Our ref: PR150263_ID_L81537 **Your Ref OUT22/3141**

Date: 8 September 2022

135 Abbott Street
Cairns QLD 4870
T +61 7 4031 1336

Office of Coordinator General
Department of State Development, Infrastructure, Local Government and Planning
PO Box 15517,
City East Qld 4002

Mr Michael Moran, Project Officer
Via email sdainfo@dsdip.qld.gov.au
Michael Moran Michael.Moran@coordinatorgeneral.qld.gov.au

Dear Sirs,

AP2022/011 Response to the request for additional information
SDA Application for Material Change of Use High Impact Industry
Proposed Asphalt plant on Lot 1 SP323733 at 101 Warner Road, Wrights Creek
Cairns South State Development Area

We act on behalf of Koppen Construction Pty Ltd.

We refer to your request for additional information dated 11 August 2022.

Issue 1 Traffic Impacts

Information requested

The proposal identifies the total traffic generation for both the asphalt plant and concrete plant to be a up to 246 heavy vehicle movements per day.

The proposal also refers to State government roadworks currently under construction that closes Warner Road at the Bruce Highway end and redirects traffic via the new road that crosses at the Maitland Road Overpass and as a result, may cause a reduction in traffic along Warner Road. Access intersections onto the site require road widening, updated line markings and as recommended by the proponent, that the speed be reduced to 60km/hour in the vicinity of the intersection access into the subject site to align with industrial heavy vehicle traffic safety requirements.

*The proponent is requested to provide a **reasonable justification that supports traffic volumes generated by the proposed development is either accommodated in existing road networks, or identifies works to be undertaken to accommodate the increased traffic.***

*Provide reasoning that the proposed development's traffic outcomes facilitate safe and efficient vehicular movements and demonstrate that the proposed **use does not unduly impact** on the safe and efficient operation of the use of external road, rail or transport infrastructure.*

Additional Information

Refer to attached letter from OSE group dated 8 September 2022.

Our ref: P80775

Issue 2 Building material

Information requested

A BAI Communications broadcast facility which accommodates existing broadcast infrastructure is located on Warner Road, opposite the proposed development site.

The proponent is requested to provide details of the construction and building materials being used for the main structures proposed on site, particularly the asphalt tower.

Additional Information

The main structures used for the asphalt plant will be steel coated with a 2pac paint system.

The site Office, Amenities and laboratory buildings will be constructed of painted and rendered concrete blocks on concrete slab footings painted with powder coated aluminium windows.

The roof will be with sloped colorbond metal roof, gutter and fascia. The roof colour will be Woodland Grey, a colorbond colour a dark charcoal-brown with a slightly warm undertone that is often used to lessen visual impacts.

The actual plant used for Warner road will be relocated from its existing site at Muswellbrook is shown in the application material as *Appendix I - Typical images PR150263-16-.pdf.* A Youtube video of the plant can be sourced at “INTRAME Asphalt Plant Toowoomba, Australia” or “Toowommba second range asphalt plant” at link.

Yours sincerely,

for RPS Australia East Pty Ltd

Ian Doust
Principal
ian.doust@rpsgroup.com.au

Attachments:

1. Certified construction cost of operational work
2. Calculations - fee required under Cairns South State Development Area fee schedule
3. Calculations - fee required under Cairns Regional Council fee schedule

8 September 2022 Our Reference: 21145_220815

RPS
135 Abbott St
Cairns, Queensland 4870

Attention: Ian Doust

Dear Ian,

AP2022/011 – SDA application for a material change of use for high impact industry (asphalt plant and concrete batching plant) in the Cairns South State Development Area – Request for Further Information

I refer to the above Request for Further Information as follows:

- *1 Traffic Impacts - The proposal identifies the total traffic generation for both the asphalt plant and concrete plant to be a up to 246 heavy vehicle movements per day. The proposal also refers to State government roadworks currently under construction that closes Warner Road at the Bruce Highway end and redirects traffic via the new road that crosses at the Maitland Road Overpass and as a result, may cause a reduction in traffic along Warner Road. Access intersections onto the site require road widening, updated line markings and as recommended by the proponent, that the speed be reduced to 60km/hour in the vicinity of the intersection access into the subject site to align with industrial heavy vehicle traffic safety requirements.*
  The proponent is requested to provide a reasonable justification that supports traffic volumes generated by the proposed development is either accommodated in existing road networks or identifies works to be undertaken to accommodate the increased traffic.

  The most recent traffic counts undertaken on Warner Rd for year 2020 are approximately 2250 AADT. Refer Attachment A - Traffic Analysis and Reporting System (TARS) extract from Department of Transport and Main Roads data base which provides traffic count history for the Pine Creek – Yarrabah Road.

