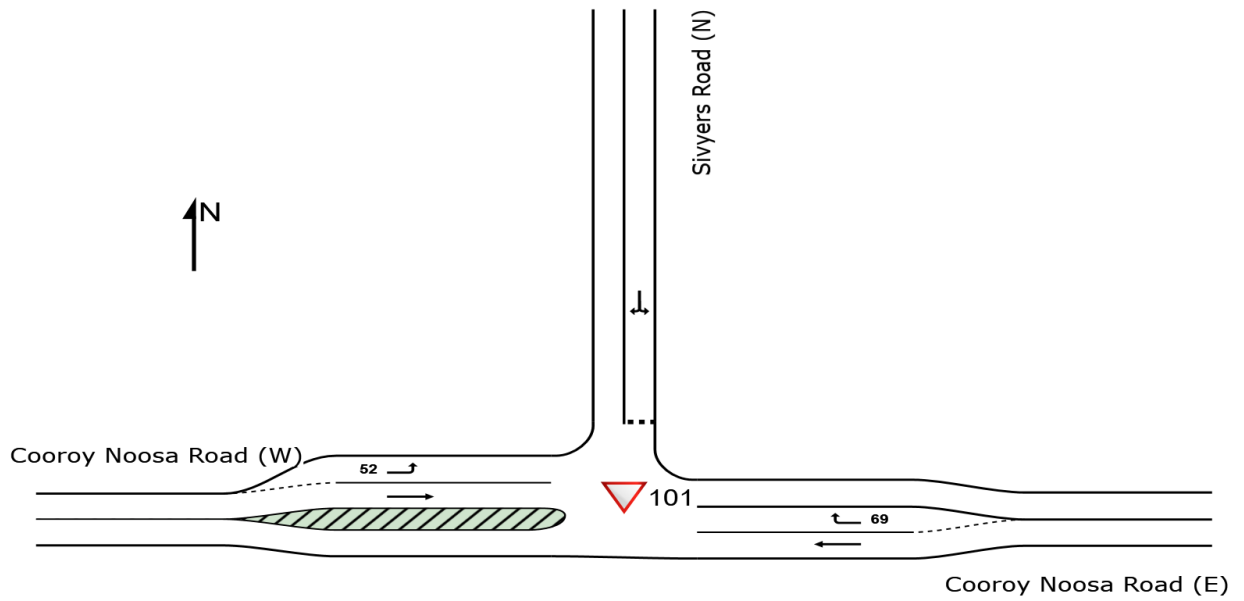
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3A - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base_AM 6-7am (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	303	8.3	303	8.3	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	1	0.0	1	0.0	0.001	8.7	LOS A	0.0	0.0	0.47	0.60	0.47	59.6
Approach			304	8.2	304	8.2	0.162	0.1	NA	0.0	0.0	0.00	0.00	0.00	79.8
North: Sivyers Road (N)															
7	L2	All MCs	11	9.1	11	9.1	0.058	9.1	LOS A	0.2	1.4	0.60	0.80	0.60	53.6
9	R2	All MCs	15	0.0	15	0.0	0.058	15.2	LOS C	0.2	1.4	0.60	0.80	0.60	55.8
Approach			26	3.8	26	3.8	0.058	12.6	LOS B	0.2	1.4	0.60	0.80	0.60	54.8
West: Cooroy Noosa Road (W)															
10	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	459	5.0	459	5.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			463	5.0	463	5.0	0.242	0.1	NA	0.0	0.0	0.00	0.01	0.00	79.7
All Vehicles			793	6.2	793	6.2	0.242	0.5	NA	0.2	1.4	0.02	0.03	0.02	78.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

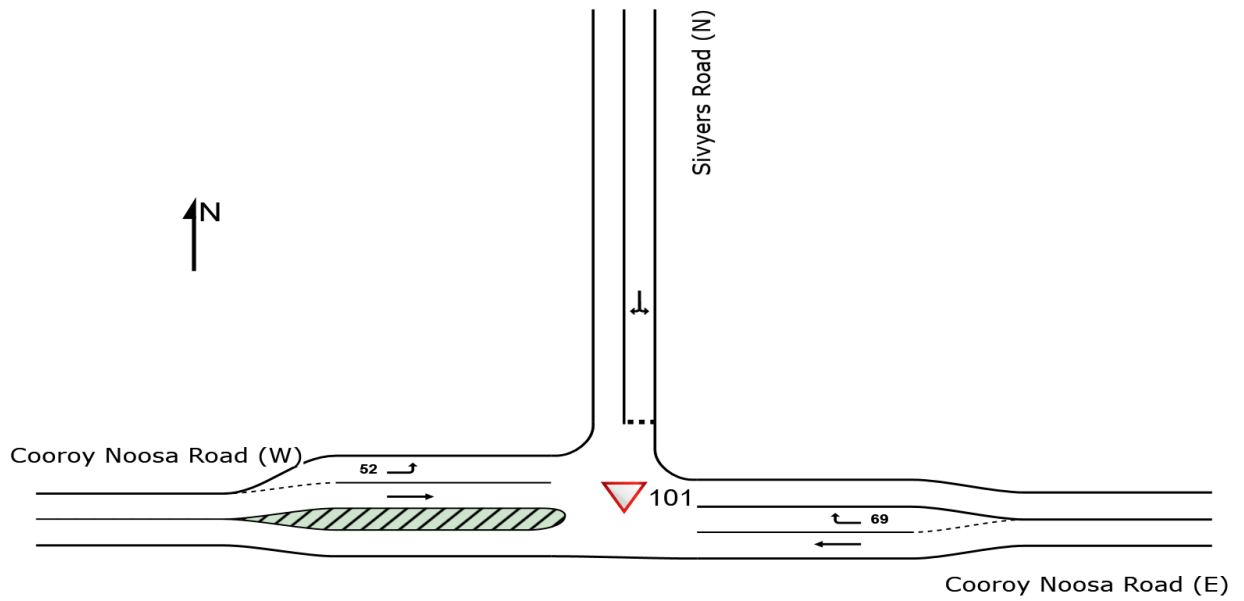
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Cooroy Noosa Road (E)															
5	T1	All MCs	554	1.6	554	1.6	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	21	4.8	21	4.8	0.024	8.8	LOS A	0.1	0.6	0.45	0.67	0.45	58.2
Approach			575	1.7	575	1.7	0.284	0.4	NA	0.1	0.6	0.02	0.02	0.02	78.7
North: Sivyers Road (N)															
7	L2	All MCs	13	0.0	13	0.0	0.079	8.2	LOS A	0.2	1.8	0.66	0.82	0.66	53.1
9	R2	All MCs	13	7.7	13	7.7	0.079	23.6	LOS C	0.2	1.8	0.66	0.82	0.66	51.5
Approach			26	3.8	26	3.8	0.079	15.9	LOS C	0.2	1.8	0.66	0.82	0.66	52.3
West: Cooroy Noosa Road (W)															
10	L2	All MCs	11	0.0	11	0.0	0.006	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	407	1.5	407	1.5	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			418	1.4	418	1.4	0.210	0.2	NA	0.0	0.0	0.00	0.02	0.00	79.4
All Vehicles			1019	1.7	1019	1.7	0.284	0.7	NA	0.2	1.8	0.03	0.04	0.03	78.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

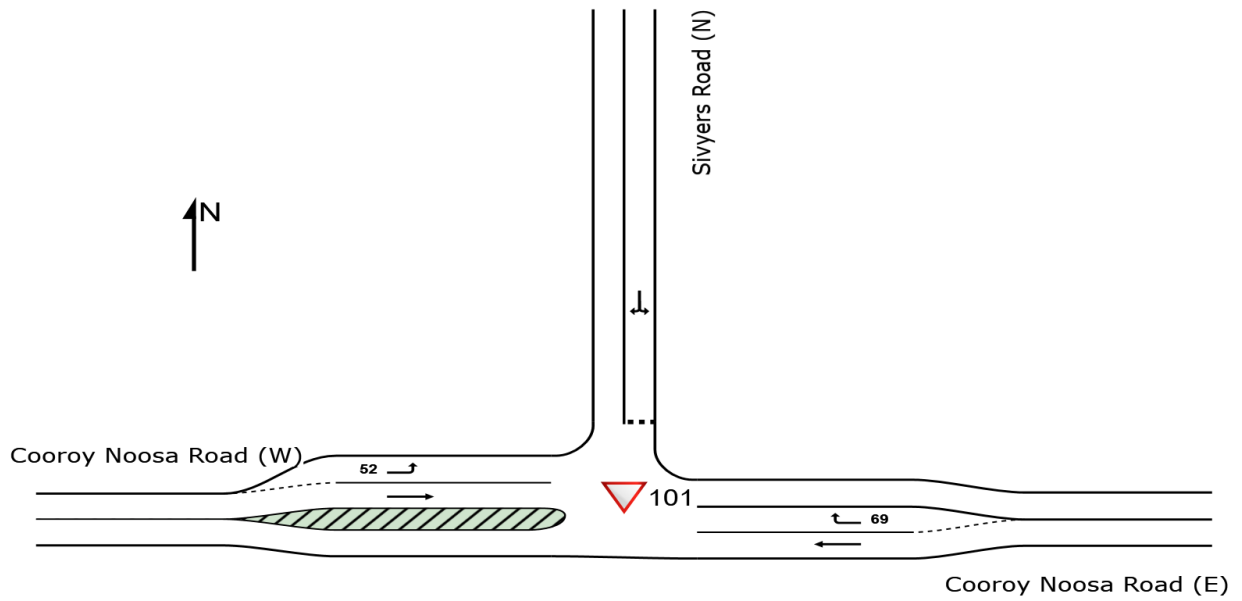
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base_AM 1015-1115am (HV hr)
(Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	545	5.0	545	5.0	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	20	0.0	20	0.0	0.029	10.2	LOS B	0.1	0.7	0.55	0.75	0.55	58.2
Approach			565	4.8	565	4.8	0.286	0.4	NA	0.1	0.7	0.02	0.03	0.02	78.8
North: Sivyers Road (N)															
7	L2	All MCs	10	0.0	10	0.0	0.120	9.9	LOS A	0.4	2.7	0.80	0.92	0.80	49.0
9	R2	All MCs	17	0.0	17	0.0	0.120	28.5	LOS D	0.4	2.7	0.80	0.92	0.80	49.0
Approach			27	0.0	27	0.0	0.120	21.6	LOS C	0.4	2.7	0.80	0.92	0.80	49.0
West: Cooroy Noosa Road (W)															
10	L2	All MCs	18	5.6	18	5.6	0.010	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	62.8
11	T1	All MCs	602	5.0	602	5.0	0.317	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			620	5.0	620	5.0	0.317	0.3	NA	0.0	0.0	0.00	0.02	0.00	79.1
All Vehicles			1212	4.8	1212	4.8	0.317	0.8	NA	0.4	2.7	0.03	0.04	0.03	77.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

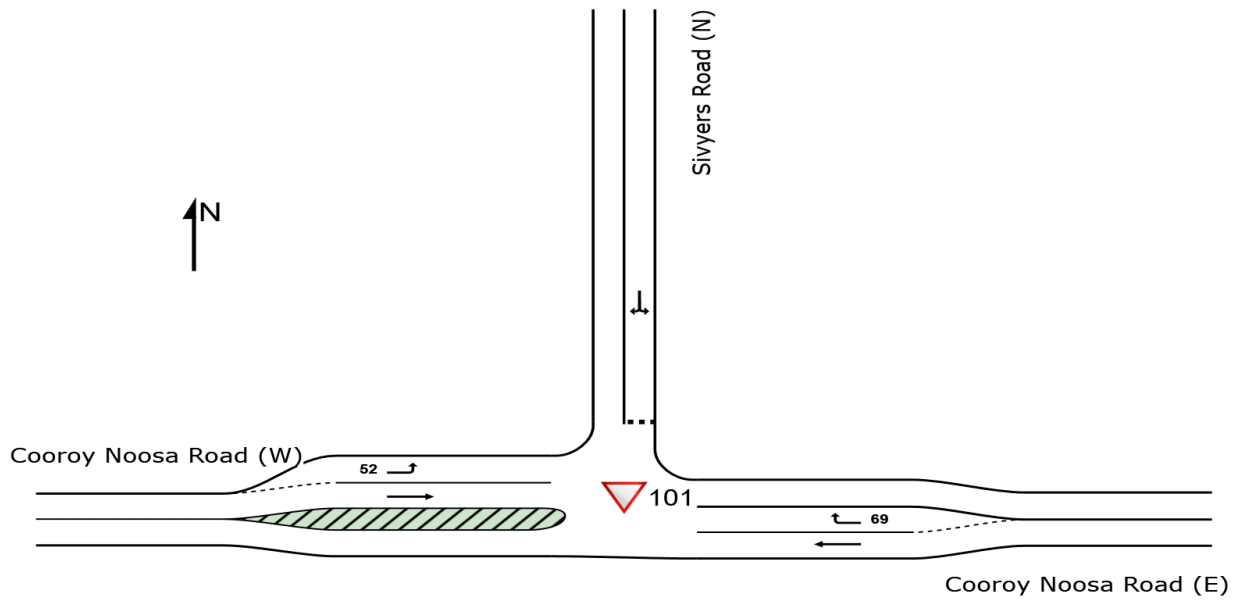
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base_AM 4-5pm (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	585	1.0	585	1.0	0.299	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	18	0.0	18	0.0	0.023	9.3	LOS A	0.1	0.6	0.50	0.70	0.50	59.0
Approach			603	1.0	603	1.0	0.299	0.3	NA	0.1	0.6	0.02	0.02	0.02	79.0
North: Sivyers Road (N)															
7	L2	All MCs	13	0.0	13	0.0	0.091	8.9	LOS A	0.3	2.1	0.72	0.89	0.72	52.0
9	R2	All MCs	14	0.0	14	0.0	0.091	25.1	LOS D	0.3	2.1	0.72	0.89	0.72	52.0
Approach			27	0.0	27	0.0	0.091	17.3	LOS C	0.3	2.1	0.72	0.89	0.72	52.0
West: Cooroy Noosa Road (W)															
10	L2	All MCs	25	0.0	25	0.0	0.013	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	503	2.2	503	2.2	0.260	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			528	2.1	528	2.1	0.260	0.4	NA	0.0	0.0	0.00	0.03	0.00	78.9
All Vehicles			1158	1.5	1158	1.5	0.299	0.7	NA	0.3	2.1	0.02	0.05	0.02	78.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

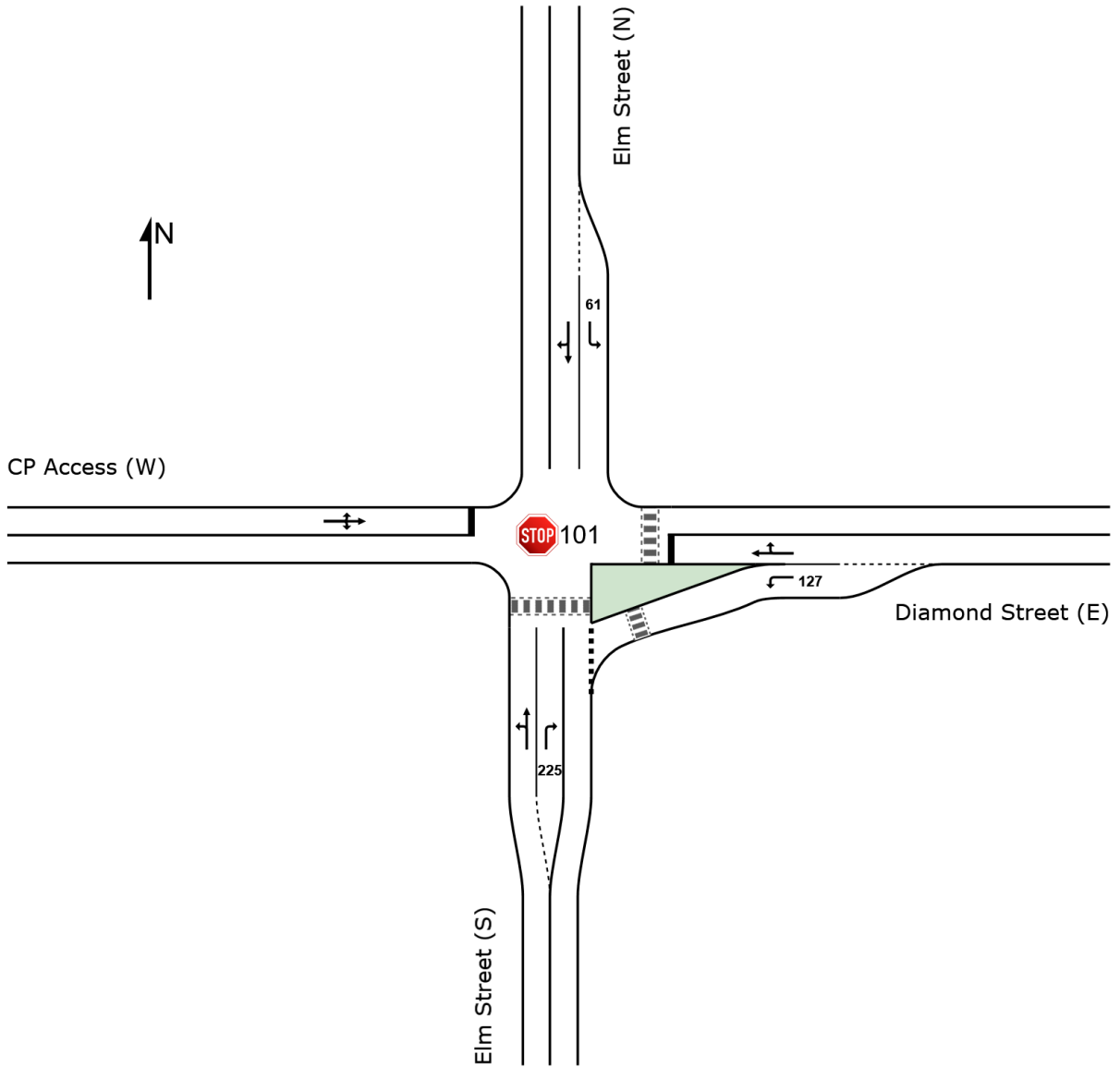
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base_AM 6-7am (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	4	0.0	4	0.0	0.061	4.6	LOS A	0.0	0.0	0.00	0.02	0.00	27.5
2	T1	All MCs	112	3.6	112	3.6	0.061	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	49.9
3	R2	All MCs	170	3.5	170	3.5	0.198	7.2	LOS A	0.8	5.9	0.52	0.70	0.52	44.4
Approach			286	3.5	286	3.5	0.198	4.4	NA	0.8	5.9	0.31	0.42	0.31	46.1
East: Diamond Street (E)															
4	L2	All MCs	186	4.8	186	4.8	0.148	5.6	LOS A	0.6	4.5	0.36	0.55	0.36	45.2
5	T1	All MCs	1	0.0	1	0.0	0.150	15.8	LOS C	0.5	3.8	0.64	1.00	0.64	34.1
6	R2	All MCs	58	3.4	58	3.4	0.150	14.9	LOS B	0.5	3.8	0.64	1.00	0.64	40.7
Approach			245	4.5	245	4.5	0.150	7.8	LOS A	0.6	4.5	0.43	0.66	0.43	44.1
North: Elm Street (N)															
7	L2	All MCs	223	2.2	223	2.2	0.121	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	247	1.2	247	1.2	0.130	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.9
9	R2	All MCs	5	0.0	5	0.0	0.130	4.6	LOS A	0.0	0.2	0.01	0.01	0.01	43.3
Approach			475	1.7	475	1.7	0.130	2.2	NA	0.0	0.2	0.01	0.25	0.01	47.8
West: CP Access (W)															
10	L2	All MCs	3	0.0	3	0.0	0.010	4.4	LOS A	0.0	0.2	0.42	0.79	0.42	35.0
11	T1	All MCs	1	0.0	1	0.0	0.010	14.0	LOS B	0.0	0.2	0.42	0.79	0.42	36.2
12	R2	All MCs	2	0.0	2	0.0	0.010	8.8	LOS A	0.0	0.2	0.42	0.79	0.42	36.1
Approach			6	0.0	6	0.0	0.010	7.5	LOS A	0.0	0.2	0.42	0.79	0.42	35.6
All Vehicles			1012	2.9	1012	2.9	0.198	4.2	NA	0.8	5.9	0.20	0.40	0.20	46.3