  Once the Warner Road connection onto the Bruce highway is disconnected (programmed for approximately 6 months' time in early 2023 as per advice from Department of Transport and Main Roads (TMR)), the majority of existing Cairns-Yarrabah traffic will cease using Warner Road. The only traffic generators for Warner Rd will be local farm dwellings and the proposed Asphalt and Concrete Batching plant development. Warner Road effectively becomes a 'local road' in terms of its use and therefore it is appropriate to refer to Cairns Regional Council's Development Manual FNQROC to determine current traffic generation for the road. With reference to FNQROC Table D1.1 Street and Road Hierarchy traffic generation table (refer Attachment B), less than 25 dwellings in the catchment may use this connection to access the Bruce Highway generating a maximum of 190 AADT. It is likely however that approximately half of these dwellings will access the Bruce Highway through the northern access roads, Harris-Hill-Page-Thompson intersection with the Highway rather than head south through the Warner Road connection. On this basis, the traffic generation is more likely to be 100 AADT from the dwellings. Therefore, the maximum traffic generation combined with the development would be approximately 350 AADT. As previously stated, Warner Road currently supports 2250 AADT which includes light traffic and heavy vehicles.

Project Manager: peter.deroma@osegroup.com.au
Art Work Spaces I 36 Abbott St Cairns QLD 4870
PO Box 809 I Edge Hill Cairns Qld 4870

With regard to the adequacy of the existing road network to support the industrial traffic generation for the proposed development, reference is made to FNQROC's road geometry standard drawing S1009 for typical industrial road type cross sections included as Attachment C. Road running carriageway widths for both an industrial collector street and access street is 3.5m (7m total to edge of line marking). The existing Warner Road carriageway is 3.5m (7m total). Drawing S1009 also shows allowance for parking either side of the carriageway, however it is suggested that parking should only be encouraged within an industrial estate where the estate is entirely sign posted at 60km/hr. Warner Road existing geometry consists of a 7m total carriageway with grassed shoulders and table drains. Parking should be discouraged on Warner Road for safety and serviceability reasons until such time as the Industrial precinct has expanded and adequate internal road structures are in place to support on street parking.

- *Provide reasoning that the proposed development's traffic outcomes facilitate safe and efficient vehicular movements and demonstrate that the proposed use does not unduly impact on the safe and efficient operation of the use of external road, rail or transport infrastructure.*

  In combination with the assessment provided above, it is also relevant to examine the new intersection of Warner Road with the realigned Pine Creek Yarrabah Road. Refer Attachment D aerial photograph of the recent construction. Discussions have been had with TMR to understand the capacity of the intersection. Confirmation received from TMR indicate the intersection geometry has been designed for a 19m semi-trailer and check vehicle being a low loader under escorts in consideration of the proposed heavy industrial precinct off Warner Road. The proposed Asphalt and Concrete Batching Plant operation will only be using 19m semi-trailers. In addition, TMR provided details of the pavement makeup for the intersection and the adjoining Warner Road section. Total minimum pavement thicknesses for the upgraded section are a minimum of 480mm. A review of these details indicate it is suitable for the proposed traffic volumes generated from the Asphalt and Concrete plant development. Further future development of the SDA may require review of Warner Road and the Intersection to accommodate increased traffic volumes and loading. It would not be reasonable to expect this developer to undertake any upgrades to Warner Road to accommodate future traffic growth and loading.

  As per the documentation provided in the original application, the proposed upgrades to Warner Road consist of the following elements:

  - Reduction of speed limit to 60km/hr in the vicinity of the development in line with heavy vehicle standards
  - Upgraded driveway intersection geometry to accommodate 19m semi-trailer trucks

  The proposed geometry and speed reduction was discussed with TMR and they have generally indicated their 'in principle' agreement.

I trust the above additional information satisfies the request for further information.

Your sincerely,

Peter De Roma

Principal Engineer

OSE Group Pty Ltd

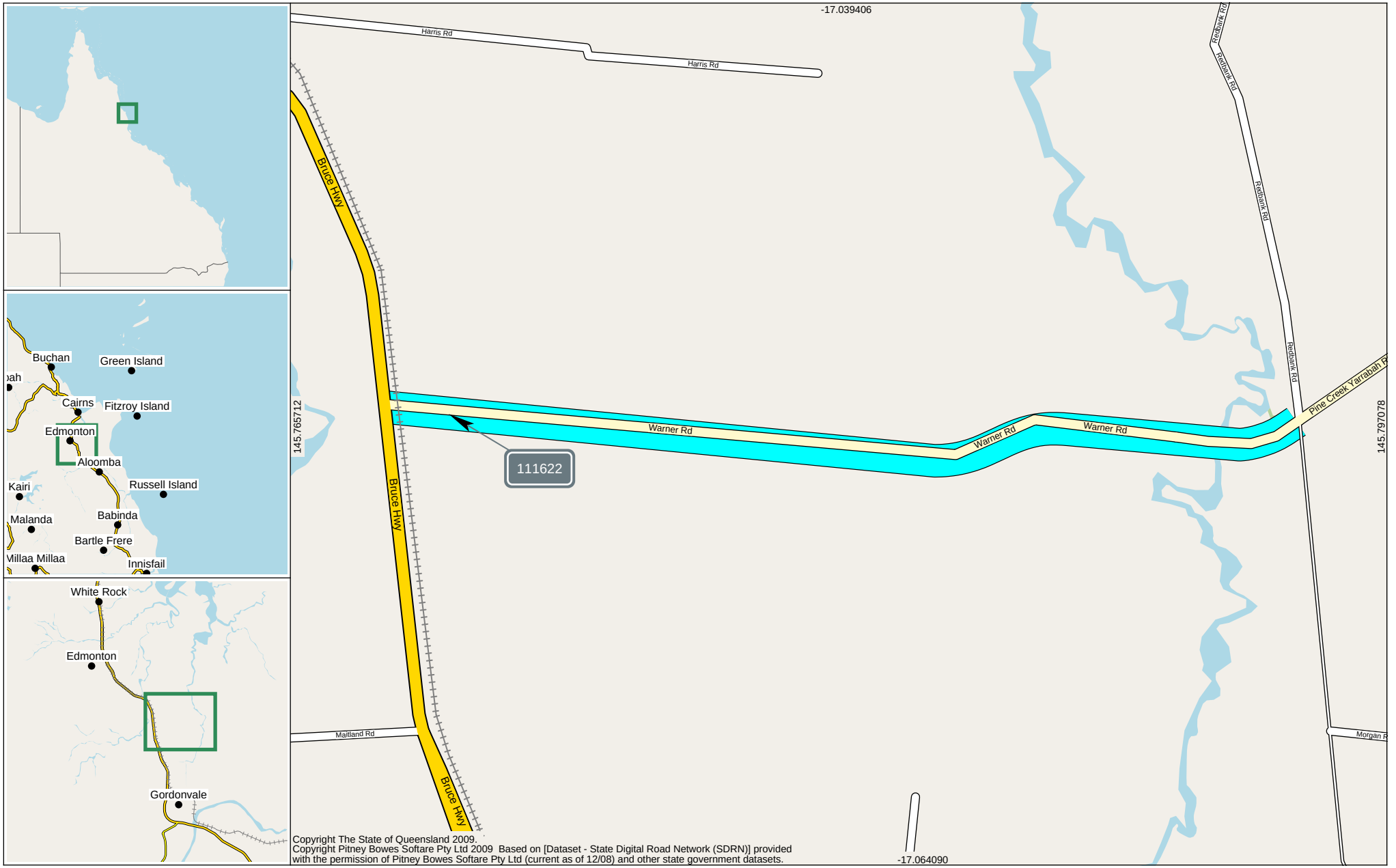
Attachment A

Traffic Analysis and Reporting System (TARS) extract from Department of Transport and Main Roads data base which provides traffic count history for the Pine Creek – Yarrabah Road

AADT Segment Report

Area 403 - Far North District Road Section 8101 - PINE CREEK - YARRABAH ROAD

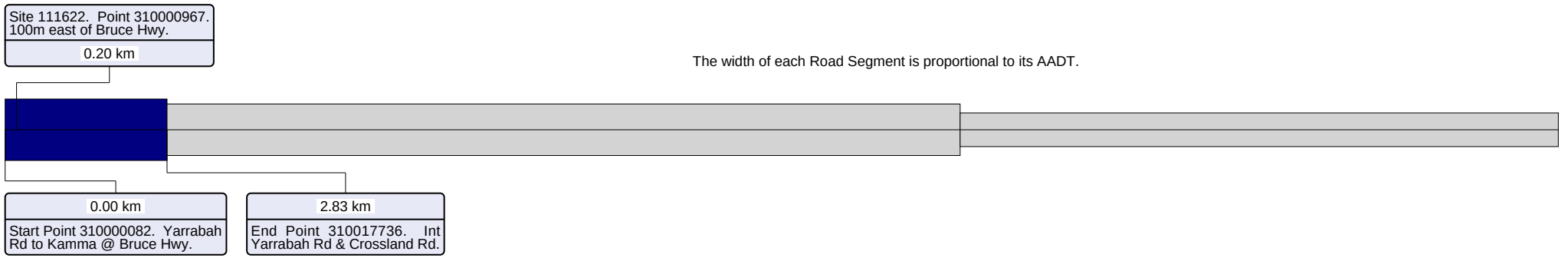
Road Segment from 0.000km to 2.835km Segment Site 111622 Traffic Year 2020 Data Collection Year 2020