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

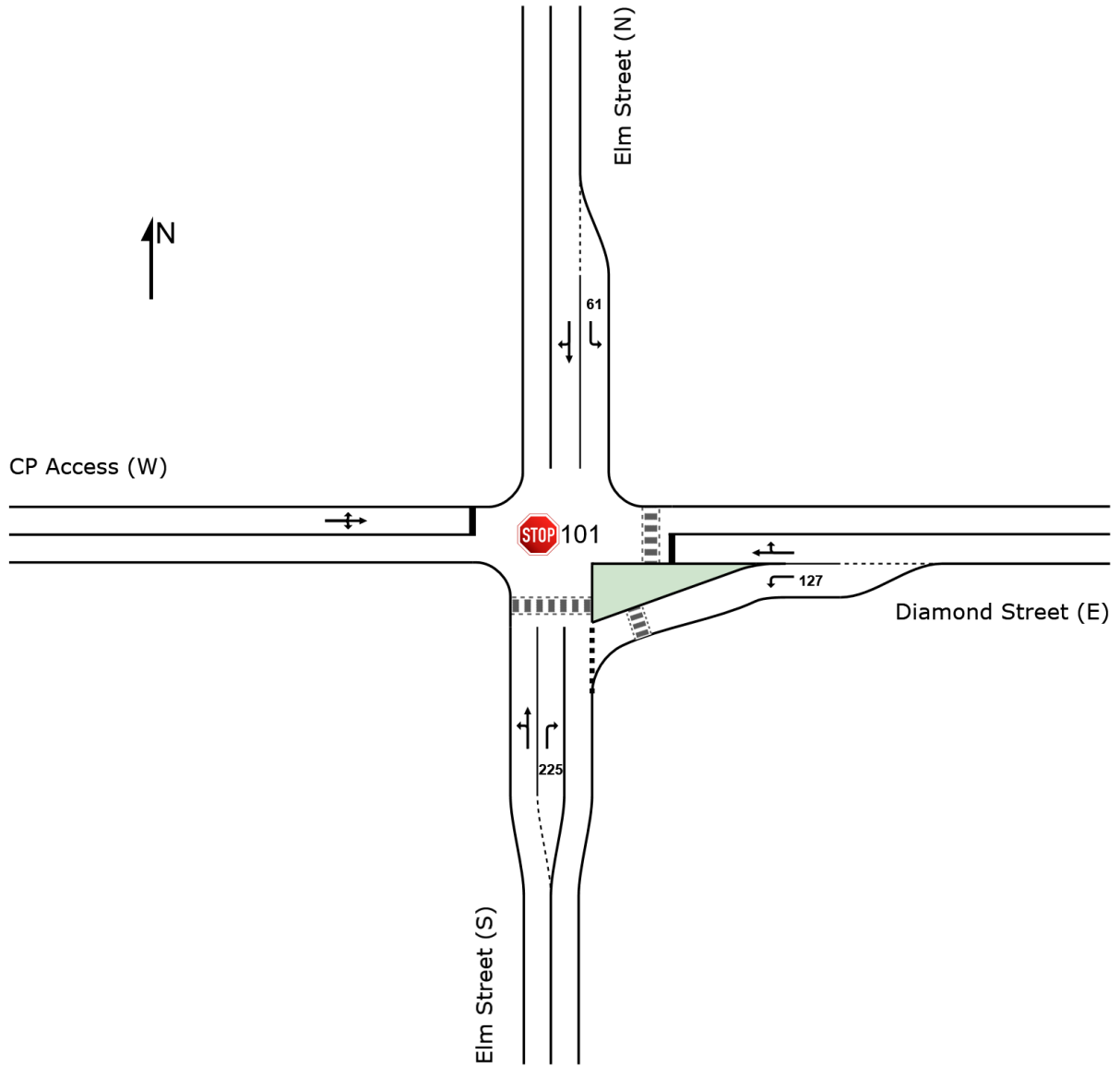
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	2	0.0	2	0.0	0.159	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	27.5
2	T1	All MCs	303	1.3	303	1.3	0.159	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
3	R2	All MCs	247	1.6	247	1.6	0.265	6.9	LOS A	1.2	8.3	0.51	0.68	0.51	44.6
Approach			552	1.4	552	1.4	0.265	3.1	NA	1.2	8.3	0.23	0.31	0.23	47.2
East: Diamond Street (E)															
4	L2	All MCs	291	0.7	291	0.7	0.227	5.6	LOS A	1.0	7.2	0.39	0.57	0.39	45.2
5	T1	All MCs	1	0.0	1	0.0	0.504	27.9	LOS D	2.3	16.7	0.84	1.13	1.26	28.9
6	R2	All MCs	134	3.7	134	3.7	0.504	26.0	LOS D	2.3	16.7	0.84	1.13	1.26	36.1
Approach			426	1.6	426	1.6	0.504	12.1	LOS B	2.3	16.7	0.53	0.75	0.66	42.0
North: Elm Street (N)															
7	L2	All MCs	157	3.2	157	3.2	0.086	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	252	1.6	252	1.6	0.132	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.9
9	R2	All MCs	3	0.0	3	0.0	0.132	5.0	LOS A	0.0	0.2	0.01	0.01	0.01	43.3
Approach			412	2.2	412	2.2	0.132	1.8	NA	0.0	0.2	0.01	0.21	0.01	48.2
West: CP Access (W)															
10	L2	All MCs	2	0.0	2	0.0	0.022	5.3	LOS A	0.1	0.5	0.63	0.89	0.63	32.4
11	T1	All MCs	1	0.0	1	0.0	0.022	19.9	LOS C	0.1	0.5	0.63	0.89	0.63	33.8
12	R2	All MCs	5	0.0	5	0.0	0.022	13.0	LOS B	0.1	0.5	0.63	0.89	0.63	33.7
Approach			8	0.0	8	0.0	0.022	11.9	LOS B	0.1	0.5	0.63	0.89	0.63	33.4
All Vehicles			1398	1.7	1398	1.7	0.504	5.5	NA	2.3	16.7	0.26	0.41	0.30	45.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

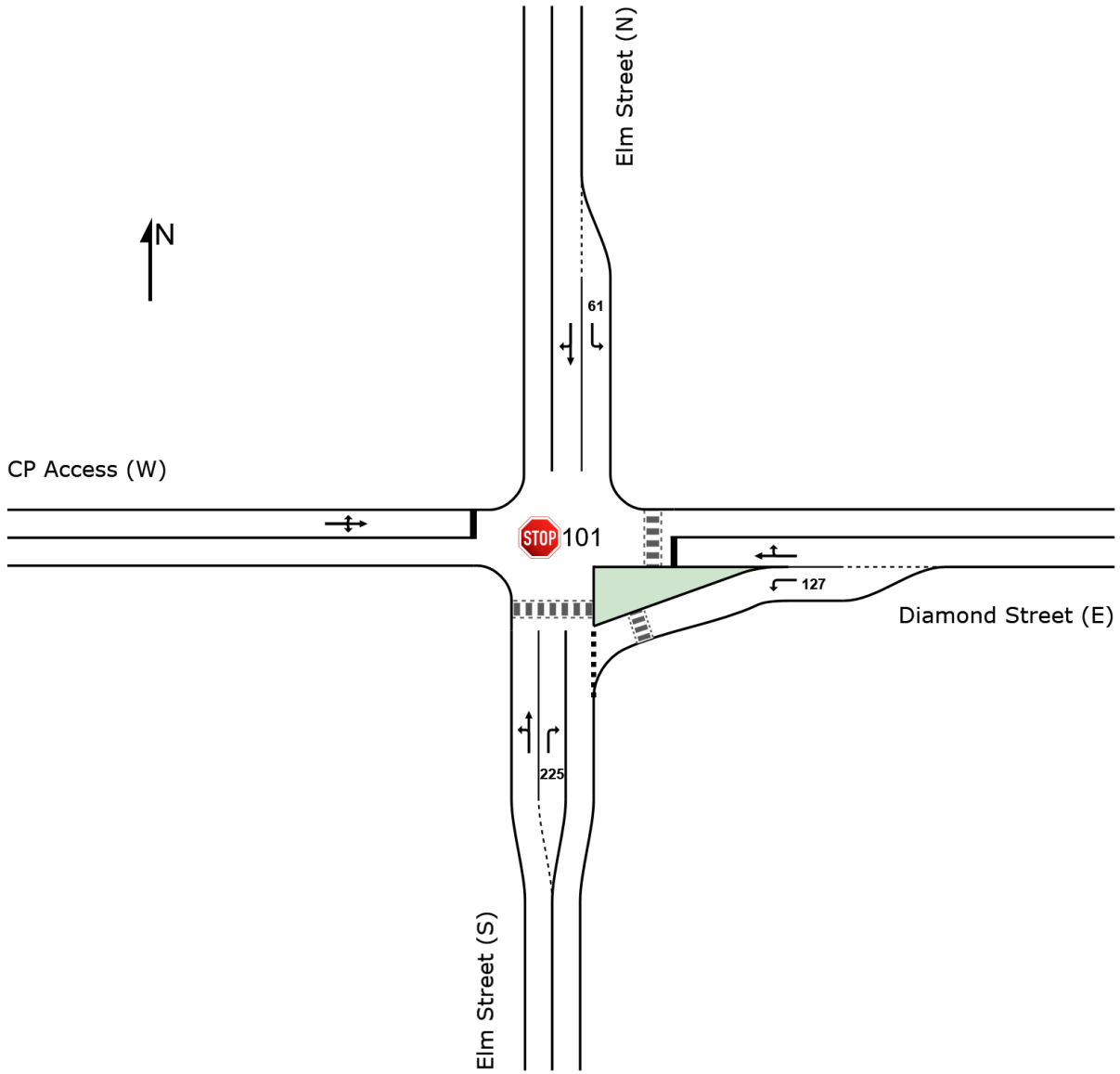
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

STOP Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base_AM 1015-1115 (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	3	0.0	3	0.0	0.170	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	27.5
2	T1	All MCs	316	5.1	316	5.1	0.170	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
3	R2	All MCs	326	3.1	326	3.1	0.445	10.0	LOS B	2.6	18.9	0.65	0.91	0.92	42.9
Approach			645	4.0	645	4.0	0.445	5.1	NA	2.6	18.9	0.33	0.46	0.46	45.9
East: Diamond Street (E)															
4	L2	All MCs	321	5.3	321	5.3	0.290	6.4	LOS A	1.3	9.5	0.48	0.63	0.48	44.9
5	T1	All MCs	1	0.0	1	0.0	0.737	52.3	LOS F	3.6	26.2	0.95	1.26	1.84	21.8
6	R2	All MCs	123	4.1	123	4.1	0.737	49.2	LOS E	3.6	26.2	0.95	1.26	1.84	29.1
Approach			445	4.9	445	4.9	0.737	18.3	LOS C	3.6	26.2	0.61	0.81	0.86	39.3
North: Elm Street (N)															
7	L2	All MCs	228	7.5	228	7.5	0.129	4.7	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	355	4.2	355	4.2	0.186	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	50.0
9	R2	All MCs	1	0.0	1	0.0	0.186	4.7	LOS A	0.0	0.1	0.00	0.00	0.00	43.4
Approach			584	5.5	584	5.5	0.186	1.8	NA	0.0	0.1	0.00	0.21	0.00	48.1
West: CP Access (W)															
10	L2	All MCs	3	0.0	3	0.0	0.023	5.4	LOS A	0.1	0.5	0.73	0.84	0.73	30.0
11	T1	All MCs	2	0.0	2	0.0	0.023	33.0	LOS D	0.1	0.5	0.73	0.84	0.73	31.4
12	R2	All MCs	1	0.0	1	0.0	0.023	17.8	LOS C	0.1	0.5	0.73	0.84	0.73	31.4
Approach			6	0.0	6	0.0	0.023	16.7	LOS C	0.1	0.5	0.73	0.84	0.73	30.7
All Vehicles			1680	4.8	1680	4.8	0.737	7.5	NA	3.6	26.2	0.29	0.47	0.41	44.5

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

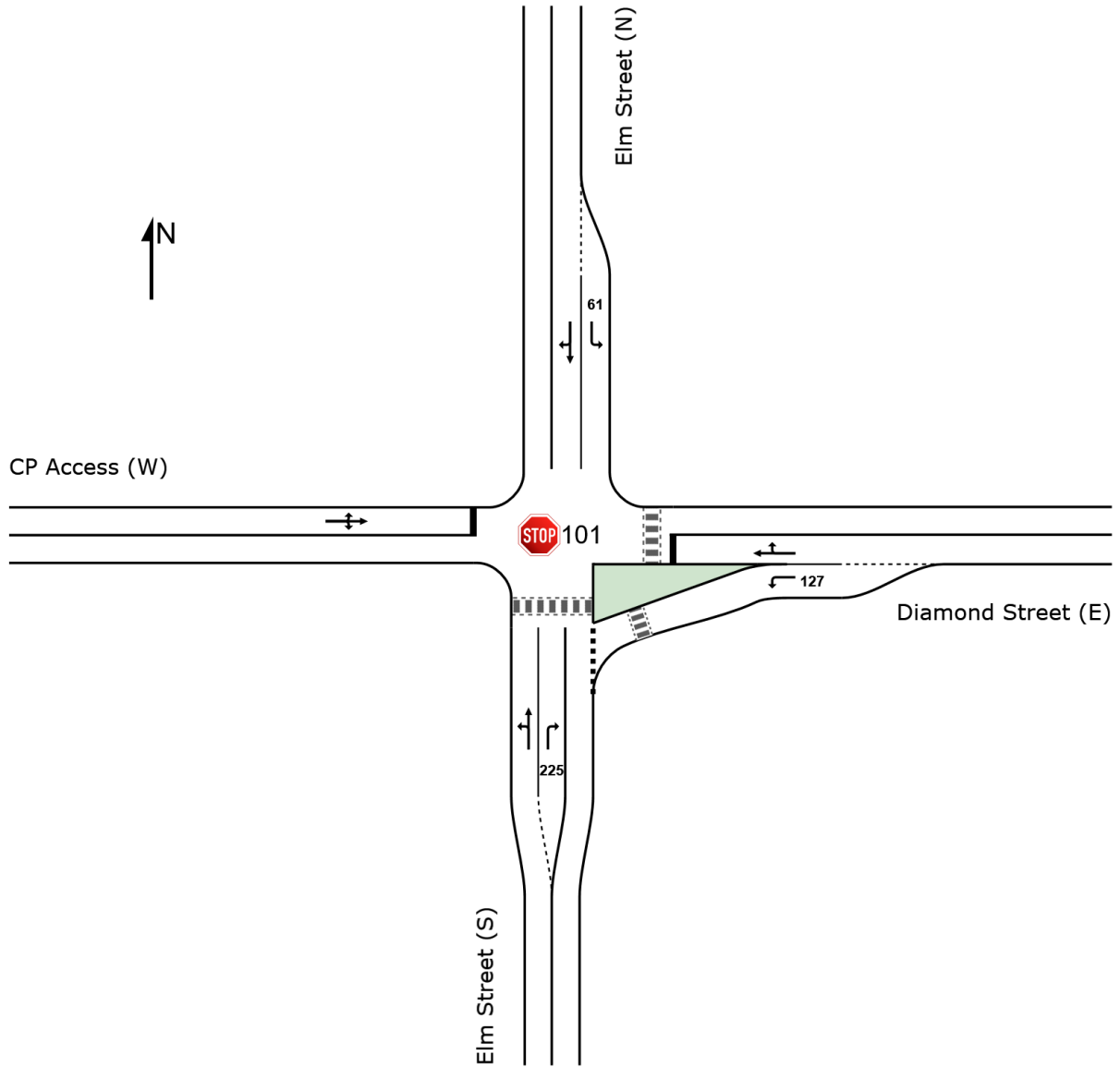
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

STOP Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base_PM 4-5pm (HV hr) (Site Folder: Future 2028 Base SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	2	0.0	2	0.0	0.181	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	27.5
2	T1	All MCs	347	1.2	347	1.2	0.181	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
3	R2	All MCs	316	1.9	316	1.9	0.391	8.8	LOS A	2.2	15.6	0.61	0.83	0.78	43.6
Approach			665	1.5	665	1.5	0.391	4.2	NA	2.2	15.6	0.29	0.40	0.37	46.5
East: Diamond Street (E)															
4	L2	All MCs	301	1.3	301	1.3	0.254	6.0	LOS A	1.1	8.0	0.44	0.61	0.44	45.1
5	T1	All MCs	2	0.0	2	0.0	0.587	40.6	LOS E	2.6	18.5	0.91	1.15	1.43	25.3
6	R2	All MCs	113	0.9	113	0.9	0.587	35.9	LOS E	2.6	18.5	0.91	1.15	1.43	32.7
Approach			416	1.2	416	1.2	0.587	14.3	LOS B	2.6	18.5	0.57	0.76	0.72	41.0
North: Elm Street (N)															
7	L2	All MCs	203	3.0	203	3.0	0.111	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	323	1.9	323	1.9	0.167	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	50.0
9	R2	All MCs	1	0.0	1	0.0	0.167	4.7	LOS A	0.0	0.1	0.00	0.00	0.00	43.4
Approach			527	2.3	527	2.3	0.167	1.8	NA	0.0	0.1	0.00	0.20	0.00	48.2
West: CP Access (W)															
10	L2	All MCs	4	0.0	4	0.0	0.031	5.5	LOS A	0.1	0.7	0.69	0.88	0.69	30.9
11	T1	All MCs	2	0.0	2	0.0	0.031	30.0	LOS D	0.1	0.7	0.69	0.88	0.69	32.3
12	R2	All MCs	3	0.0	3	0.0	0.031	17.3	LOS C	0.1	0.7	0.69	0.88	0.69	32.2
Approach			9	0.0	9	0.0	0.031	14.9	LOS B	0.1	0.7	0.69	0.88	0.69	31.7
All Vehicles			1617	1.7	1617	1.7	0.587	6.1	NA	2.6	18.5	0.27	0.43	0.34	45.3

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Organisation: SMEC AUSTRALIA | Licence: NETWORK / Enterprise Level 2 | Created: Wednesday, 6 November 2024 12:47:03 AM

Project: X:\Projects\300357\30035740\100 Concept-Feasibility\Traffic\Traffic Management Plan\TIA update\SIDRA\SIDRA Models_04-11-24.sip9

G-2 2028 With Project SIDRA results

USER REPORT FOR SITE

 Project: SIDRA Models_04-11-24

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Template: Unsignalised

 Site: 101 [1A - Lake MD & Collwood Rd Priority_2028 Base with Dev LVs_AM 6-7am (LV hr)
(Site Folder: Future 2028 Base with Dev_SIDRA Models)]

New Site

Site Category: (None)

Give-Way (Two-Way)