AADT Segment Report

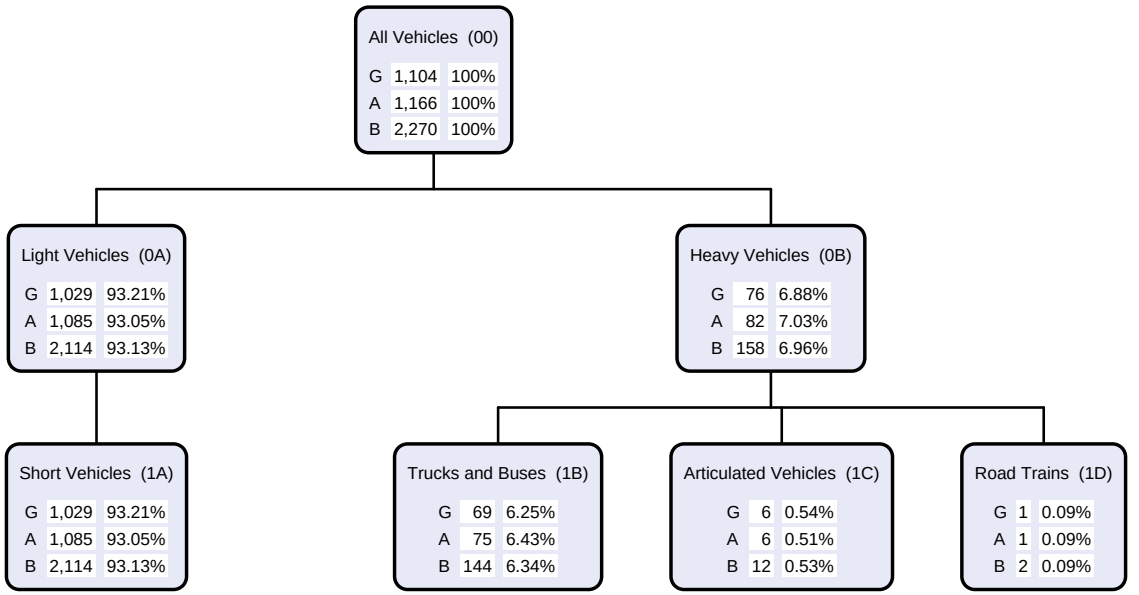
Area 403 - Far North District Road Section 8101 - PINE CREEK - YARRABAH ROAD

Road Segment from 0.000km to 2.835km Segment Site 111622 Traffic Year 2020 Data Collection Year 2020



The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.



AADT Segment Annual Volume Report
Provides summary data for the selected AADT Segment of a Road Section. Summary data is presented as both directional information and a combined bi-directional figure. The data is then broken down by Traffic Class, when available. The report also includes maps displaying the location of both the AADT Segment and the traffic count site.

Annual Average Daily Traffic (AADT)
Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segments
The State declared road network is broken into Road Sections and then further broken down into AADT Segments. An AADT Segment is a sub-section of the declared road network where traffic volume is similar along the entire AADT Segment.

Area
For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

AADT Values
AADT values are displayed by direction of travel as:

- G Traffic flow in gazettal direction
- A Traffic flow against gazettal direction
- B Traffic flow in both directions

Data Collection Year
Is the most recent year that data was collected at the data collection site.

Please Note:
Due to location and/or departmental policy, some sites are not counted every year.

Gazettal Direction
Is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

Maps
Display the selected location from a range of viewing levels, the start and end position details for the AADT Segment and the location of the traffic count site.

Road Section
Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Segment Site
Is the unique identifier for the traffic count site representing the traffic flow within the AADT Segment.

Site
The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site Description
The description of the physical location of the traffic counting device.

Start and End Point
The unique identifier for the Through Distance along a Road Section.

Vehicle Class
Traffic is categorised as per the Austroads Vehicle Classification scheme. Traffic classes are in the following hierarchical format:

Volume or All Vehicles
00 = 0A + 0B

Light Vehicles
0A = 1A
1A = 2A + 2B

Heavy Vehicles
0B = 1B + 1C + 1D
1B = 2C + 2D + 2E
1C = 2F + 2G + 2H + 2I
1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume
00 All vehicles

2-Bin
0A Light vehicles
0B Heavy vehicles

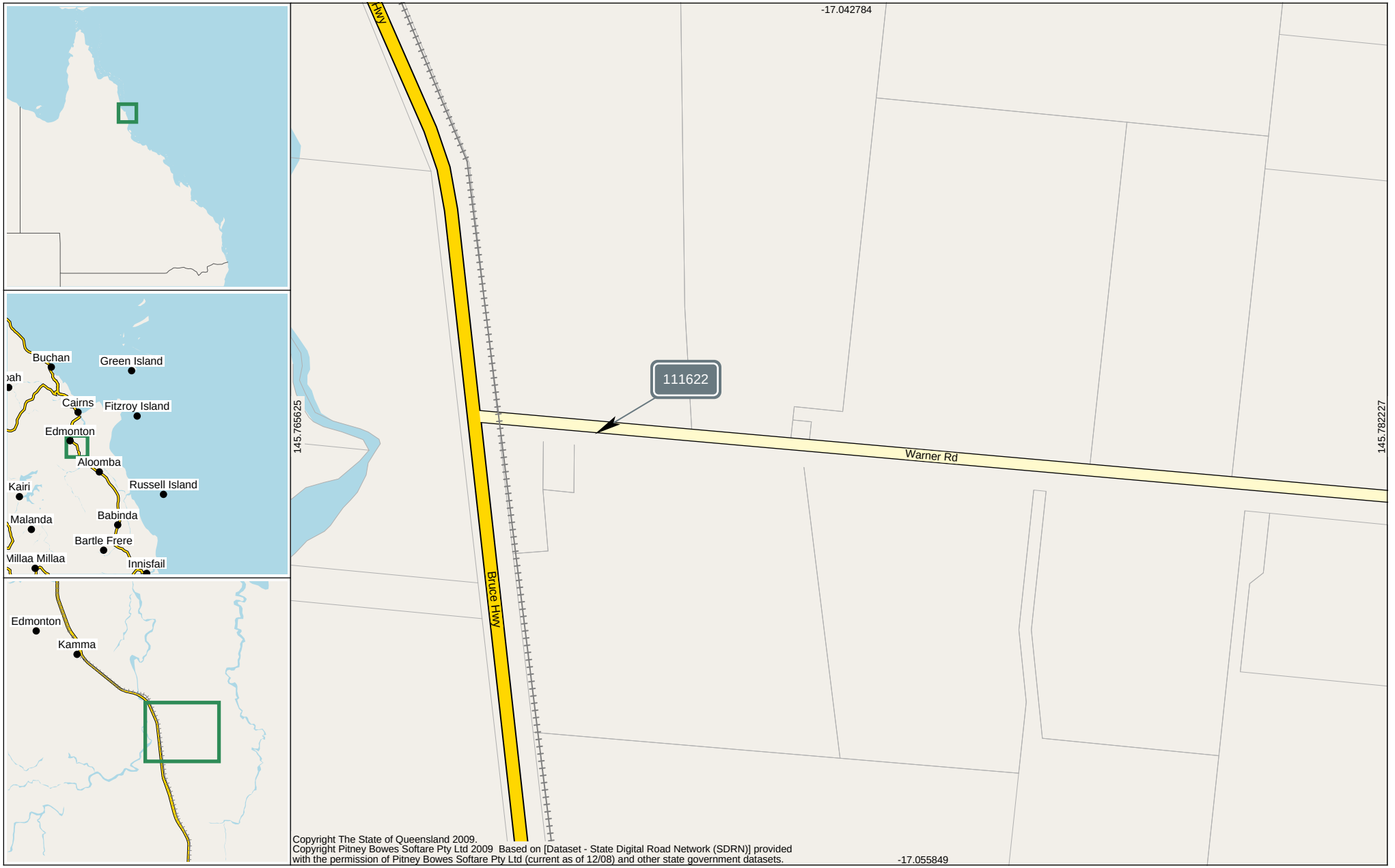
4-Bin
1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin
2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