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	8	0.0	8	0.0	0.068	0.2	LOS A	0.3	2.2	0.17	0.53	0.17	61.2
3	R2	All MCs	108	0.0	108	0.0	0.068	5.7	LOS A	0.3	2.2	0.17	0.53	0.17	40.4
Approach			116	0.0	116	0.0	0.068	5.4	NA	0.3	2.2	0.17	0.53	0.17	41.9
East: Collwood Road (E)															
4	L2	All MCs	1	0.0	1	0.0	0.001	0.1	LOS A	0.0	0.0	0.15	0.12	0.15	40.9
6	R2	All MCs	1	0.0	1	0.0	0.001	1.0	LOS A	0.0	0.0	0.15	0.12	0.15	46.0
Approach			2	0.0	2	0.0	0.001	0.6	LOS A	0.0	0.0	0.15	0.12	0.15	43.3
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.039	7.0	LOS A	0.0	0.0	0.00	0.31	0.00	42.3
8	T1	All MCs	73	0.0	73	0.0	0.039	2.0	LOS A	0.0	0.0	0.00	0.31	0.00	75.5
Approach			74	0.0	74	0.0	0.039	2.1	NA	0.0	0.0	0.00	0.31	0.00	75.1
All Vehicles			192	0.0	192	0.0	0.068	4.0	NA	0.3	2.2	0.11	0.44	0.11	53.7

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

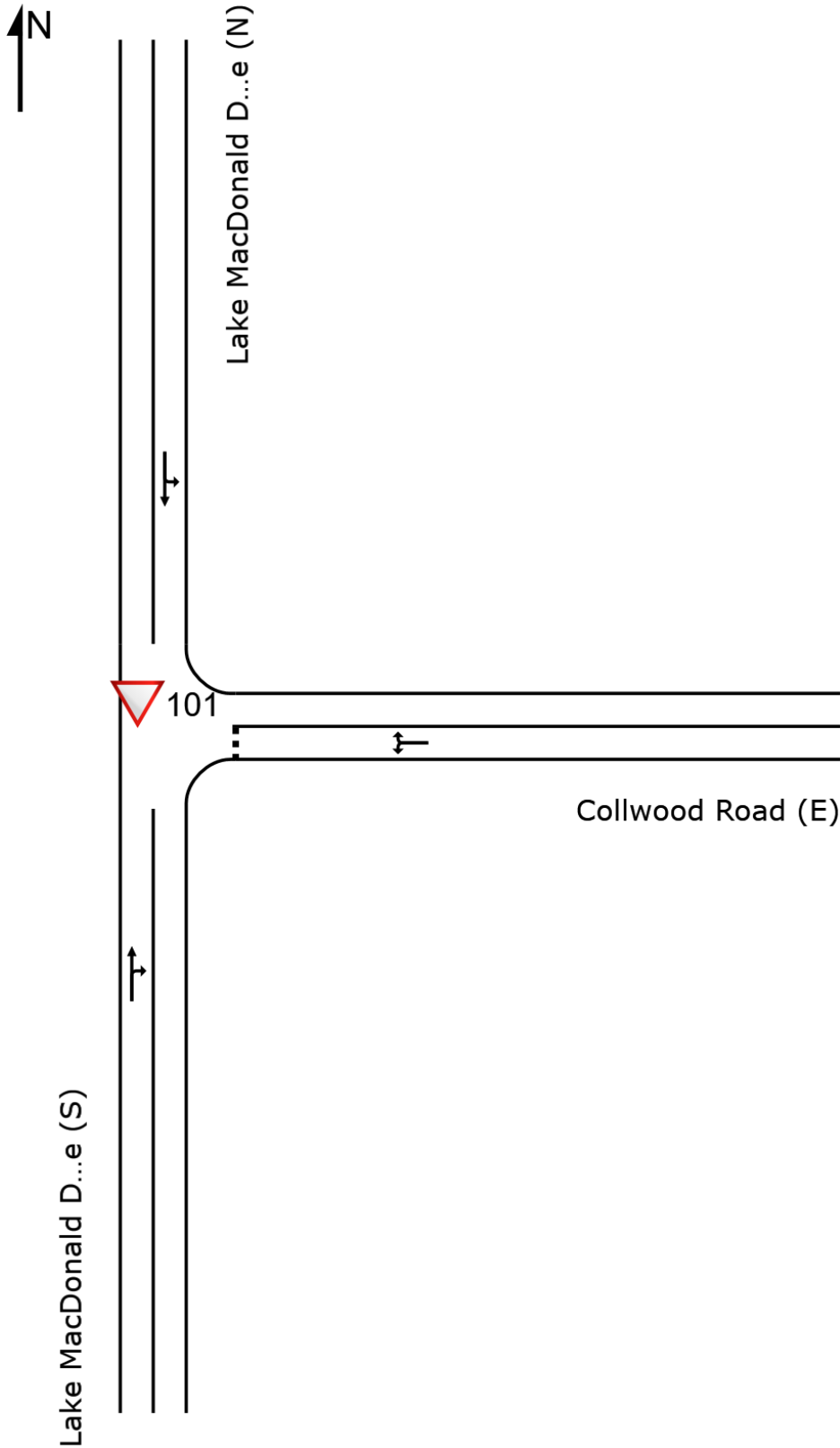
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1B - Lake MD & Collwood Rd Priority_2028 Base with Dev LVs_PM 5-6pm (LV hr)
(Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	81	0.0	81	0.0	0.043	0.0	LOS A	0.0	0.1	0.01	0.02	0.01	67.5
3	R2	All MCs	2	0.0	2	0.0	0.043	5.5	LOS A	0.0	0.1	0.01	0.02	0.01	45.0
Approach			83	0.0	83	0.0	0.043	0.1	NA	0.0	0.1	0.01	0.02	0.01	67.0
East: Collwood Road (E)															
4	L2	All MCs	92	0.0	92	0.0	0.045	0.1	LOS A	0.2	1.5	0.10	0.02	0.10	41.1
6	R2	All MCs	1	0.0	1	0.0	0.045	0.9	LOS A	0.2	1.5	0.10	0.02	0.10	46.3
Approach			93	0.0	93	0.0	0.045	0.1	LOS A	0.2	1.5	0.10	0.02	0.10	41.2
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.018	7.0	LOS A	0.0	0.0	0.00	0.32	0.00	42.3
8	T1	All MCs	33	0.0	33	0.0	0.018	2.0	LOS A	0.0	0.0	0.00	0.32	0.00	75.4
Approach			34	0.0	34	0.0	0.018	2.2	NA	0.0	0.0	0.00	0.32	0.00	74.4
All Vehicles			210	0.0	210	0.0	0.045	0.4	NA	0.2	1.5	0.05	0.07	0.05	56.5

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

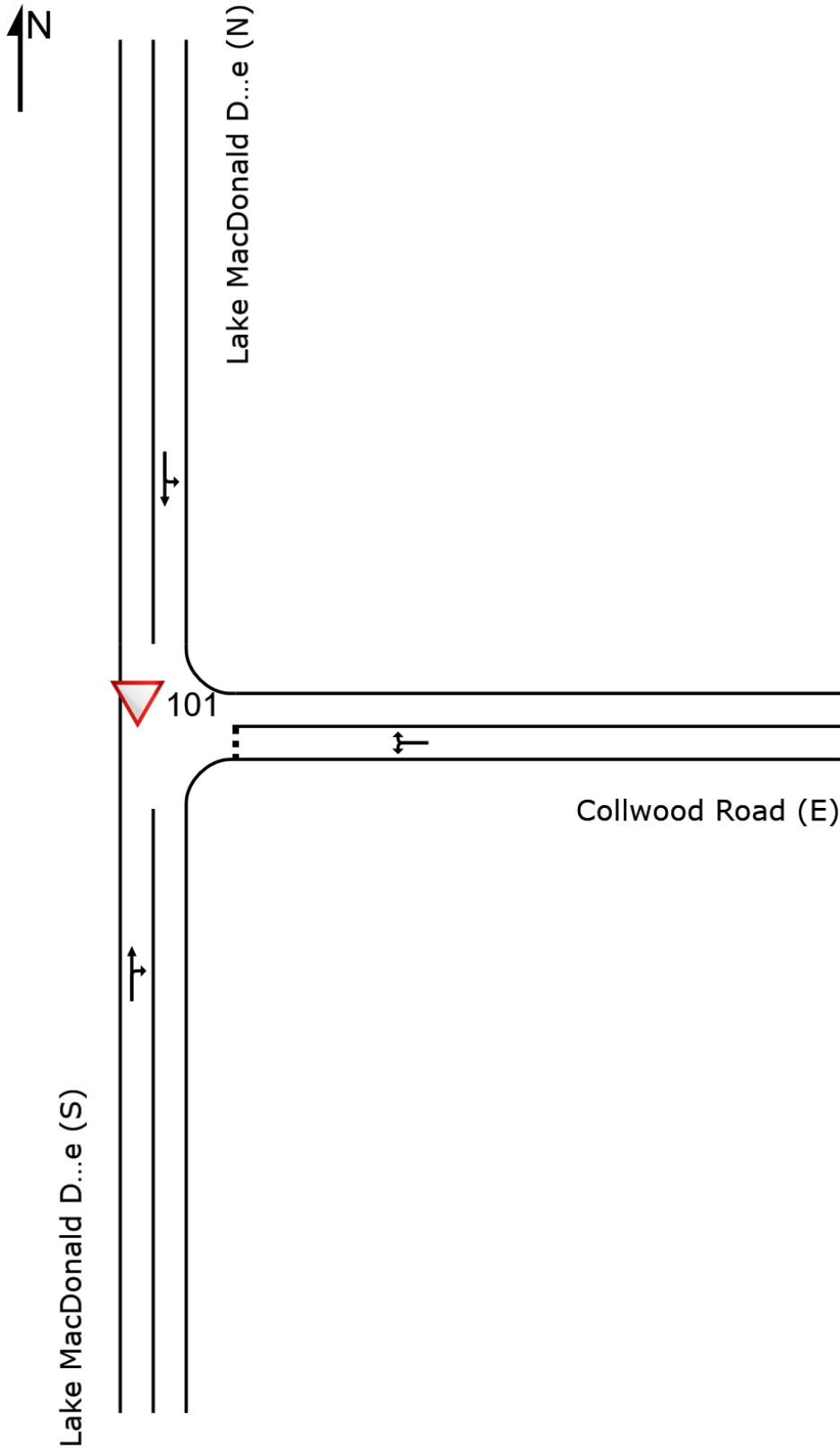
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1C - Lake MD & Collwood Rd Priority_2028 Base_with Dev HVs_AM 1015-1115am (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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: Lake MacDonald Drive (S)															
2	T1	All MCs	47	6.4	47	6.4	0.036	0.1	LOSA	0.1	0.8	0.08	0.11	0.08	65.7
3	R2	All MCs	9	100.0	9	100.0	0.036	7.1	LOSA	0.1	0.8	0.08	0.11	0.08	43.8
Approach			56	21.4	56	21.4	0.036	1.2	NA	0.1	0.8	0.08	0.11	0.08	62.5
East: Collwood Road (E)															
4	L2	All MCs	10	90.0	10	90.0	0.008	0.2	LOSA	0.0	0.4	0.15	0.06	0.15	37.5
6	R2	All MCs	1	0.0	1	0.0	0.008	0.9	LOSA	0.0	0.4	0.15	0.06	0.15	46.0
Approach			11	81.8	11	81.8	0.008	0.3	LOSA	0.0	0.4	0.15	0.06	0.15	38.1
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.027	7.0	LOSA	0.0	0.0	0.00	0.31	0.00	57.7
8	T1	All MCs	50	4.0	50	4.0	0.027	2.0	LOSA	0.0	0.0	0.00	0.31	0.00	75.4
Approach			51	3.9	51	3.9	0.027	2.1	NA	0.0	0.0	0.00	0.31	0.00	75.1
All Vehicles			118	19.5	118	19.5	0.036	1.5	NA	0.1	0.8	0.05	0.20	0.05	65.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

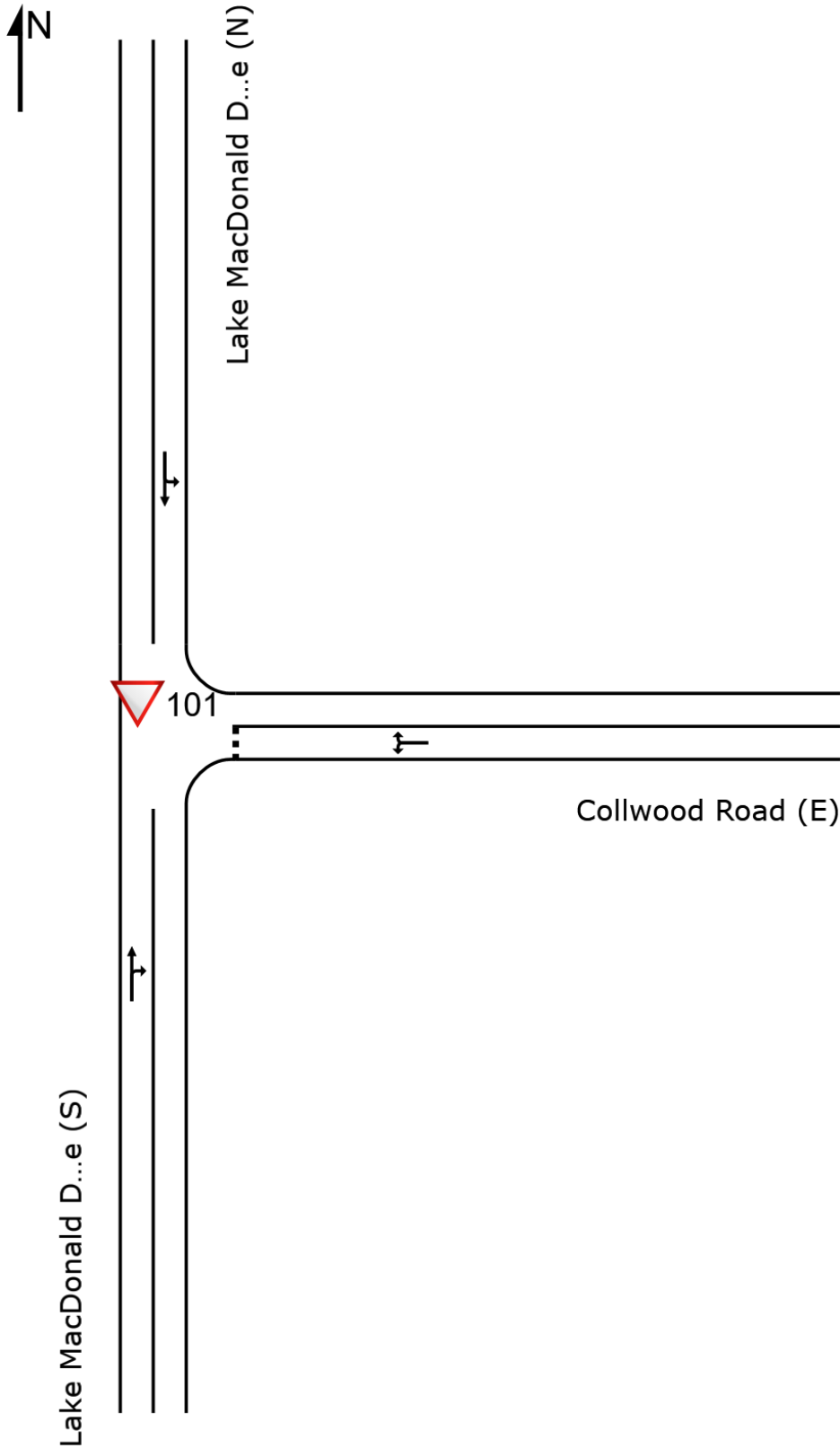
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [1D - Lake MD & Collwood Rd Priority_2028 Base with Dev HVs_PM 4-5pm (HV hr)
(Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
South: Lake MacDonald Drive (S)															
2	T1	All MCs	109	0.9	109	0.9	0.069	0.0	LOSA	0.1	0.7	0.04	0.05	0.04	66.8
3	R2	All MCs	9	100.0	9	100.0	0.069	6.9	LOSA	0.1	0.7	0.04	0.05	0.04	44.4
Approach			118	8.5	118	8.5	0.069	0.6	NA	0.1	0.7	0.04	0.05	0.04	65.3
East: Collwood Road (E)															
4	L2	All MCs	10	90.0	10	90.0	0.008	0.2	LOSA	0.0	0.4	0.15	0.05	0.15	37.5
6	R2	All MCs	1	0.0	1	0.0	0.008	1.0	LOSA	0.0	0.4	0.15	0.05	0.15	46.0
Approach			11	81.8	11	81.8	0.008	0.3	LOSA	0.0	0.4	0.15	0.05	0.15	38.1
North: Lake MacDonald Drive (N)															
7	L2	All MCs	1	0.0	1	0.0	0.026	7.0	LOSA	0.0	0.0	0.00	0.32	0.00	57.7
8	T1	All MCs	49	2.0	49	2.0	0.026	2.0	LOSA	0.0	0.0	0.00	0.32	0.00	75.4
Approach			50	2.0	50	2.0	0.026	2.1	NA	0.0	0.0	0.00	0.32	0.00	75.2
All Vehicles			179	11.2	179	11.2	0.069	1.0	NA	0.1	0.7	0.04	0.13	0.04	65.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

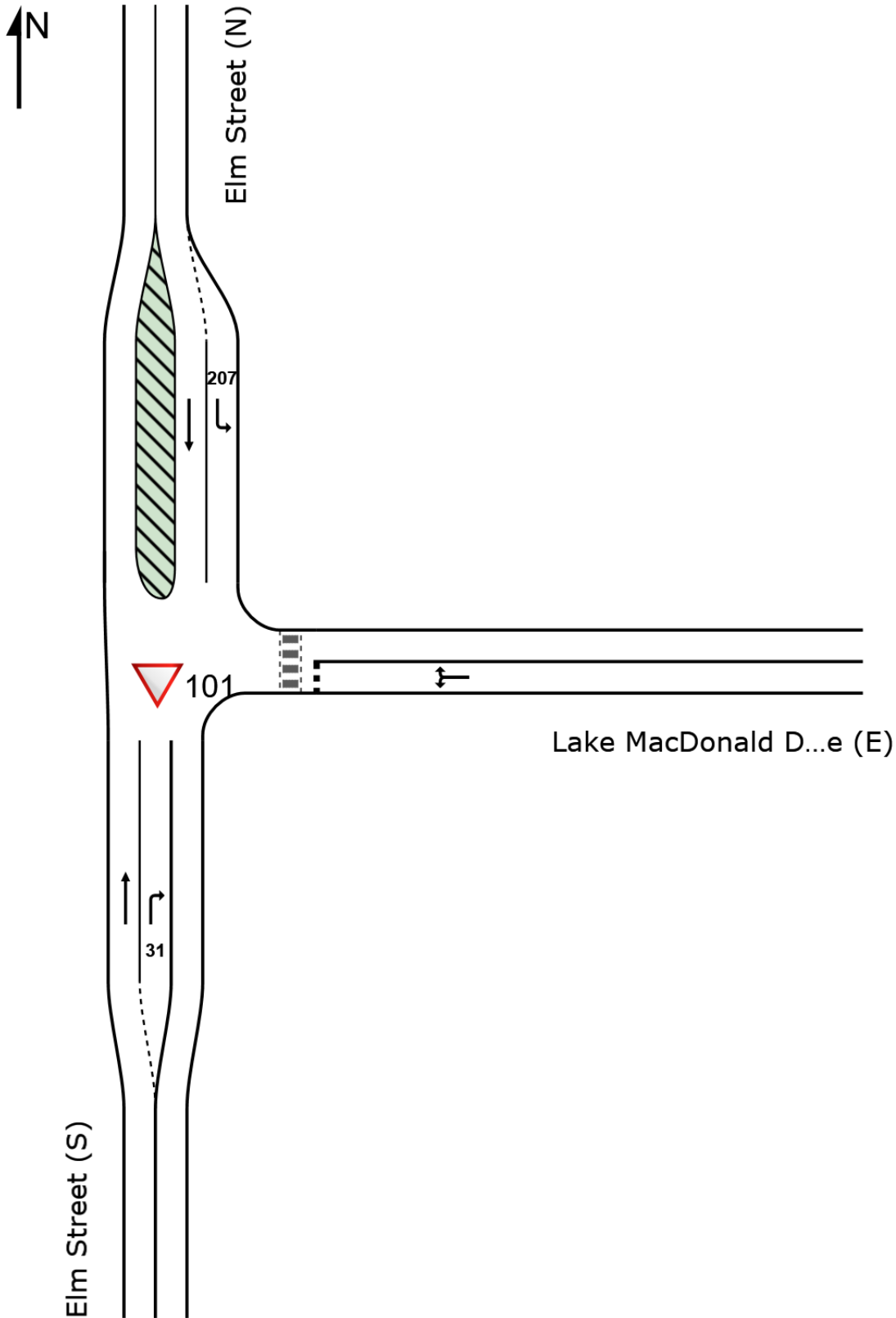
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [2A - Elm Street & Lake MD Priority_2028 Base with Dev LVs_AM 6-7am (LV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	155	6.5	155	6.5	0.084	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
3	R2	All MCs	103	1.9	103	1.9	0.113	7.6	LOS A	0.4	3.2	0.47	0.70	0.47	50.9
Approach			258	4.7	258	4.7	0.113	3.1	NA	0.4	3.2	0.19	0.28	0.19	56.0
East: Lake MacDonald Drive (E)															
4	L2	All MCs	68	1.5	68	1.5	0.112	7.7	LOS A	0.4	3.1	0.51	0.71	0.51	50.5
6	R2	All MCs	12	8.3	12	8.3	0.112	14.9	LOS B	0.4	3.1	0.51	0.71	0.51	50.2
Approach			80	2.5	80	2.5	0.112	8.8	LOS A	0.4	3.1	0.51	0.71	0.51	50.4
North: Elm Street (N)															
7	L2	All MCs	48	2.1	48	2.1	0.027	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
8	T1	All MCs	362	4.4	362	4.4	0.194	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			410	4.1	410	4.1	0.194	0.7	NA	0.0	0.0	0.00	0.07	0.00	59.0
All Vehicles			748	4.1	748	4.1	0.194	2.4	NA	0.4	3.2	0.12	0.21	0.12	56.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