Annual Volume Report

Area 403 - Far North District Road Section 8101 - PINE CREEK - YARRABAH ROAD

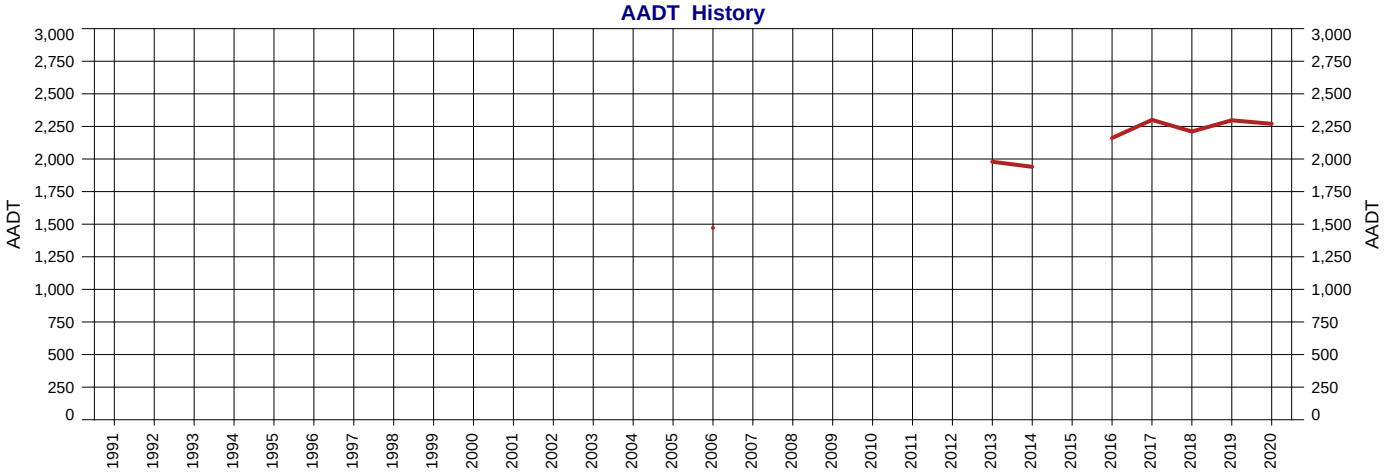
Site 111622 - 100m east of Bruce Hwy TDist 0.200km Speed Limit 100



Area	403 - Far North District
Road Section	8101 - PINE CREEK - YARRABAH ROAD
Site	111622 - 100m east of Bruce Hwy
Thru Dist	0.2
Type	C - Coverage
Stream	TB - Bi-directional traffic flow

Year	2020	Growth last Year	-1.18%
AADT	2,270	Growth last 5 Yrs	
Avg Week Day	2,724	Growth last 10 Yrs	
Avg Weekend Day	2,020		