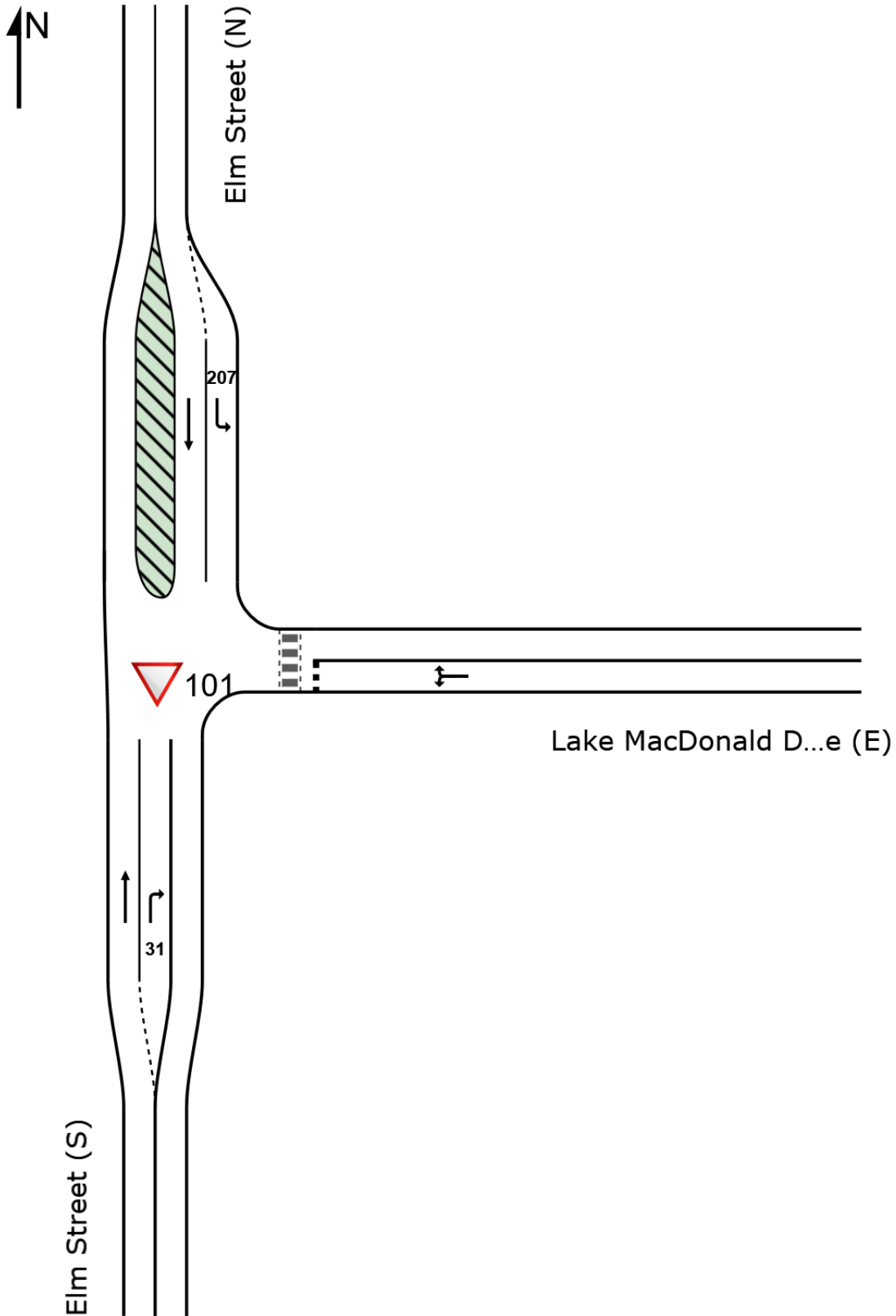
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base with Dev LVs_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	429	0.5	429	0.5	0.224	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	103	0.0	103	0.0	0.094	6.7	LOS A	0.4	2.6	0.37	0.63	0.37	51.6
Approach			532	0.4	532	0.4	0.224	1.3	NA	0.4	2.6	0.07	0.12	0.07	58.1
East: Lake MacDonald Drive (E)															
4	L2	All MCs	128	2.3	128	2.3	0.282	7.2	LOS A	1.3	9.0	0.58	0.70	0.60	49.4
6	R2	All MCs	49	0.0	49	0.0	0.282	18.6	LOS C	1.3	9.0	0.58	0.70	0.60	49.4
Approach			177	1.7	177	1.7	0.282	10.4	LOS B	1.3	9.0	0.58	0.70	0.60	49.4
North: Elm Street (N)															
7	L2	All MCs	25	0.0	25	0.0	0.014	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
8	T1	All MCs	248	1.6	248	1.6	0.131	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			273	1.5	273	1.5	0.131	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.2
All Vehicles			982	0.9	982	0.9	0.282	2.7	NA	1.3	9.0	0.14	0.21	0.15	56.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

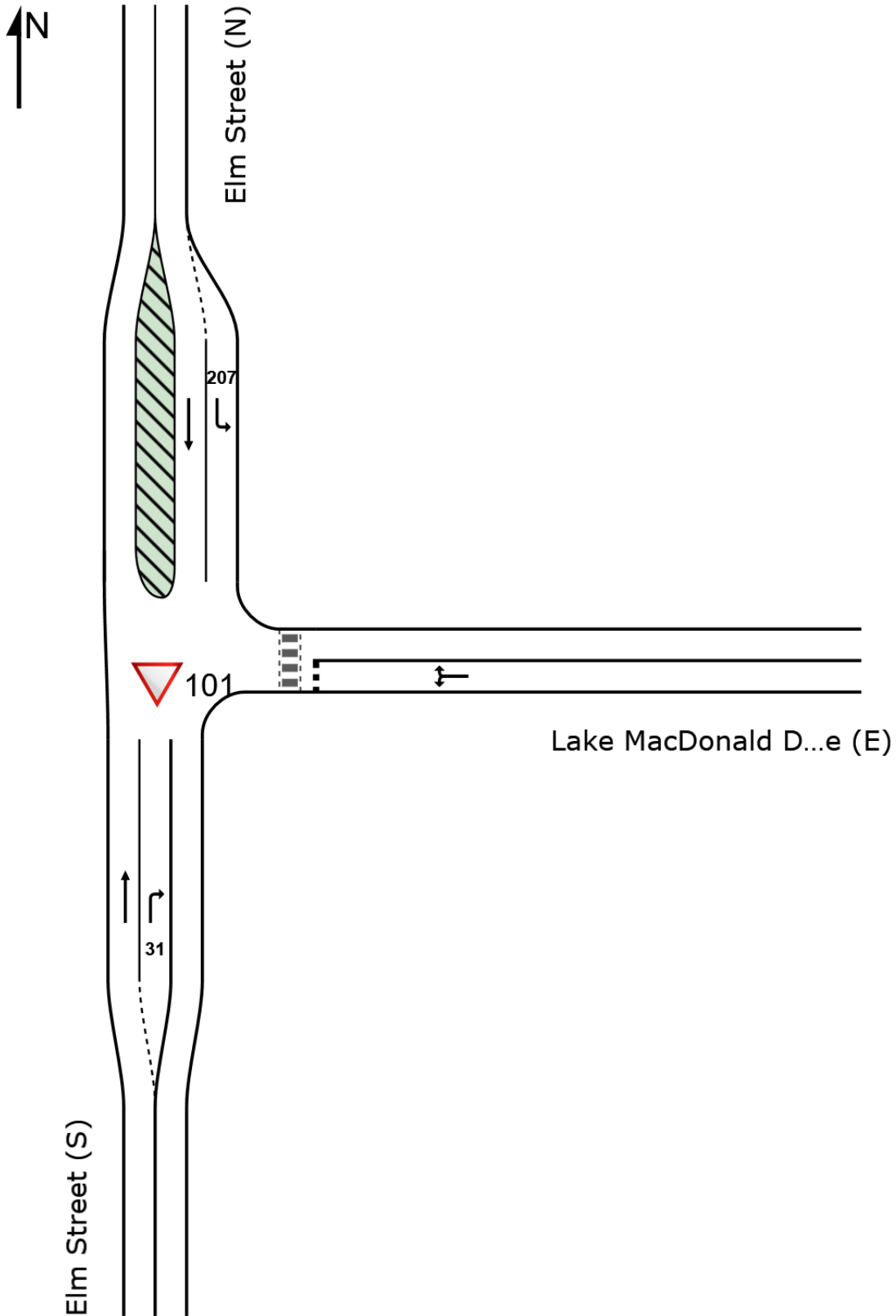
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base with Dev HVs_AM 1015-1115am (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	330	3.6	330	3.6	0.176	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	84	11.9	84	11.9	0.101	8.1	LOS A	0.4	3.0	0.48	0.71	0.48	50.3
Approach			414	5.3	414	5.3	0.176	1.7	NA	0.4	3.0	0.10	0.14	0.10	57.7
East: Lake MacDonald Drive (E)															
4	L2	All MCs	93	4.3	93	4.3	0.281	8.8	LOS A	1.2	9.0	0.66	0.83	0.76	47.3
6	R2	All MCs	35	22.9	35	22.9	0.281	26.1	LOS D	1.2	9.0	0.66	0.83	0.76	46.7
Approach			128	9.4	128	9.4	0.281	13.5	LOS B	1.2	9.0	0.66	0.83	0.76	47.1
North: Elm Street (N)															
7	L2	All MCs	29	31.0	29	31.0	0.019	5.9	LOS A	0.0	0.0	0.00	0.57	0.00	51.6
8	T1	All MCs	381	3.9	381	3.9	0.204	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			410	5.9	410	5.9	0.204	0.5	NA	0.0	0.0	0.00	0.04	0.00	59.2
All Vehicles			952	6.1	952	6.1	0.281	2.7	NA	1.2	9.0	0.13	0.19	0.14	56.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

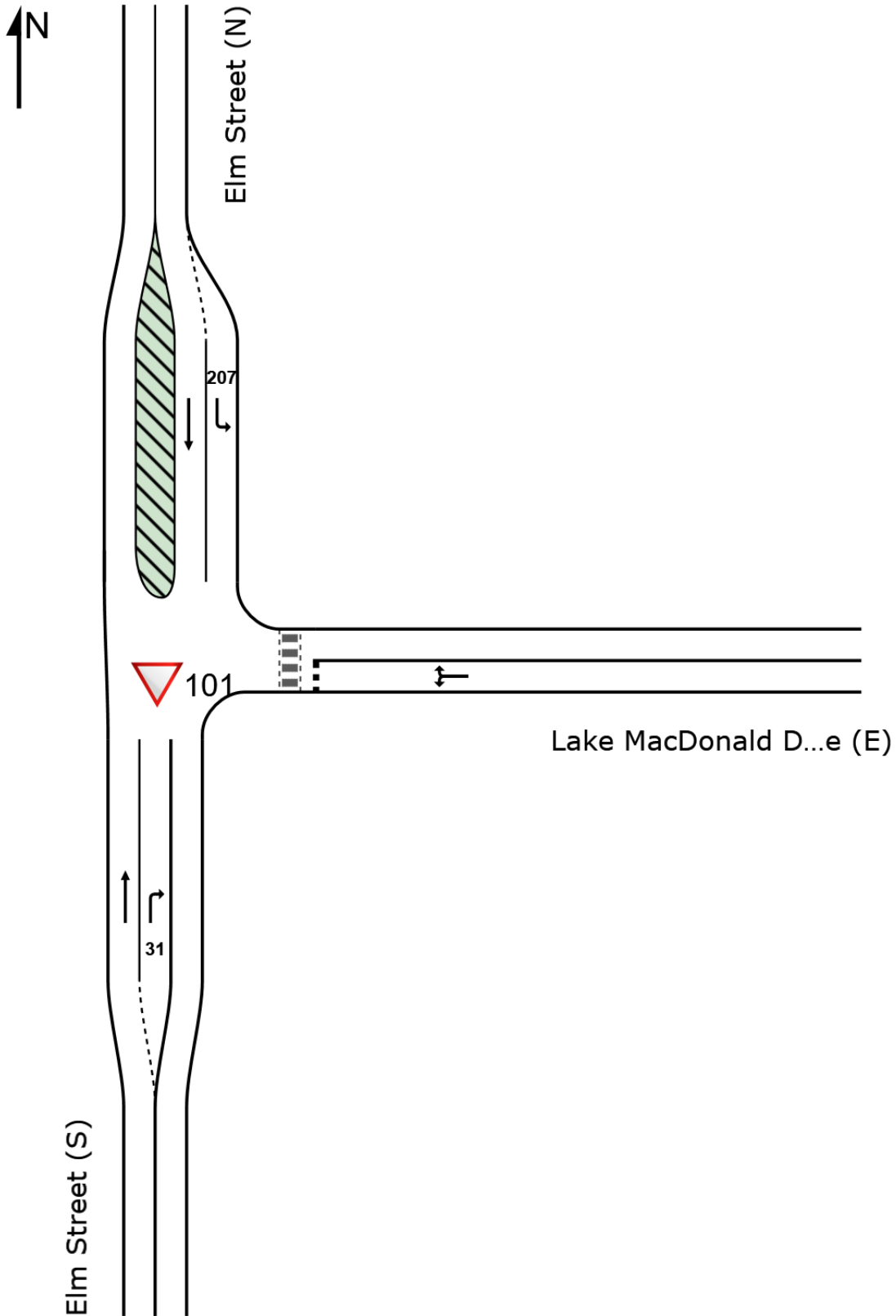
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▼ Site: 101 [2B - Elm Street & Lake MD Priority_2028 Base with Dev HVs_PM 4-5pm (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
South: Elm Street (S)															
2	T1	All MCs	454	2.4	454	2.4	0.240	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
3	R2	All MCs	142	3.5	142	3.5	0.158	7.8	LOS A	0.6	4.6	0.48	0.72	0.48	50.7
Approach			596	2.7	596	2.7	0.240	1.9	NA	0.6	4.6	0.12	0.17	0.12	57.4
East: Lake MacDonald Drive (E)															
4	L2	All MCs	106	0.9	106	0.9	0.433	10.6	LOS B	2.1	15.6	0.77	0.96	1.13	44.0
6	R2	All MCs	43	23.3	43	23.3	0.433	41.6	LOS E	2.1	15.6	0.77	0.96	1.13	43.3
Approach			149	7.4	149	7.4	0.433	19.5	LOS C	2.1	15.6	0.77	0.96	1.13	43.8
North: Elm Street (N)															
7	L2	All MCs	42	19.0	42	19.0	0.026	5.8	LOS A	0.0	0.0	0.00	0.57	0.00	52.1
8	T1	All MCs	368	2.7	368	2.7	0.195	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			410	4.4	410	4.4	0.195	0.6	NA	0.0	0.0	0.00	0.06	0.00	59.0
All Vehicles			1155	3.9	1155	3.9	0.433	3.7	NA	2.1	15.6	0.16	0.23	0.21	55.7

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

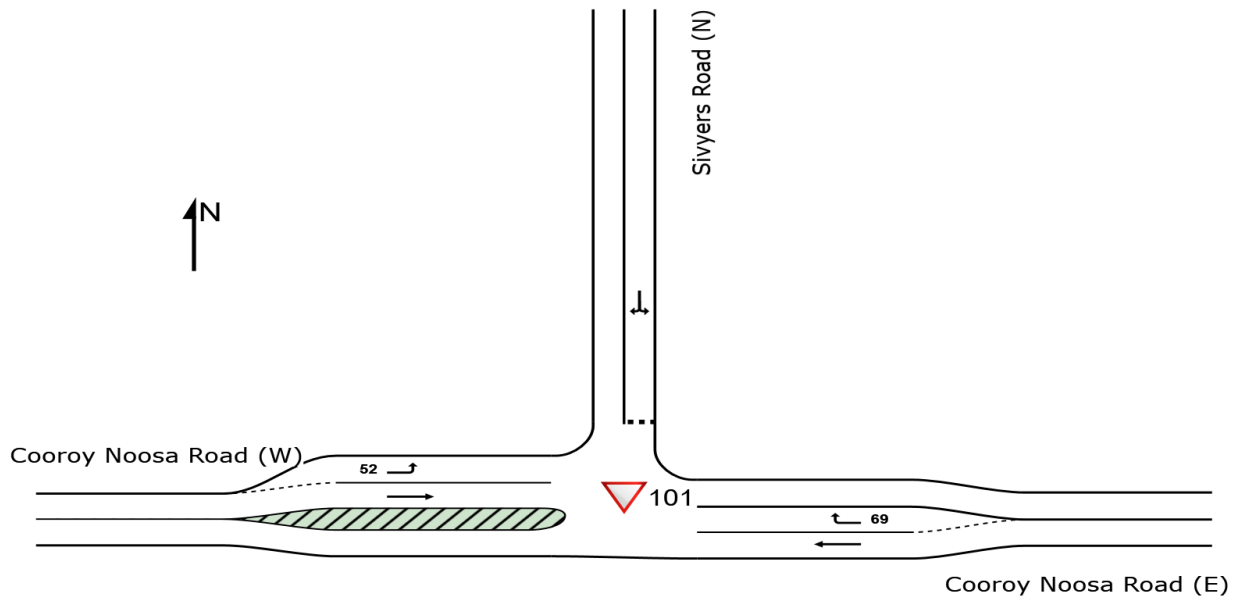
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3A - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base with Dev LVs_AM 6-7am (LV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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.]	[Dist]				km/h
			veh/h		veh/h					veh	m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	303	8.3	303	8.3	0.162	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	26	0.0	26	0.0	0.030	8.9	LOS A	0.1	0.8	0.48	0.70	0.48	59.4
Approach			329	7.6	329	7.6	0.162	0.7	NA	0.1	0.8	0.04	0.05	0.04	77.8
North: Sivyers Road (N)															
7	L2	All MCs	11	9.1	11	9.1	0.059	9.1	LOS A	0.2	1.5	0.61	0.81	0.61	53.4
9	R2	All MCs	15	0.0	15	0.0	0.059	15.7	LOS C	0.2	1.5	0.61	0.81	0.61	55.6
Approach			26	3.8	26	3.8	0.059	12.9	LOS B	0.2	1.5	0.61	0.81	0.61	54.6
West: Cooroy Noosa Road (W)															
10	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	459	5.0	459	5.0	0.242	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			463	5.0	463	5.0	0.242	0.1	NA	0.0	0.0	0.00	0.01	0.00	79.7
All Vehicles			818	6.0	818	6.0	0.242	0.8	NA	0.2	1.5	0.03	0.05	0.03	77.8

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

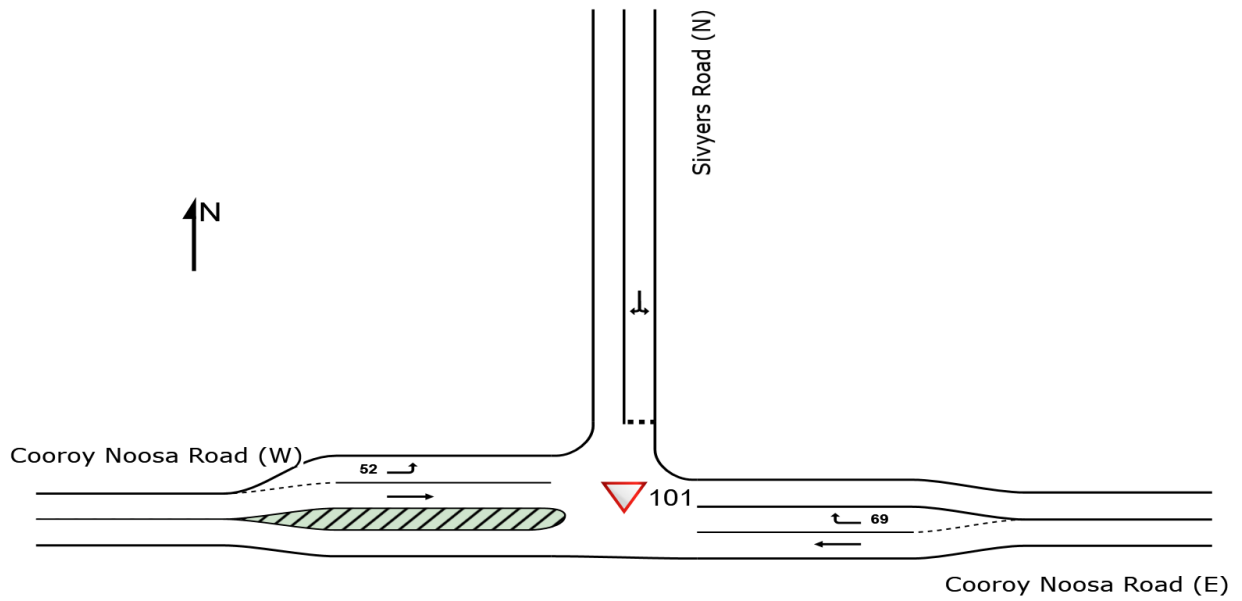
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base with Dev LVs_PM 5-6pm (LV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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: Cooroy Noosa Road (E)															
5	T1	All MCs	554	1.6	554	1.6	0.284	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	21	4.8	21	4.8	0.024	8.8	LOS A	0.1	0.6	0.45	0.67	0.45	58.2
Approach			575	1.7	575	1.7	0.284	0.4	NA	0.1	0.6	0.02	0.02	0.02	78.7
North: Sivyers Road (N)															
7	L2	All MCs	39	0.0	39	0.0	0.109	8.3	LOS A	0.4	2.6	0.59	0.78	0.59	56.0
9	R2	All MCs	13	7.7	13	7.7	0.109	24.3	LOS C	0.4	2.6	0.59	0.78	0.59	54.2
Approach			52	1.9	52	1.9	0.109	12.3	LOS B	0.4	2.6	0.59	0.78	0.59	55.5
West: Cooroy Noosa Road (W)															
10	L2	All MCs	11	0.0	11	0.0	0.006	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	407	1.5	407	1.5	0.210	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			418	1.4	418	1.4	0.210	0.2	NA	0.0	0.0	0.00	0.02	0.00	79.4
All Vehicles			1045	1.6	1045	1.6	0.284	0.9	NA	0.4	2.6	0.04	0.06	0.04	77.4

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

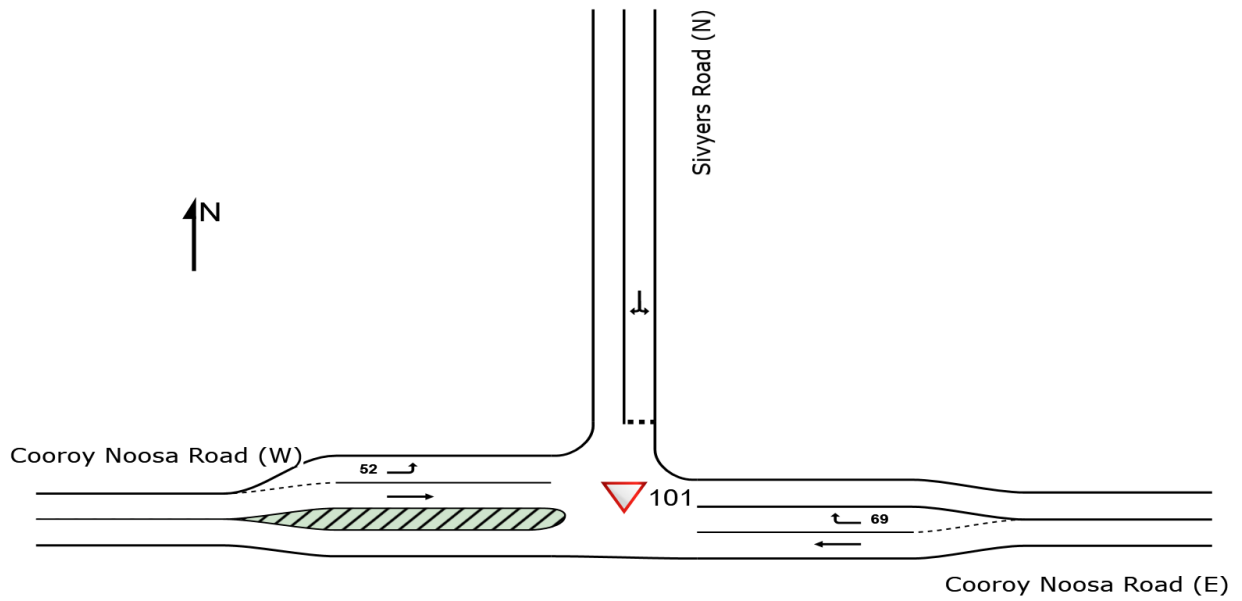
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base with Dev HVs_AM 1015-1115am (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	546	5.1	546	5.1	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	20	0.0	20	0.0	0.029	10.2	LOS B	0.1	0.7	0.55	0.75	0.55	58.2
Approach			566	4.9	566	4.9	0.286	0.4	NA	0.1	0.7	0.02	0.03	0.02	78.8
North: Sivyers Road (N)															
7	L2	All MCs	10	0.0	10	0.0	0.121	9.9	LOS A	0.4	2.7	0.80	0.92	0.80	48.9
9	R2	All MCs	17	0.0	17	0.0	0.121	28.7	LOS D	0.4	2.7	0.80	0.92	0.80	49.0
Approach			27	0.0	27	0.0	0.121	21.7	LOS C	0.4	2.7	0.80	0.92	0.80	48.9
West: Cooroy Noosa Road (W)															
10	L2	All MCs	18	5.6	18	5.6	0.010	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	62.8
11	T1	All MCs	603	5.1	603	5.1	0.318	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			621	5.2	621	5.2	0.318	0.3	NA	0.0	0.0	0.00	0.02	0.00	79.1
All Vehicles			1214	4.9	1214	4.9	0.318	0.8	NA	0.4	2.7	0.03	0.04	0.03	77.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

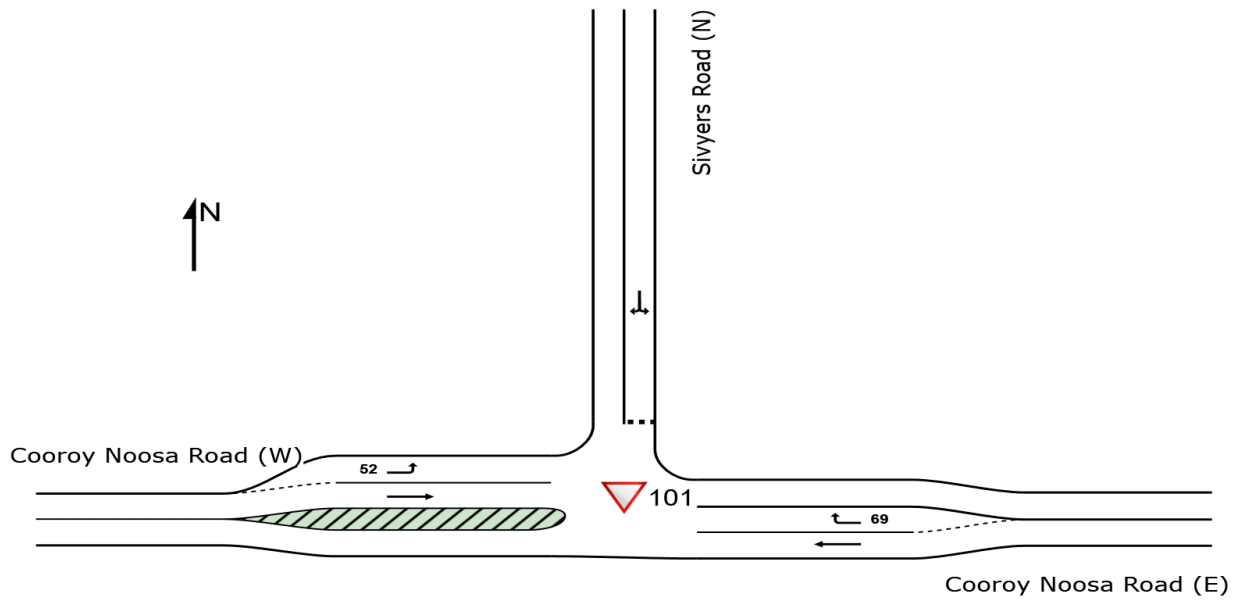
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

▽ Site: 101 [3B - Cooroy Noosa Rd & Sivyers Rd Prority_2028 Base with Dev HVs_AM 4-5pm (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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] veh/h	%	[Total HV] veh/h	%				[Veh.] veh	[Dist] m				
East: Cooroy Noosa Road (E)															
5	T1	All MCs	586	1.2	586	1.2	0.300	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
6	R2	All MCs	18	0.0	18	0.0	0.023	9.3	LOS A	0.1	0.6	0.50	0.70	0.50	59.0
Approach			604	1.2	604	1.2	0.300	0.3	NA	0.1	0.6	0.02	0.02	0.02	79.0
North: Sivyers Road (N)															
7	L2	All MCs	13	0.0	13	0.0	0.092	9.0	LOS A	0.3	2.1	0.72	0.89	0.72	51.9
9	R2	All MCs	14	0.0	14	0.0	0.092	25.3	LOS D	0.3	2.1	0.72	0.89	0.72	52.0
Approach			27	0.0	27	0.0	0.092	17.4	LOS C	0.3	2.1	0.72	0.89	0.72	52.0
West: Cooroy Noosa Road (W)															
10	L2	All MCs	25	0.0	25	0.0	0.013	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
11	T1	All MCs	504	2.4	504	2.4	0.261	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			529	2.3	529	2.3	0.261	0.4	NA	0.0	0.0	0.00	0.03	0.00	78.9
All Vehicles			1160	1.6	1160	1.6	0.300	0.8	NA	0.3	2.1	0.02	0.05	0.02	78.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

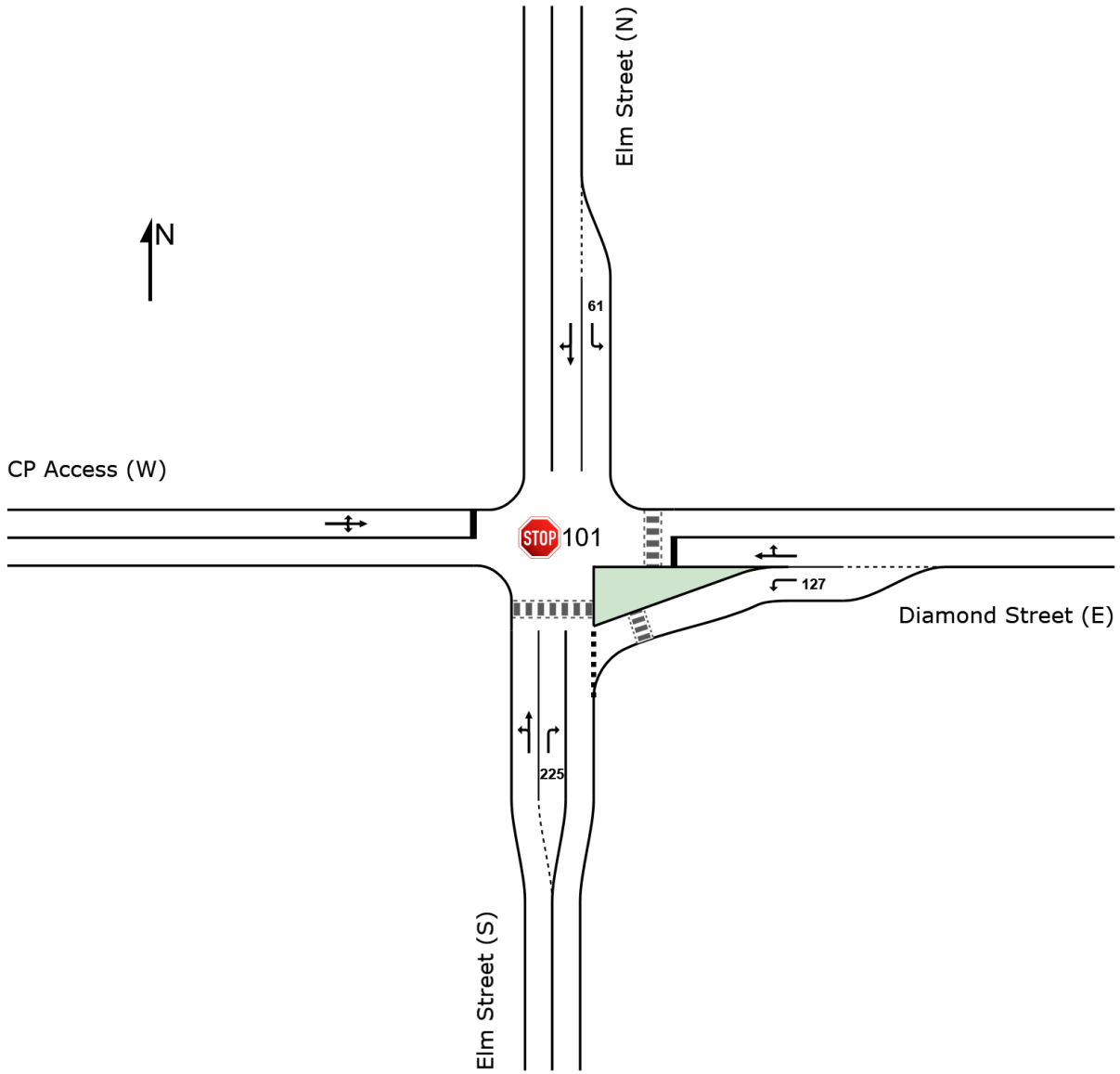
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

**STOP Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base with Dev LVs_AM 6-7am (LV hr)
(Site Folder: Future 2028 Base with Dev_SIDRA Models)]**

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	4	0.0	4	0.0	0.101	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	27.5
2	T1	All MCs	190	2.1	190	2.1	0.101	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
3	R2	All MCs	170	3.5	170	3.5	0.198	7.2	LOS A	0.8	5.9	0.52	0.70	0.52	44.4
Approach			364	2.7	364	2.7	0.198	3.4	NA	0.8	5.9	0.24	0.33	0.24	46.8
East: Diamond Street (E)															
4	L2	All MCs	186	4.8	186	4.8	0.148	5.6	LOS A	0.6	4.5	0.36	0.55	0.36	45.2
5	T1	All MCs	1	0.0	1	0.0	0.168	17.5	LOS C	0.6	4.2	0.69	1.00	0.69	33.4
6	R2	All MCs	58	3.4	58	3.4	0.168	16.3	LOS C	0.6	4.2	0.69	1.00	0.69	40.1
Approach			245	4.5	245	4.5	0.168	8.2	LOS A	0.6	4.5	0.44	0.66	0.44	43.9
North: Elm Street (N)															
7	L2	All MCs	223	2.2	223	2.2	0.121	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	247	1.2	247	1.2	0.130	0.0	LOS A	0.0	0.3	0.02	0.01	0.02	49.9
9	R2	All MCs	5	0.0	5	0.0	0.130	4.8	LOS A	0.0	0.3	0.02	0.01	0.02	43.2
Approach			475	1.7	475	1.7	0.130	2.2	NA	0.0	0.3	0.01	0.25	0.01	47.8
West: CP Access (W)															
10	L2	All MCs	3	0.0	3	0.0	0.011	4.7	LOS A	0.0	0.3	0.50	0.79	0.50	34.5
11	T1	All MCs	1	0.0	1	0.0	0.011	15.9	LOS C	0.0	0.3	0.50	0.79	0.50	35.8
12	R2	All MCs	2	0.0	2	0.0	0.011	9.8	LOS A	0.0	0.3	0.50	0.79	0.50	35.7
Approach			6	0.0	6	0.0	0.011	8.3	LOS A	0.0	0.3	0.50	0.79	0.50	35.2
All Vehicles			1090	2.7	1090	2.7	0.198	4.0	NA	0.8	5.9	0.19	0.38	0.19	46.5

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

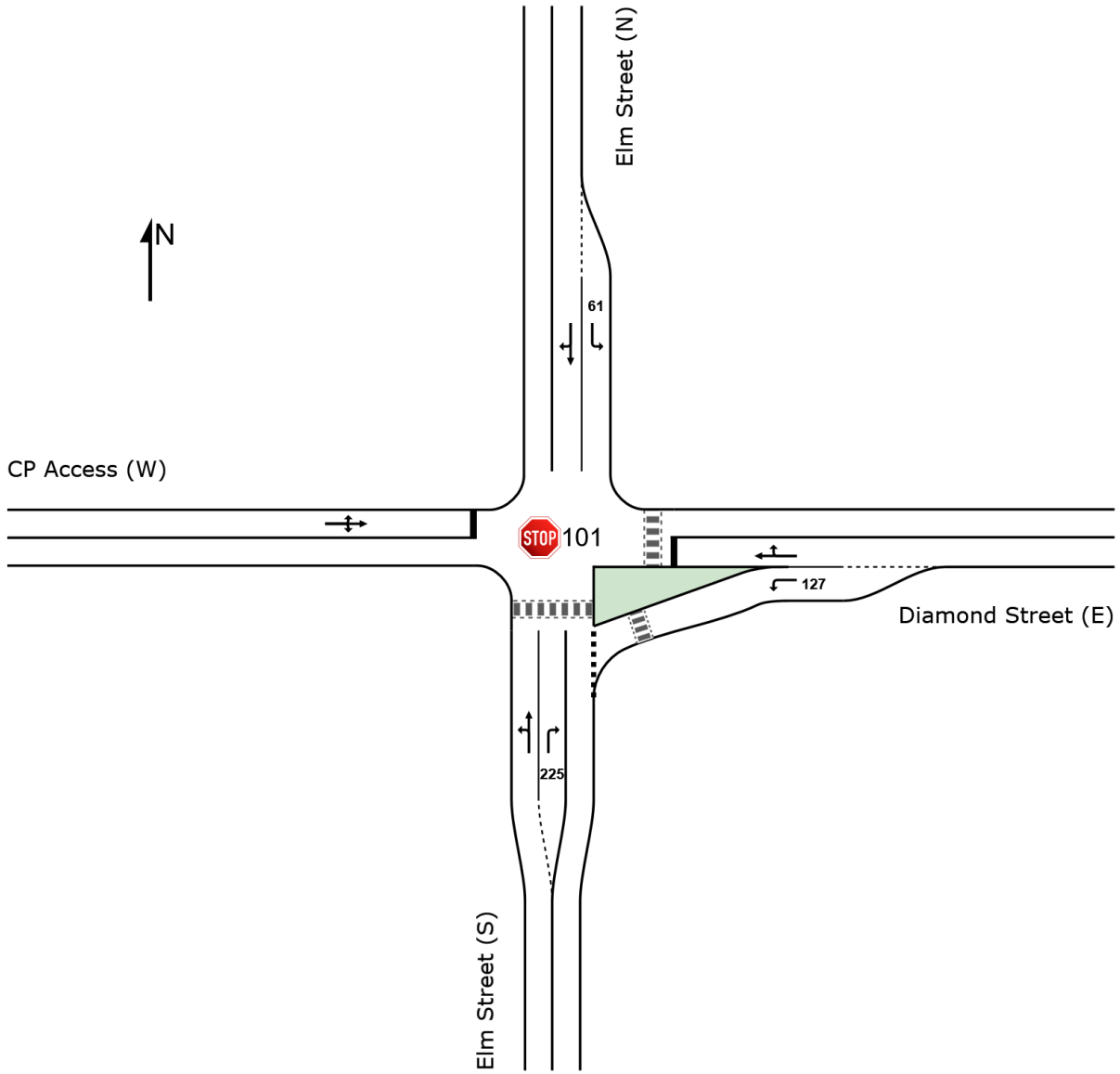
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