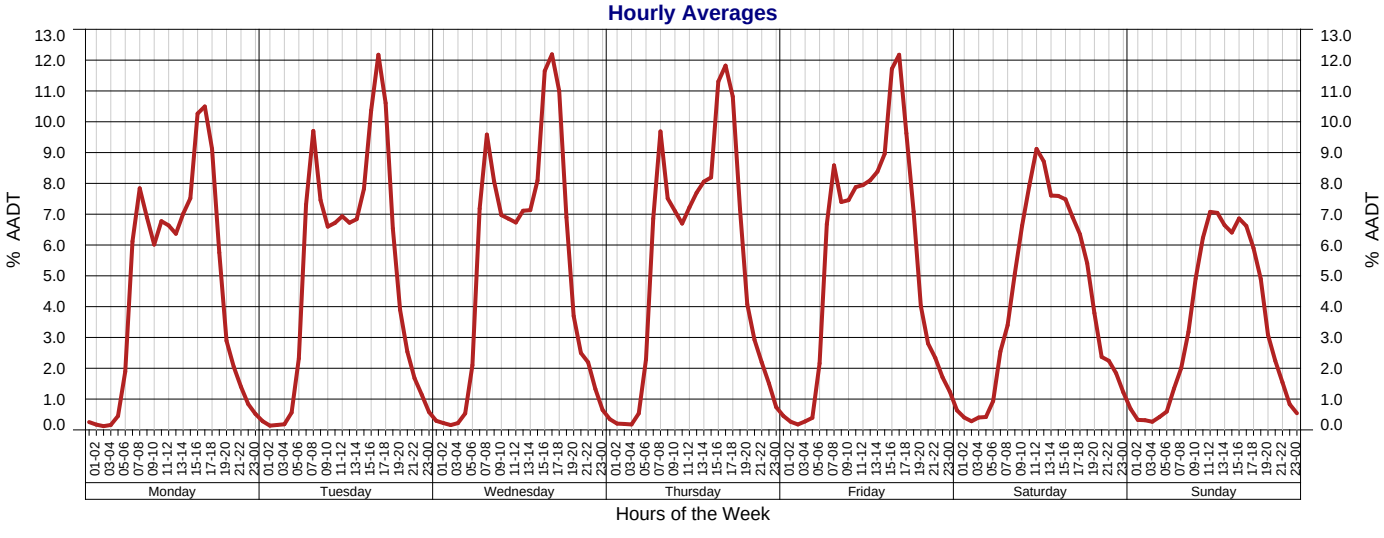
AADT History



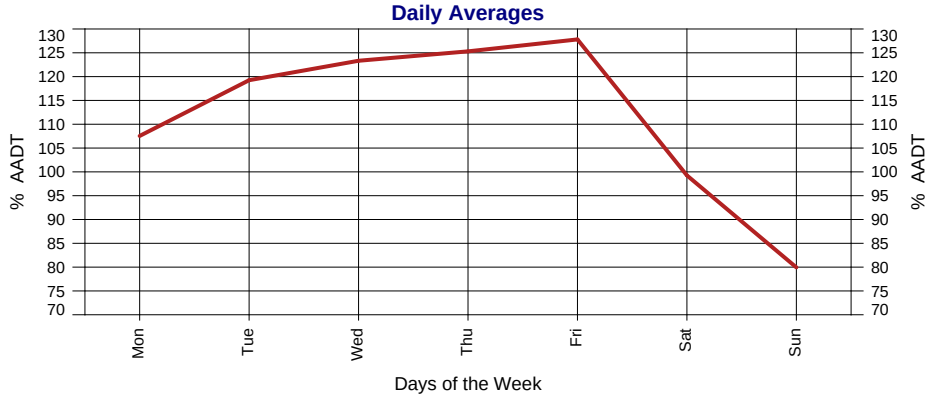
Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2020	2,270	-1.18%		
2019	2,297	3.89%	2.76%	
2018	2,211	-3.87%	2.38%	
2017	2,300	6.43%		
2016	2,161			3.90%
2015				
2014	1,940	-1.97%		
2013	1,979			
2012				
2011				
2010				
2009				
2008				
2007				
2006	1,472			

Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2005				
2004				
2003				
2002				
2001				
2000				
1999				
1998				
1997				
1996				
1995				
1994				
1993				
1992				
1991				