**STOP Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base with Dev LVs_PM 5-6pm (LV hr)
(Site Folder: Future 2028 Base with Dev_SIDRA Models)]**

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	2	0.0	2	0.0	0.159	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	27.5
2	T1	All MCs	303	1.3	303	1.3	0.159	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
3	R2	All MCs	247	1.6	247	1.6	0.288	7.6	LOS A	1.3	9.4	0.55	0.74	0.59	44.2
Approach			552	1.4	552	1.4	0.288	3.4	NA	1.3	9.4	0.25	0.33	0.26	47.0
East: Diamond Street (E)															
4	L2	All MCs	291	0.7	291	0.7	0.244	6.0	LOS A	1.1	7.6	0.44	0.60	0.44	45.1
5	T1	All MCs	1	0.0	1	0.0	0.574	33.0	LOS D	2.7	19.4	0.88	1.17	1.41	27.1
6	R2	All MCs	134	3.7	134	3.7	0.574	30.7	LOS D	2.7	19.4	0.88	1.17	1.41	34.4
Approach			426	1.6	426	1.6	0.574	13.8	LOS B	2.7	19.4	0.58	0.78	0.75	41.2
North: Elm Street (N)															
7	L2	All MCs	157	3.2	157	3.2	0.086	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	322	1.2	322	1.2	0.167	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.9
9	R2	All MCs	3	0.0	3	0.0	0.167	4.9	LOS A	0.0	0.2	0.01	0.01	0.01	43.3
Approach			482	1.9	482	1.9	0.167	1.5	NA	0.0	0.2	0.01	0.18	0.01	48.4
West: CP Access (W)															
10	L2	All MCs	2	0.0	2	0.0	0.024	5.3	LOS A	0.1	0.6	0.65	0.90	0.65	31.7
11	T1	All MCs	1	0.0	1	0.0	0.024	22.6	LOS C	0.1	0.6	0.65	0.90	0.65	33.1
12	R2	All MCs	5	0.0	5	0.0	0.024	14.5	LOS B	0.1	0.6	0.65	0.90	0.65	33.1
Approach			8	0.0	8	0.0	0.024	13.2	LOS B	0.1	0.6	0.65	0.90	0.65	32.8
All Vehicles			1468	1.6	1468	1.6	0.574	5.9	NA	2.7	19.4	0.27	0.41	0.32	45.5

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

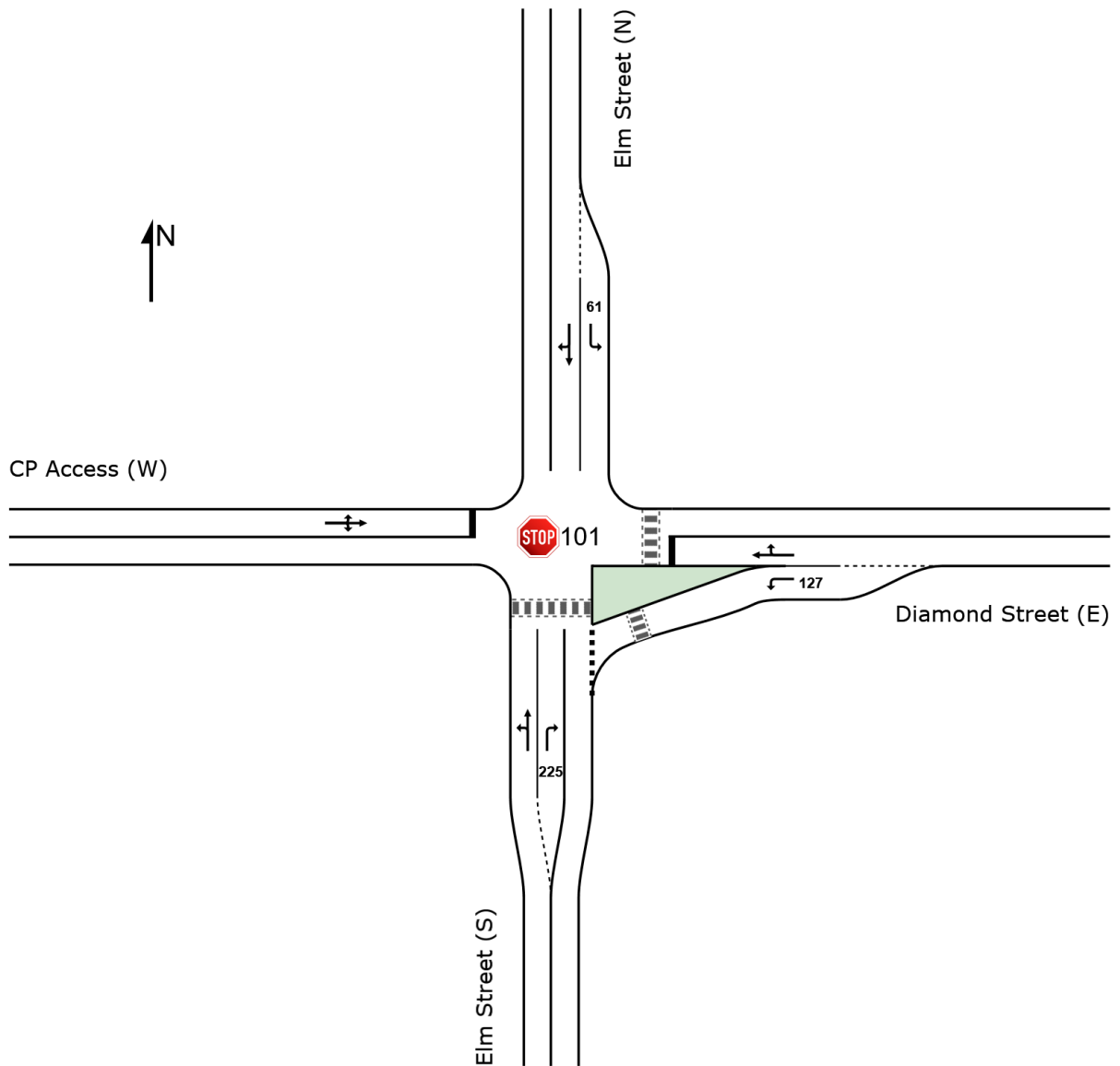
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base with Dev HVs_AM 1015-1115 (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	3	0.0	3	0.0	0.170	4.6	LOS A	0.0	0.0	0.00	0.01	0.00	27.5
2	T1	All MCs	316	5.1	316	5.1	0.170	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	49.9
3	R2	All MCs	326	3.1	326	3.1	0.446	10.1	LOS B	2.6	18.9	0.65	0.92	0.92	42.9
Approach			645	4.0	645	4.0	0.446	5.1	NA	2.6	18.9	0.33	0.47	0.46	45.9
East: Diamond Street (E)															
4	L2	All MCs	321	5.3	321	5.3	0.290	6.4	LOS A	1.3	9.5	0.48	0.63	0.48	44.9
5	T1	All MCs	1	0.0	1	0.0	0.759	54.4	LOS F	3.8	27.7	0.95	1.29	1.93	21.2
6	R2	All MCs	124	4.8	124	4.8	0.759	51.7	LOS F	3.8	27.7	0.95	1.29	1.93	28.4
Approach			446	5.2	446	5.2	0.759	19.1	LOS C	3.8	27.7	0.61	0.82	0.89	38.9
North: Elm Street (N)															
7	L2	All MCs	229	7.9	229	7.9	0.130	4.7	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	355	4.2	355	4.2	0.186	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	50.0
9	R2	All MCs	1	0.0	1	0.0	0.186	4.7	LOS A	0.0	0.1	0.00	0.00	0.00	43.4
Approach			585	5.6	585	5.6	0.186	1.8	NA	0.0	0.1	0.00	0.21	0.00	48.1
West: CP Access (W)															
10	L2	All MCs	3	0.0	3	0.0	0.024	5.4	LOS A	0.1	0.5	0.73	0.84	0.73	30.0
11	T1	All MCs	2	0.0	2	0.0	0.024	33.1	LOS D	0.1	0.5	0.73	0.84	0.73	31.4
12	R2	All MCs	1	0.0	1	0.0	0.024	17.8	LOS C	0.1	0.5	0.73	0.84	0.73	31.4
Approach			6	0.0	6	0.0	0.024	16.7	LOS C	0.1	0.5	0.73	0.84	0.73	30.7
All Vehicles			1682	4.9	1682	4.9	0.759	7.7	NA	3.8	27.7	0.29	0.47	0.42	44.4

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

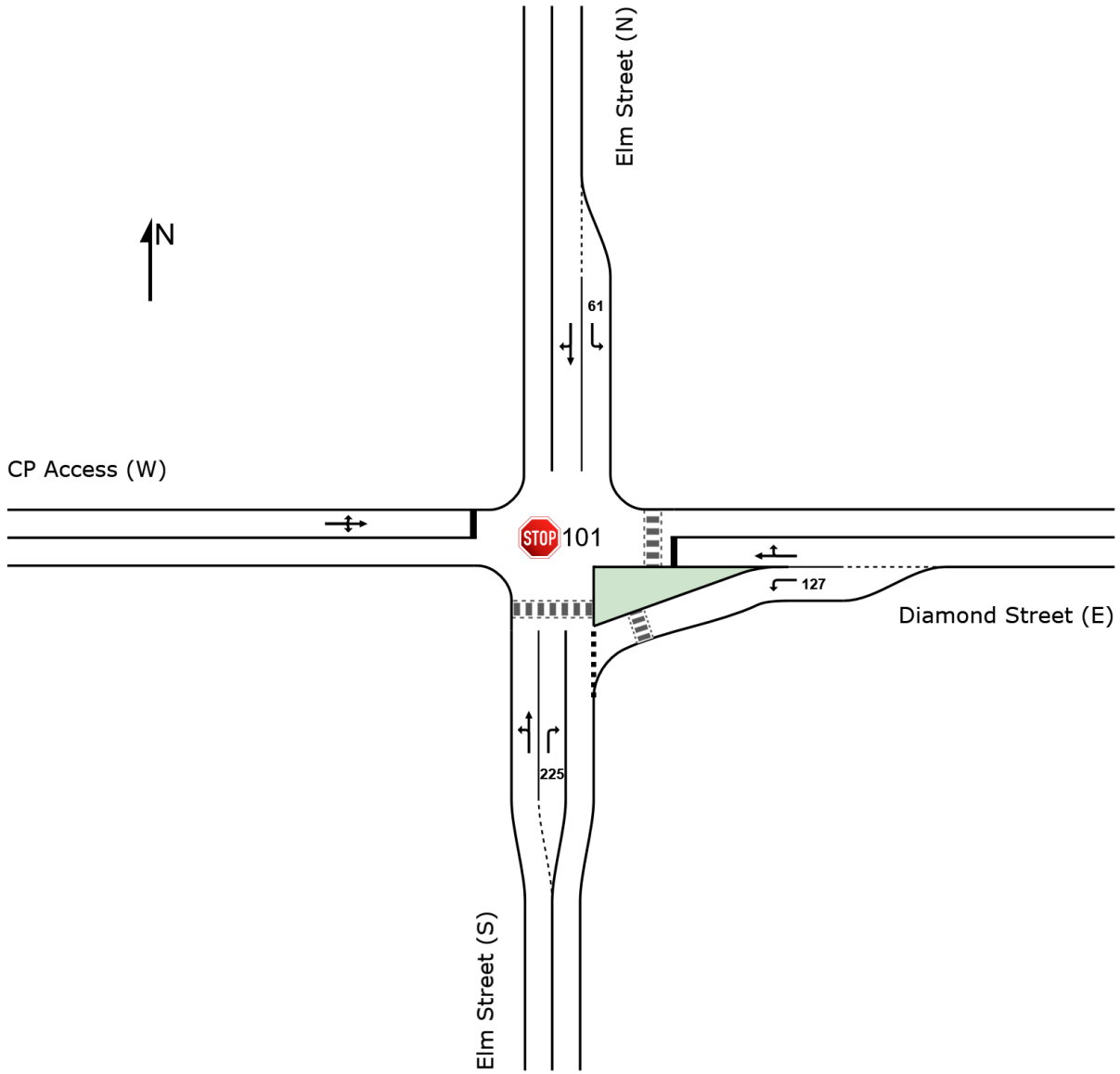
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Site: 101 [4A - Elm St, Diamond St and CP Priority_2028 Base with Dev HVs_PM 4-5pm (HV hr) (Site Folder: Future 2028 Base with Dev_SIDRA Models)]

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

Site Layout

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



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: Elm Street (S)															
1	L2	All MCs	2	0.0	2	0.0	0.181	4.6	LOS A	0.0	0.0	0.00	0.00	0.00	27.5
2	T1	All MCs	347	1.2	347	1.2	0.181	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
3	R2	All MCs	316	1.9	316	1.9	0.392	8.8	LOS A	2.2	15.6	0.61	0.83	0.78	43.6
Approach			665	1.5	665	1.5	0.392	4.2	NA	2.2	15.6	0.29	0.40	0.37	46.5
East: Diamond Street (E)															
4	L2	All MCs	301	1.3	301	1.3	0.254	6.0	LOS A	1.1	8.0	0.44	0.61	0.44	45.1
5	T1	All MCs	2	0.0	2	0.0	0.606	41.5	LOS E	2.7	19.3	0.91	1.17	1.47	24.9
6	R2	All MCs	114	1.8	114	1.8	0.606	37.3	LOS E	2.7	19.3	0.91	1.17	1.47	32.3
Approach			417	1.4	417	1.4	0.606	14.7	LOS B	2.7	19.3	0.57	0.76	0.73	40.8
North: Elm Street (N)															
7	L2	All MCs	204	3.4	204	3.4	0.112	4.6	LOS A	0.0	0.0	0.00	0.53	0.00	45.6
8	T1	All MCs	323	1.9	323	1.9	0.167	0.0	LOS A	0.0	0.1	0.00	0.00	0.00	50.0
9	R2	All MCs	1	0.0	1	0.0	0.167	4.7	LOS A	0.0	0.1	0.00	0.00	0.00	43.4
Approach			528	2.5	528	2.5	0.167	1.8	NA	0.0	0.1	0.00	0.20	0.00	48.2
West: CP Access (W)															
10	L2	All MCs	4	0.0	4	0.0	0.031	5.5	LOS A	0.1	0.7	0.70	0.88	0.70	30.9
11	T1	All MCs	2	0.0	2	0.0	0.031	30.1	LOS D	0.1	0.7	0.70	0.88	0.70	32.3
12	R2	All MCs	3	0.0	3	0.0	0.031	17.3	LOS C	0.1	0.7	0.70	0.88	0.70	32.2
Approach			9	0.0	9	0.0	0.031	14.9	LOS B	0.1	0.7	0.70	0.88	0.70	31.7
All Vehicles			1619	1.8	1619	1.8	0.606	6.2	NA	2.7	19.3	0.27	0.43	0.34	45.3

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

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

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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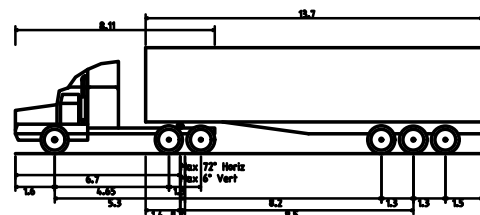
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Project: X:\Projects\300357\30035740\100 Concept-Feasibility\Traffic\Traffic Management Plan\TIA update\SIDRA\SIDRA Models_04-11-24.sip9

Appendix H

Swept Path Assessment

H-1 Lake Macdonald Drive / Collwood Road



Prime mover and semi-trailer (19 m)	19.000m
Overall Length	2.500m
Overall Width	4.300m
Overall Body Height	0.540m
Min Body Ground Clearance	2.500m
Track Width	6.00s
Lock-to-lock time	12.500m
Curb to Curb Turning Radius	

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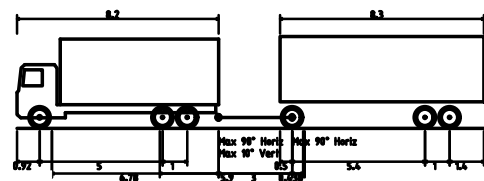
VEHICLE TURN PATHS
LAKE MACDONALD DRIVE / COLLWOOD ROAD
PRIME MOVER AND SEMI-TRAILER (19m)

INFORMATION DOCUMENT

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Truck & Dog	
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	3.738m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	9.600m

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**VEHICLE TURN PATHS
LAKE MACDONALD DRIVE / COLLWOOD ROAD
TRUCK AND DOG**

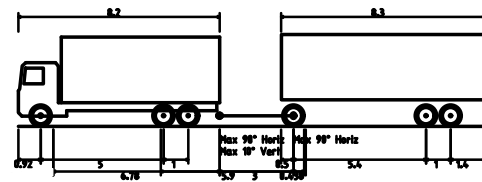
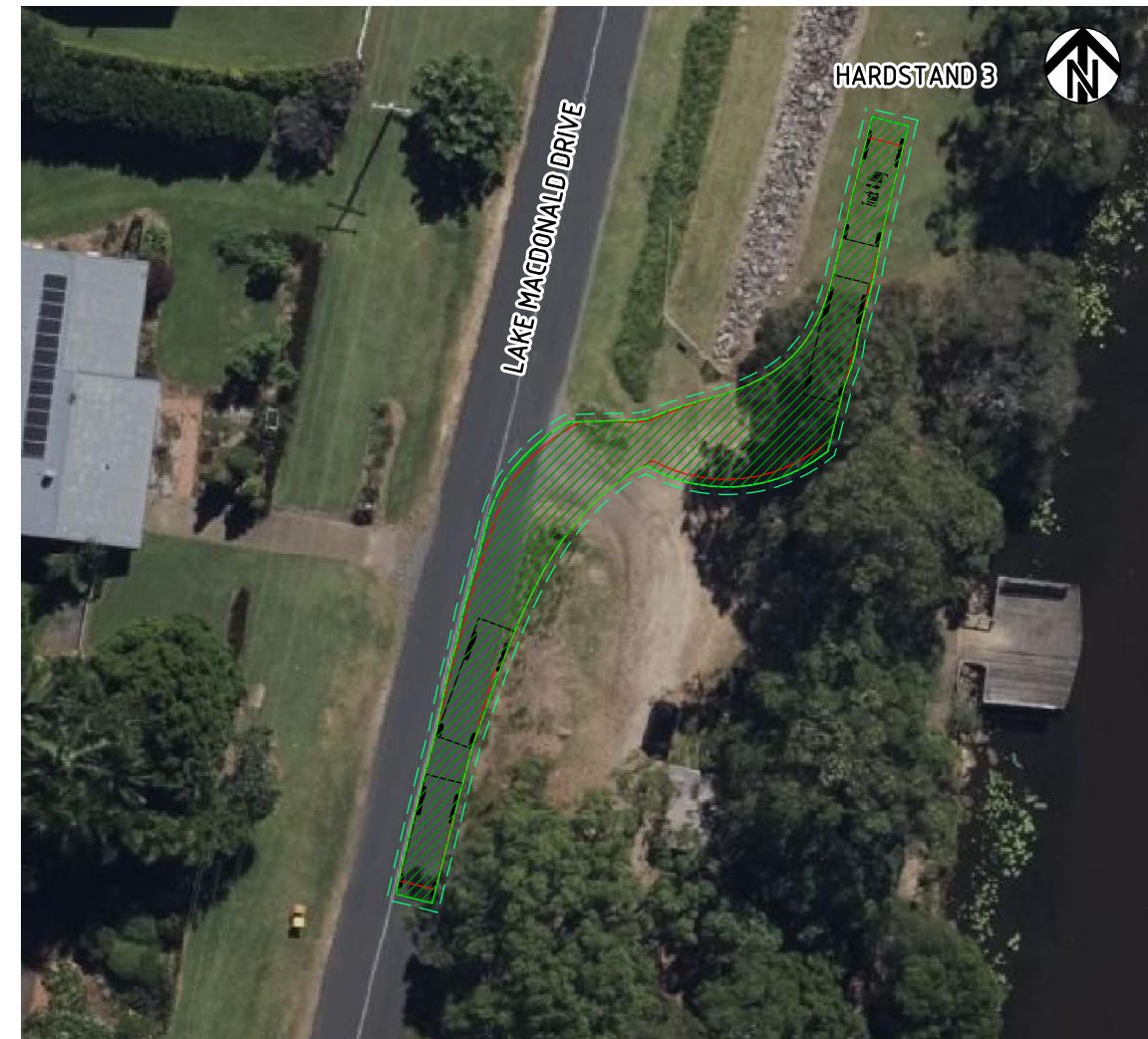
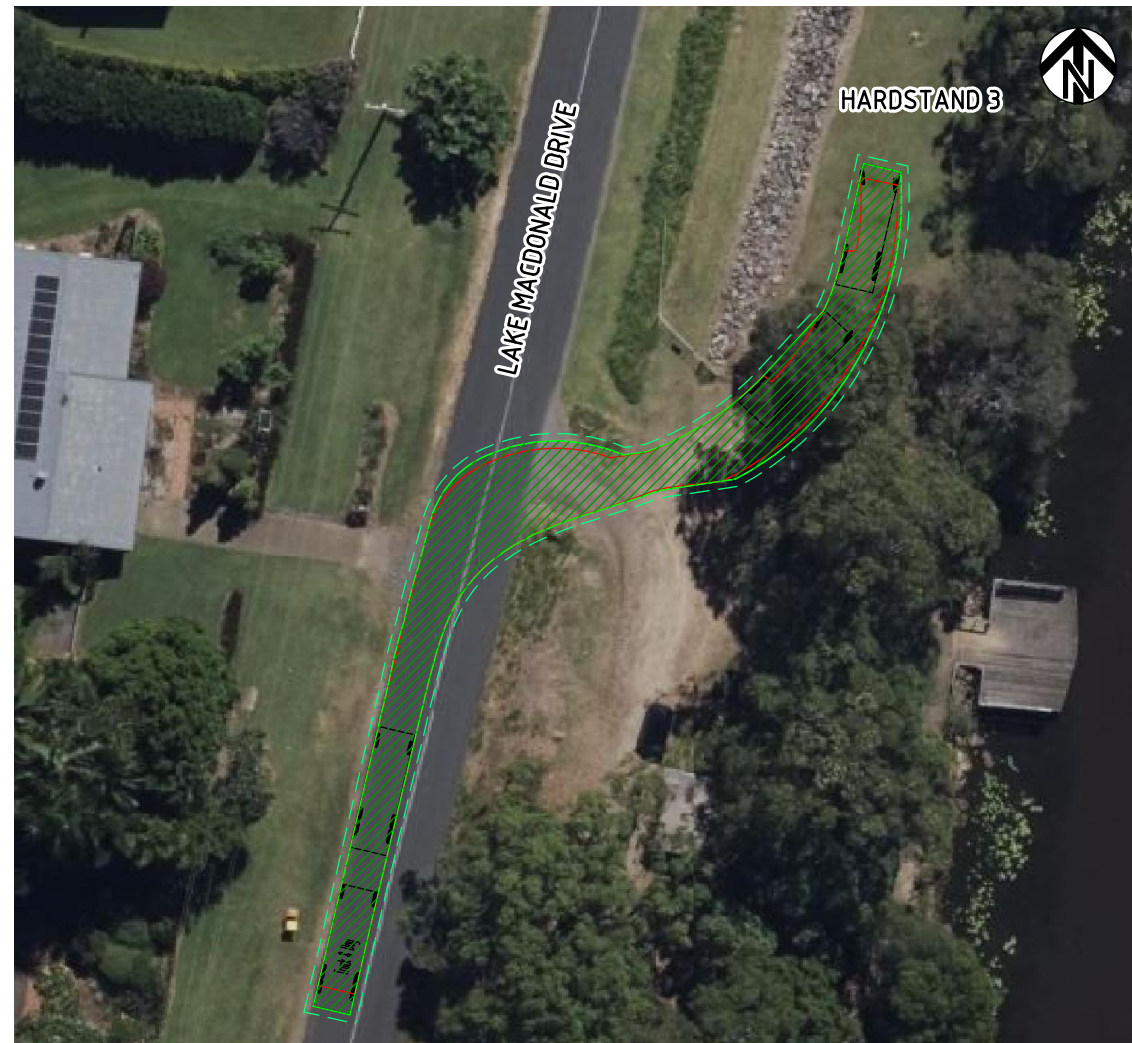
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H-2 Lake Macdonald Drive / Hardstand Area 3



Truck & Dog	19.000m
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	3.738m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	9.600m

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SCALE 1:250

**VEHICLE TURN PATHS
LAKE MACDONALD DRIVE / HARDSTAND 3
TRUCK AND DOG**

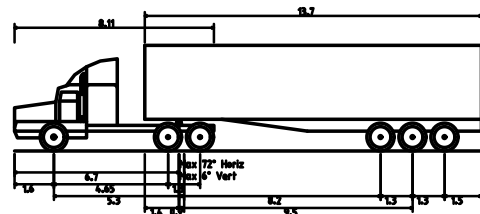
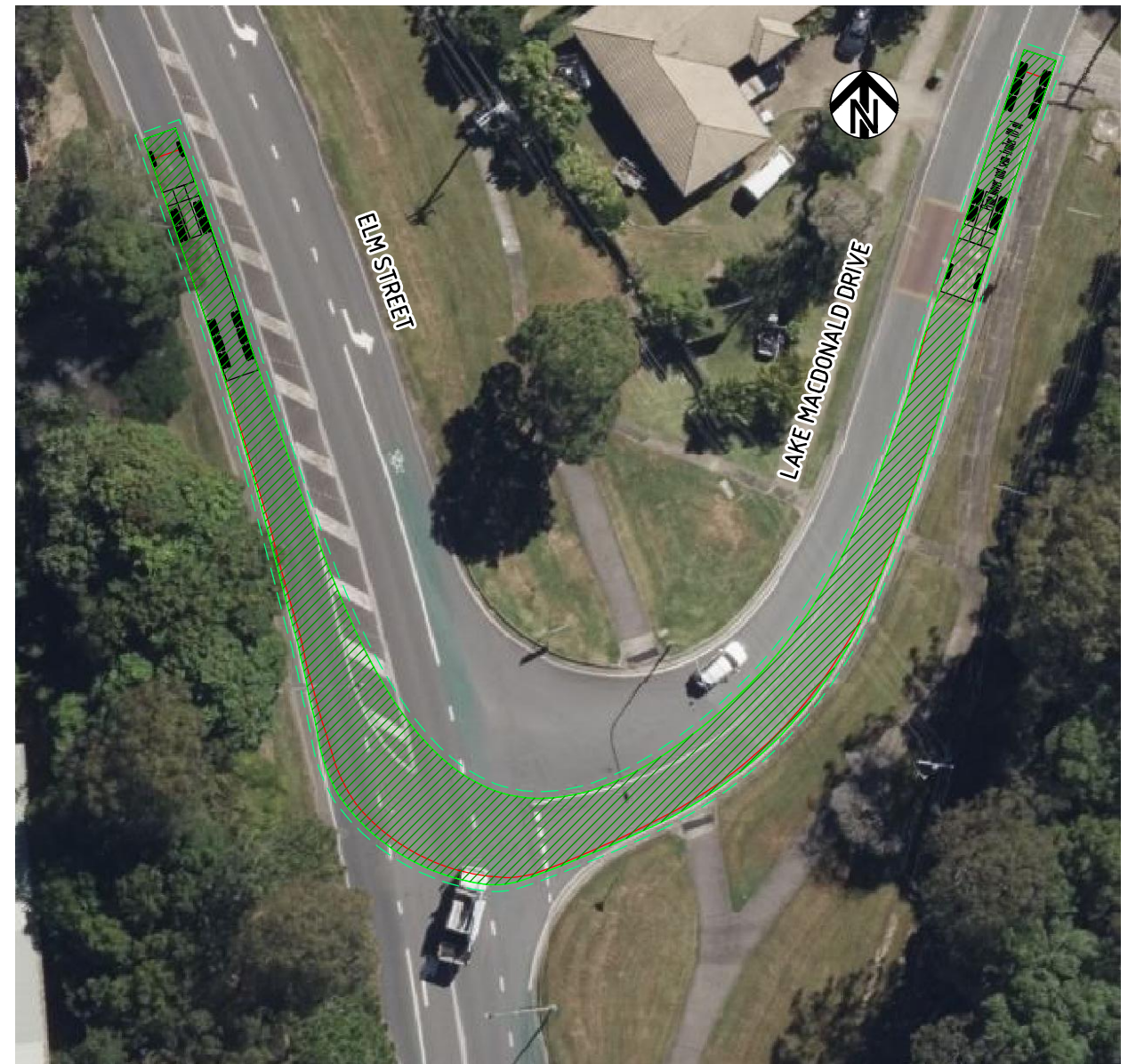
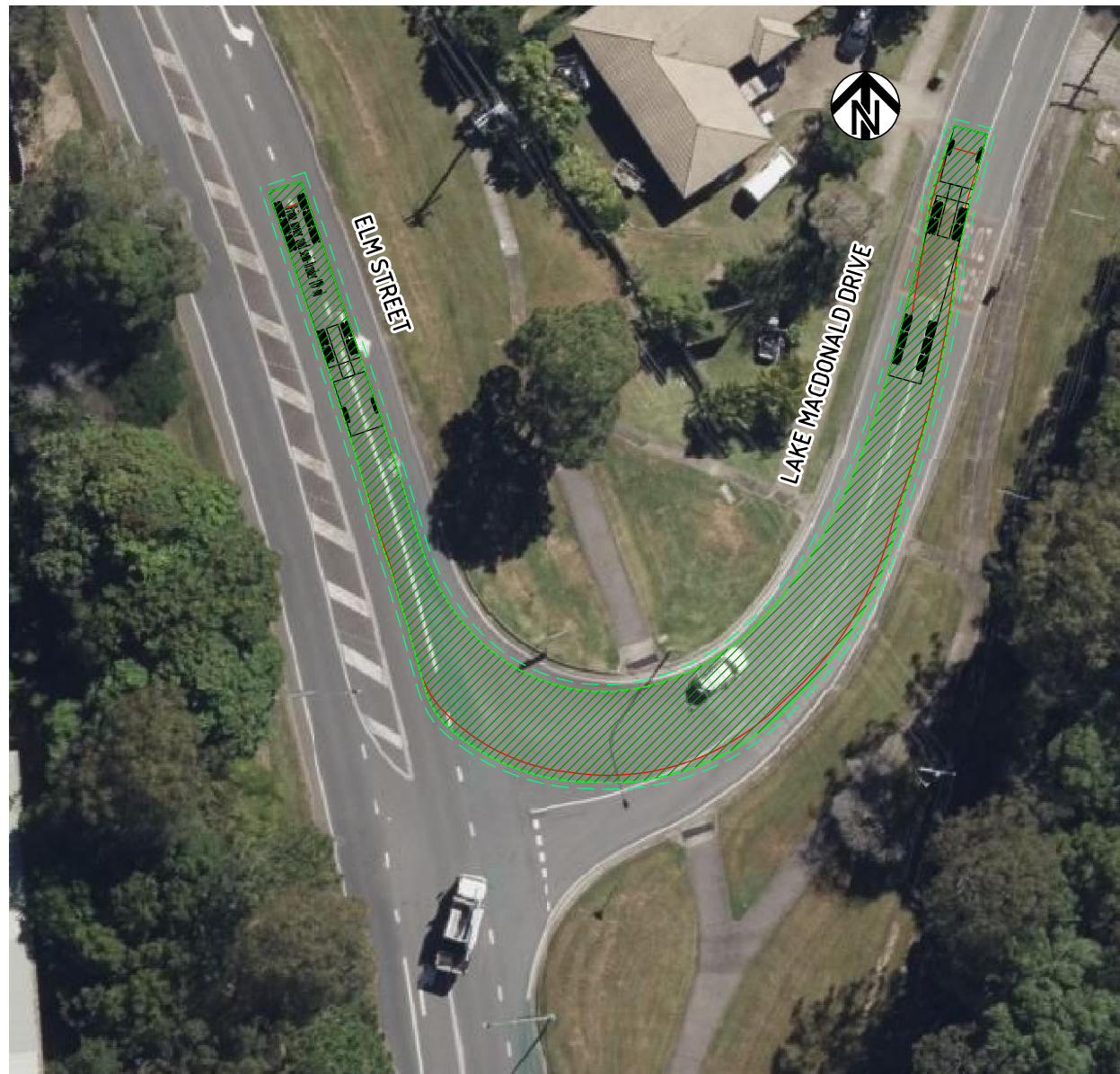
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H-3 Elm Street / Lake Macdonald Drive



Prime mover and semi-trailer (19 m)
 Overall Length 19.000m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.540m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 12.500m

NOT FOR CONSTRUCTION

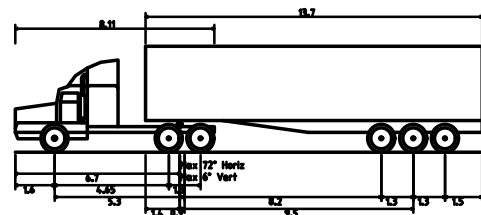
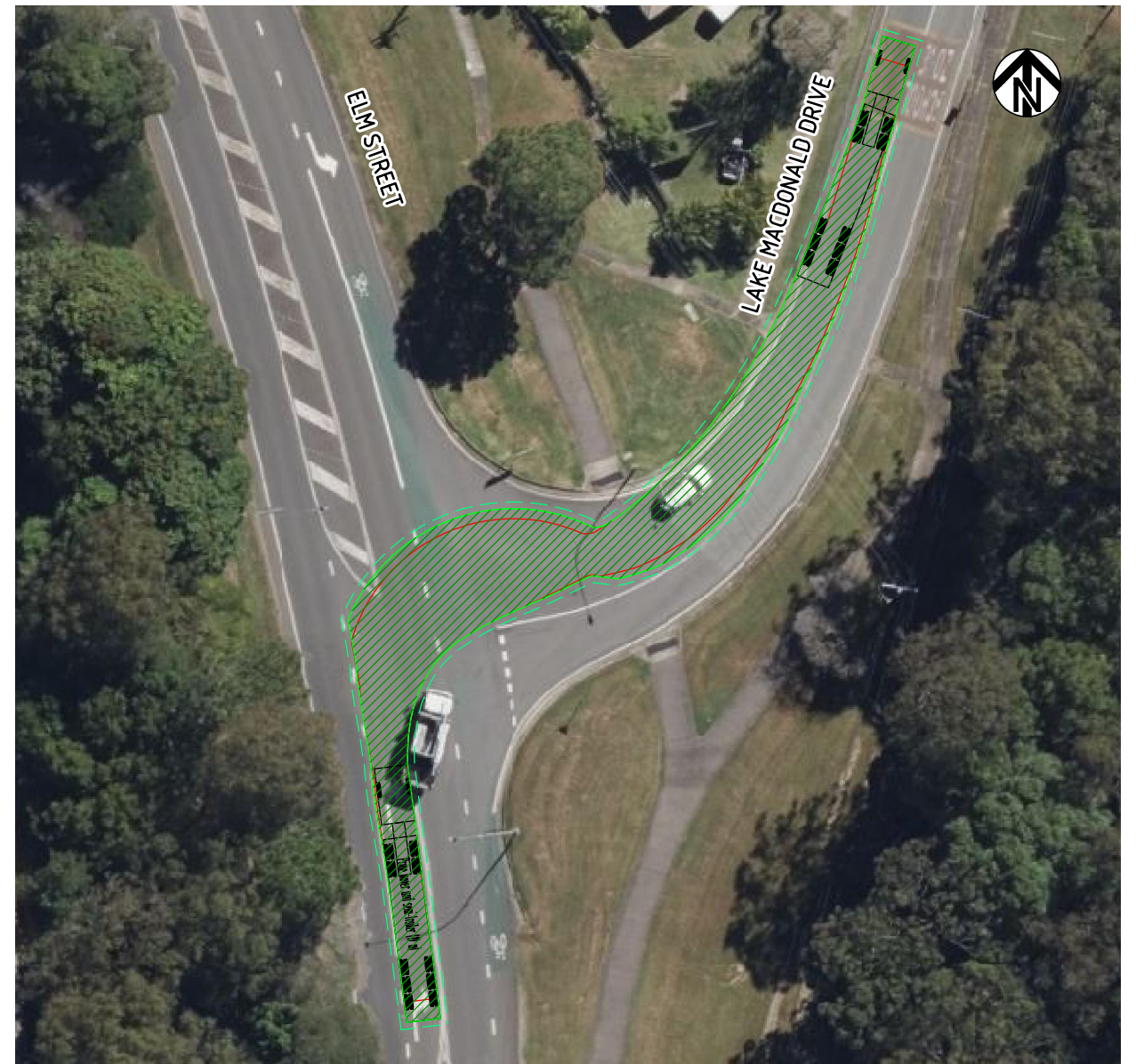
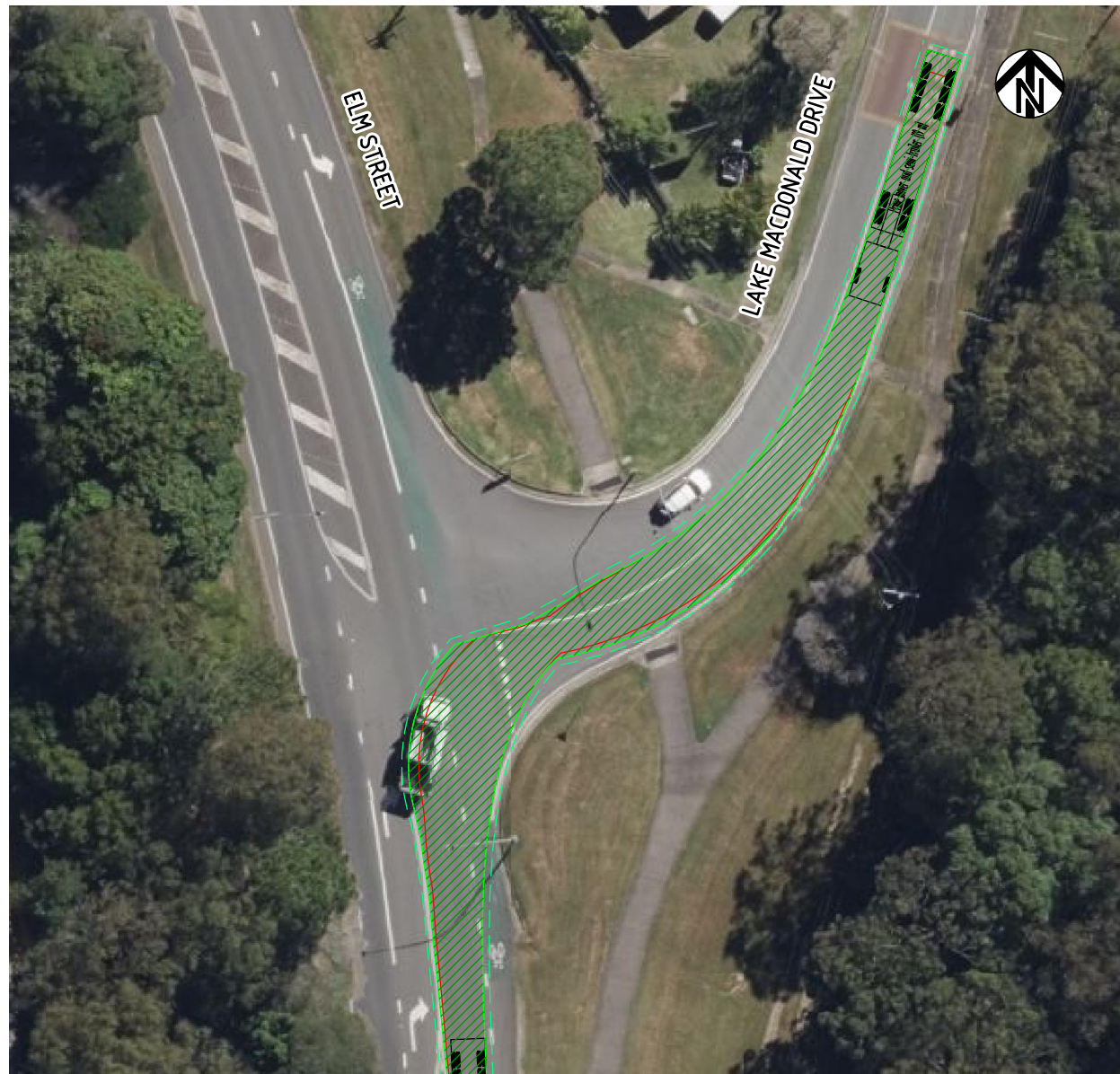
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**VEHICLE TURN PATHS
 ELM STREET / LAKE MACDONALD DRIVE
 PRIME MOVER AND SEMI-TRAILER (19m)**