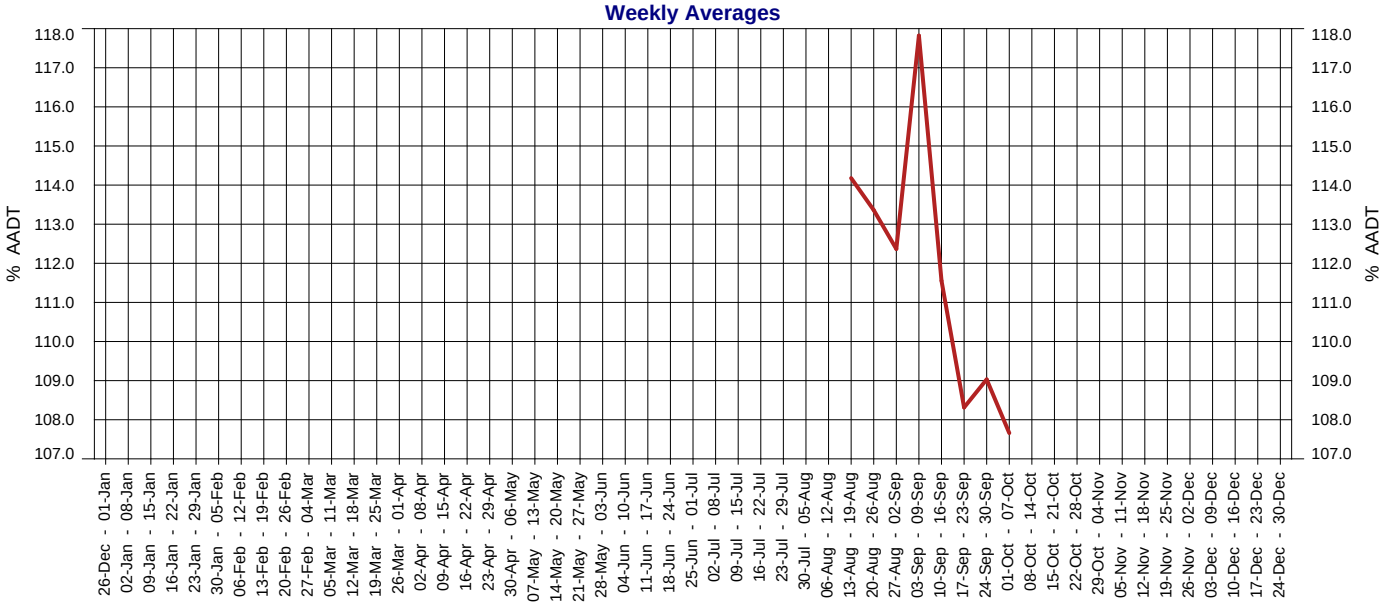
Hourly Averages



Daily Averages



Weekly Averages



2020 Calendar

January

M	T	W	T	F	S	S
		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		

February

M	T	W	T	F	S	S
					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	

March

M	T	W	T	F	S	S
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

April

M	T	W	T	F	S	S
		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			

May

M	T	W	T	F	S	S
				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

June

M	T	W	T	F	S	S
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					

July

M	T	W	T	F	S	S
		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		

August

M	T	W	T	F	S	S
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

September

M	T	W	T	F	S	S
	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				

October

M	T	W	T	F	S	S
			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	

November

M	T	W	T	F	S	S
30						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

December

M	T	W	T	F	S	S
	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			

Days on which traffic data was collected.

Annual Volume Report
Displays AADT history with hourly, daily and weekly patterns by Stream in addition to annual data for AADT figures with 1 year, 5 year and 10 year growth rates.

Annual Average Daily Traffic (AADT)
Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT History
Displays the years when traffic data was collected at this count site.

Area
For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitian District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Avg Week Day
Average daily traffic volume during the week days, Monday to Friday.

Avg Weekend Day
Average daily traffic volume during the weekend, Saturday and Sunday.

Calendar
Days on which traffic data was collected are highlighted in green.

Gazettal Direction
The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

- G Traffic flowing in Gazettal Direction
- A Traffic flowing against Gazettal Direction
- B The combined traffic flow in both Directions

Growth Percentage
Represents the increase or decrease in AADT, using a exponential fit over the previous 1, 5 or 10 year period.

Hour, Day & Week Averages
The amount of traffic on the road network will vary depending on the time of day, the day of the week and the week of the year. The ebb and flow of traffic travelling through a site over a period of time forms a pattern. The Hour, Day and Week Averages are then used in the calculation of AADT.

Road Section
Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site
The unique identifier and description of the physical location of a traffic counting device. Sites are located at a Through Distance along a Road Section.

Stream
The lane in which the traffic is travelling in. This report provides data for the combined flow of traffic in both directions.

Thru Dist or TDist
The distance from the beginning of the Road Section, in kilometres.

Type
There are two types of traffic counting sites, Permanent and Coverage. Permanent means the traffic counting device is in place 24/7. Coverage means the traffic counting device is in place for a specified period of time.

Year
Is the current year for the report. Where an AADT Year record is missing a traffic count has not been conducted, for that year.

Attachment B – FNQROC Extract

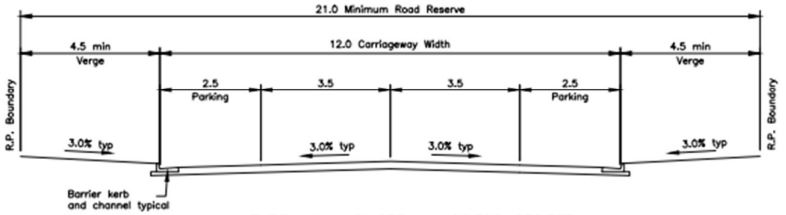
Table D1.1 Street and Road Hierarchy - Deemed to Comply Requirements