INFORMATION DOCUMENT

30035740-ID-1001





Prime mover and semi-trailer (19 m)	19.000m
Overall Length	2.500m
Overall Width	4.300m
Overall Body Height	0.540m
Min Body Ground Clearance	2.500m
Track Width	6.00s
Lock-to-lock time	12.500m

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SCALE 1:250

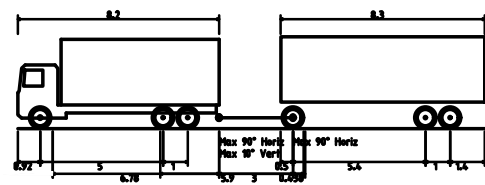
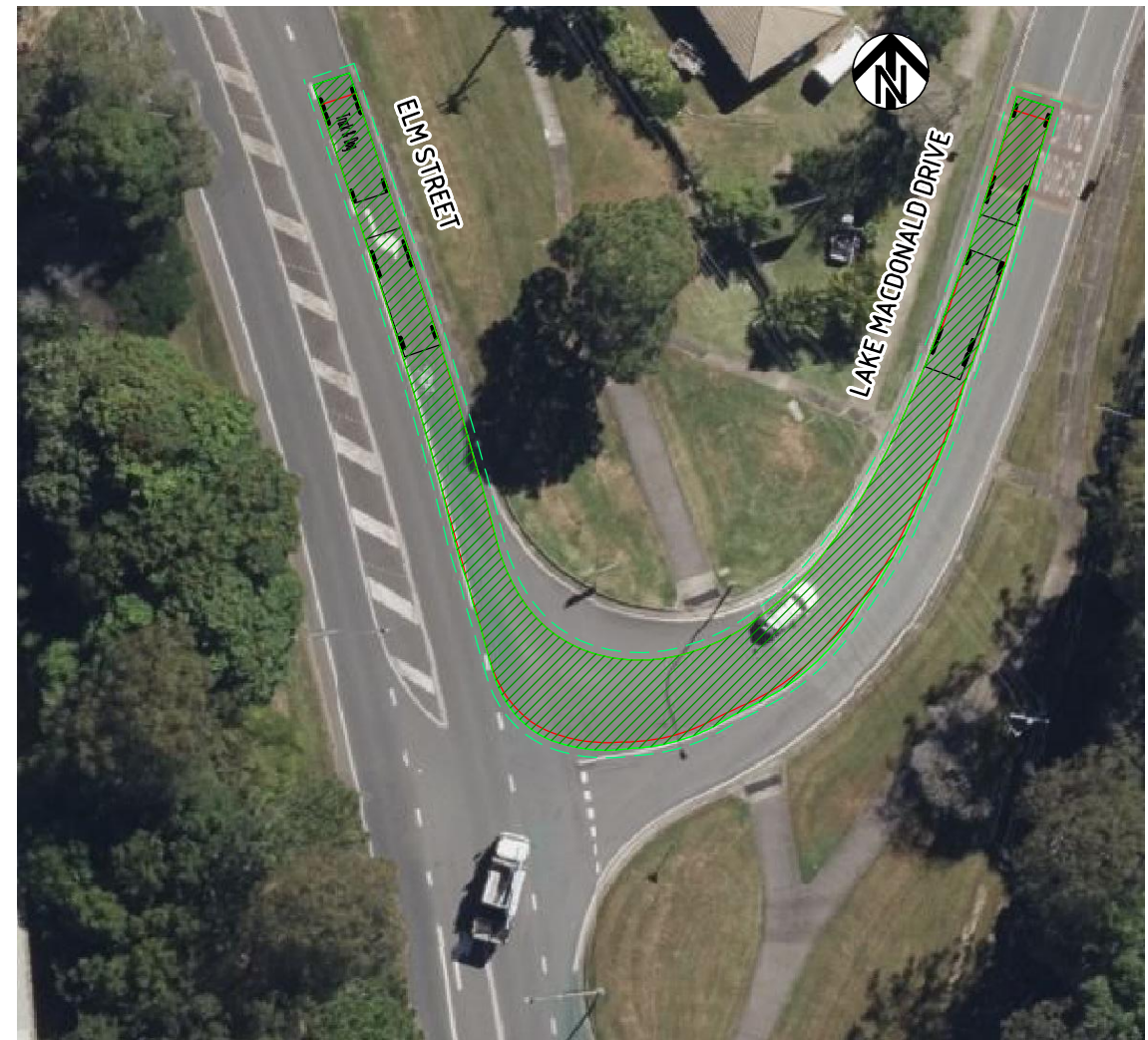
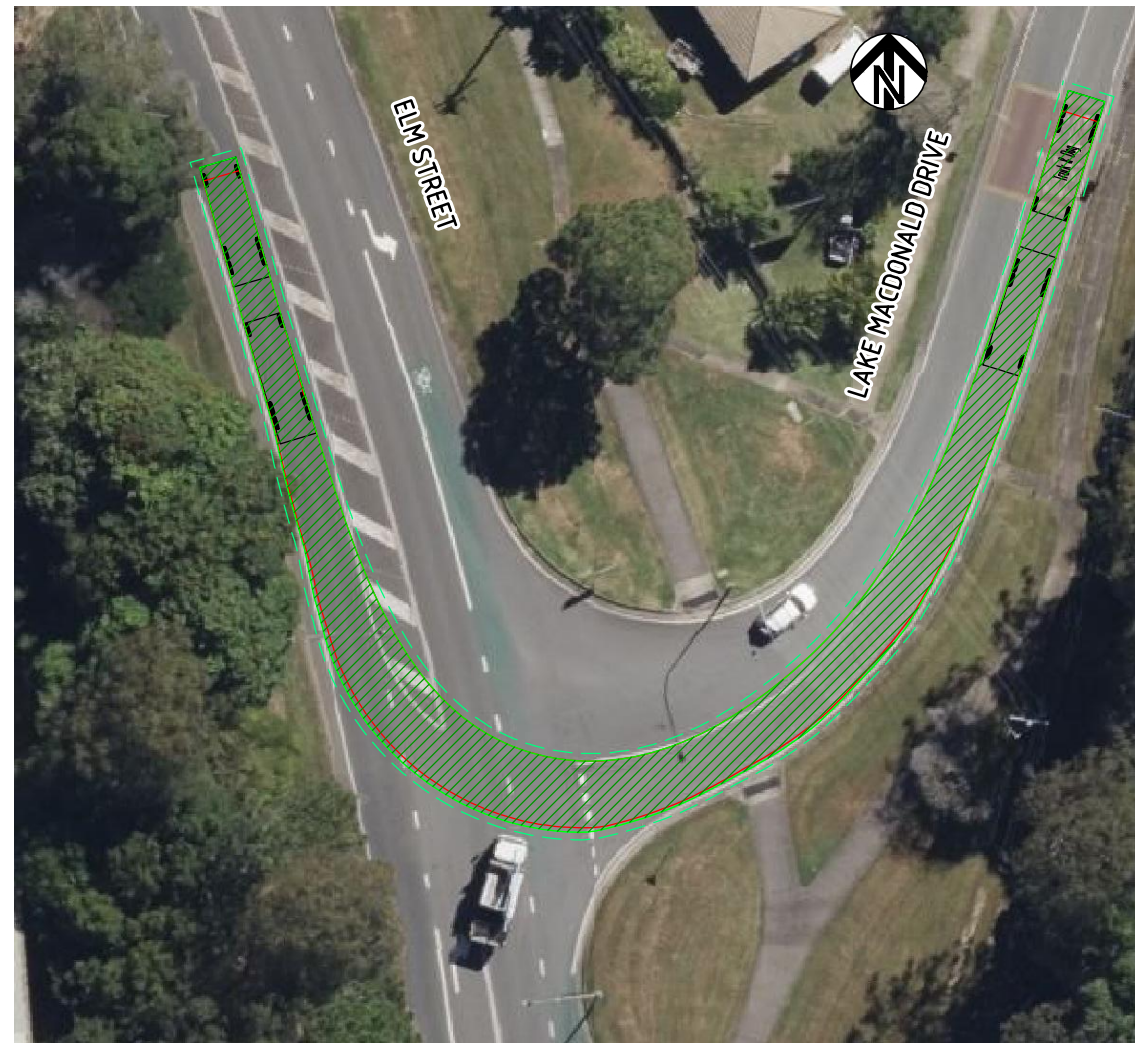
**VEHICLE TURN PATHS
ELM STREET / LAKE MACDONALD DRIVE
PRIME MOVER AND SEMI-TRAILER (19m)**

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Truck & Dog
 Overall Length 19.000m
 Overall Width 2.500m
 Overall Body Height 3.738m
 Min Body Ground Clearance 0.427m
 Track Width 2.500m
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 9.600m

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SCALE 1:250

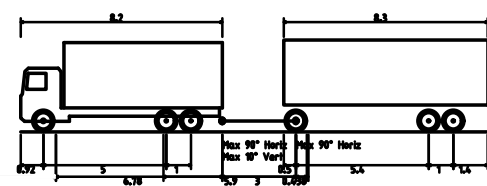
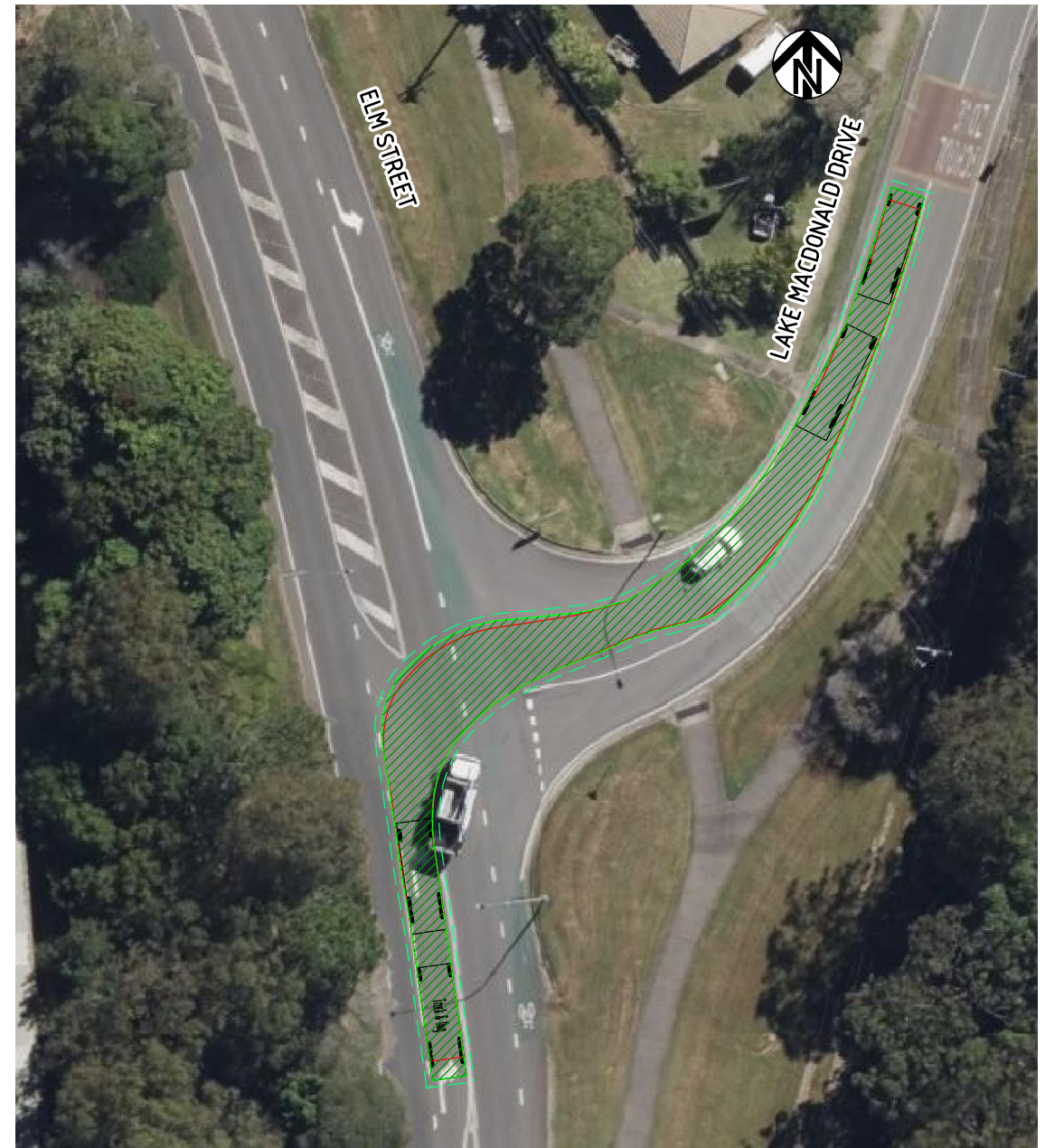
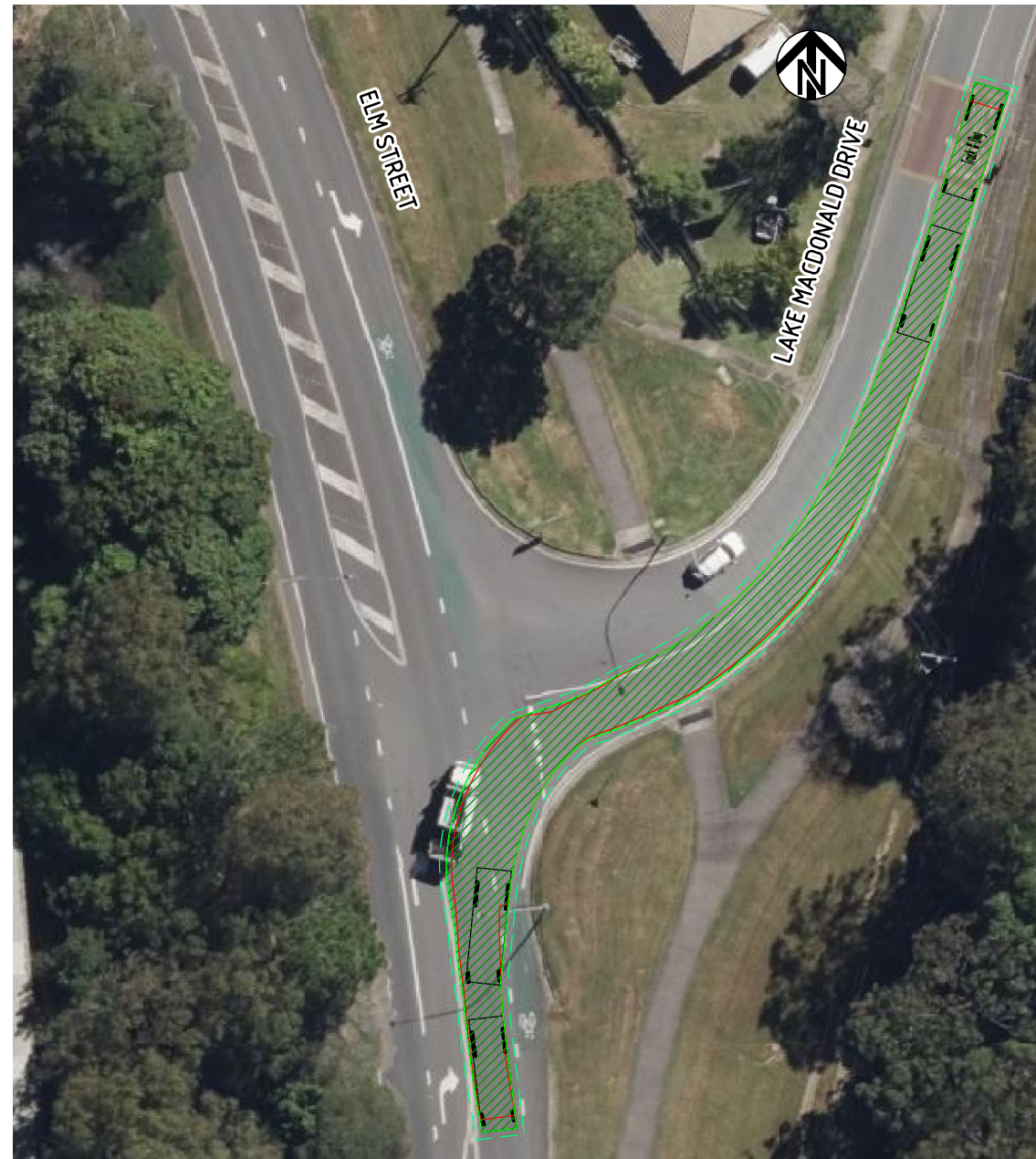
VEHICLE TURN PATHS
ELM STREET / LAKE MACDONALD DRIVE
TRUCK AND DOG

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Truck & Dog	
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	3.738m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	9.600m

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**VEHICLE TURN PATHS
 ELM STREET / LAKE MACDONALD DRIVE
 TRUCK AND DOG**

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