Road Hierarchy Classification [8, 13]		Type	Standard Drawing	Catchment Size (no of dwellings)	AADT (vpd)	Reserve Width [1,2,6,7] (Min)	Carriageway Width [1,3, 10] (Min)	Verge Width [9] (Min each side)	Footpath[18]	Max Grade (Desirable)	Design Speed (km/h)	Lighting Category
Access Place (CRC, CCRC and DSC only)[14]		1	S1005	0- 25	0-190	14.5m	5.5m sealed	4.5m	not req'd	16% [4] (12%)	30	P4
Access Street (TRC. CCRC, MSC , CRC & DSC only)[14]		2	S1005	26-90[11]	200-740[12]	15.5m	6.5m sealed	4.5m	1 side	16% [34] (12%)	30	P4
Low Density Residential (CRC, CCRC, and MSC only)		3	S1005	n/a	n/a	20m	7.0m sealed with 1.0m wide gravel shoulders [5]	5.5m	Not req'd	16% [3] (12%)	60	P4
Residential Street (excl TRC, CCRC, MSC, DSC & CRC)		4	S1005	0 – 90	0 - 740	16.5m	7.5m sealed	4.5m	1 side [12]	16% [34] (12)	40	P4[16]
Collector Road	Minor[15]	5	S1006	91 - 300	750-2990	16.5m	7.5m [2]	4.5m	1 side	10% (8%)	50	P3
	Major[15]	6	S1006	301 – 600	3000-5999	20m	11m	4.5m	1 side	10% (8%)	60	V5
Sub Arterial/Arterial [9, 15]	No median	7[17]	S1007	>600	>6000	25m	16m	4.5m	both sides	8% (6%)	60	V3
	2 lane median divided	8				28m	2 x 5.5m separated by a 5m median	6m				
	4 lane median divided	9	S1008			31m	2 x 8.5m separated by a 5m median	4.5m				
	4 lane median divided with parking	10				40m	2 x 12.4m separated by a 5m median if no centre parking	5.1m				
Industrial Access Street		11	S1009	<8Ha		21m	12m	4.5m	not req'd	10% (6%)	60	P3
Industrial Collector Street		12	S1009	<30Ha		23m	14m	4.5m	Not req'd	8% (6%)	60	P3
Rural			Refer Table D1.4 for details of Rural Road Elements									

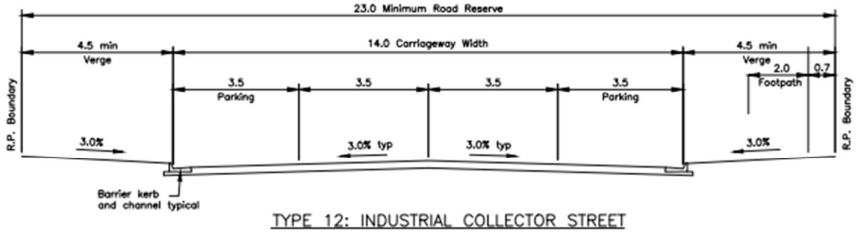
Notes:

1. Carriageway (and reserve) widening shall be provided on bends in accordance with Queensland Streets.
2. Widening of carriageway to 10m shall be required on all bus routes, and a minimum road reserve of 18m provided.
3. Carriageway widths are measured from the invert of the kerb and channel on one side of the carriageway to the invert of the kerb and channel on the opposite side of the carriageway.
4. The absolute maximum grade shall be 20% for a maximum length of 60m. The maximum length of grades less than 20%, but not less than 16%, shall be 60m plus 25m for each 1% the grade is less than 20%. The maximum length of any grade greater than 16% shall be 160m.
5. Where the ultimate traffic catchment exceeds 30 allotments and Council considers bicycle use likely, shoulders shall be sealed to provide a total seal minimum width of 9.0m.
6. Road reserve widths may require widening to accommodate table drains, provision for services, on-street car parking provision & bus bays.
7. Minimum reserve width must be provided, irrespective of minimum verge and carriageway widths specified.
8. In CRC - For CBD streets between Florence St, Wharf St, McLeod St, & The Esplanade, refer to CBD Streetscape Masterplan policy.
9. The road cross section type for this category shall be provided by the Council or Relevant Authority (DTMR). Traffic volumes shall be identified in a traffic management report.
10. Where the road is nominated as part of the bikeway network, allowance for bike lanes shall be added to this width (minimum bikeway width is 1.5m, or 2.0m where the design speed is > 60km/h)

Attachment C – FNQROC Extract



TYPE 11: INDUSTRIAL ACCESS STREET



TYPE 12: INDUSTRIAL COLLECTOR STREET

NOTES

1. This drawing is provided to assist in the interpretation of Table D1.1 of the FNQROC Regional Development Manual. This drawing should be read in conjunction with the above table and the remainder of the manual. Where conflicts occur Table D1.1 shall take precedence.
2. All dimensions are in metres U.N.O.
3. Refer to Project Drawings for pavement & seal details & subsoil drainage requirements.
4. The minimum reserve width overrides the sum of other minimum dimensions.

C	FOOTPATH DIMENSIONS ADDED	23/10/17
B	PAVEMENT UNDER KERB ADDED	OCT 11
A	ORIGINAL ISSUE	FEB 09
REVISIONS		DATE

DISCLAIMER

The authors and sponsoring organisations shall have no liability or responsibility to the user or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused, directly or indirectly, by the adoption and use of these Standard Drawings including, but not limited to, any interruption of service, loss of business or anticipatory profits, or consequential damages resulting from the use of these Standard Drawings. Persons must not rely on these Standard Drawings as the equivalent of, or a substitute for, project-specific design and assessment by an appropriately qualified professional.

TYPICAL ROAD CROSS SECTIONS
TYPE 11 & TYPE 12

Standard Drawing
S1009
A | B | C

Attachment D – Warner Road Intersection