

## TRANSPORT STATEMENT

<b>Client</b>	Economic Development Queensland	<b>Date</b>	25/06/2024
<b>Project</b>	Lumina Pedestrian Crossing	<b>Project No:</b>	P0046236
<b>Prepared By:</b>	Lee Flueckiger	<b>Reviewed By</b>	Andy Johnston, RPEQ 24764

## 1. BACKGROUND

Urbis has been engaged by Economic Development Queensland (EDQ) to provide a traffic engineering assessment of pedestrian treatment options within the Parklands Lumina PDA. The purpose of this assessment is to undertake advise and report on the possible pedestrian treatment options for Nexus Way between Village Boulevard and Parklands Drive.

Consultation meeting's have taken place between the City of Gold Coast (CoGC), EDQ, and Urbis;

- Preliminary drawings and assessment of crossing treatments were presented by Urbis and EDQ to Council on Thursday 28<sup>th</sup> March 2024. This meeting assisted Urbis and EDQ to note and discuss Council's concerns and questions around the various pedestrian treatment options available. Asset Management raised potential concerns around maintenance and management of the drainage facilities on Nexus Way which have assisted in the design development. The loss of on-street carparking was not highlighted as a major concern, with Council highlighting the priority is the transport officers assessment of the safety.
- A follow up meeting was held between Councils Transport officer, Lucas Stewart, and the Urbis Transport team on 11<sup>th</sup> April 2024. This meeting reviewed the preliminary design presented earlier in detail and what additional treatments may be needed. The primary concern was visual recognition of the crossing area and vehicle speeds. Following this review, Urbis and EDQ revised the drawing proposal in accordance with Council's feedback.
- A final meeting with Councils transport officer (Lucas Stewart) took place on 2<sup>nd</sup> May 2024 to review a preliminary drawing establishing a zebra crossing and what, if any, additional treatments may be supported to increase the amenity of the design. Council highlighted support for the proposed design provided speed surveys demonstrated a safe road environment. The design of the crossing is reflected in the final drawing enclosed in Appendix B and a copy of the Council officers endorsement of the preliminary design in Appendix C.

As a result of these meetings, the assessment within this document has been revised to consider the external factors and a current speed survey undertaken on Nexus Way, Section 2.3.

### 1.1. LOCATION AND INTENT

Urbis have undertaken a site visit of the Parklands PDA along Nexus Way. Both sides of the road are lined with indented parking bays separated by planting islands. The ideal location for any crossing would be central of Nexus Way between Village Boulevard and Parklands Drive. See Figure 1 for the location of assessment and local area.

Figure 1. Location of Assessment and Crossing Investigation



Existing provisions for on-street parking provide space for up to 14 cars to park in parallel within the indented bays on each kerbside, 28 in total.

If a crossing is aligned with an existing landscaped island, this would require the loss of potentially 3 carparks (1 on the northern kerb and 2 on the southern kerb).

### 1.1.1. Sight Distances

Sight distances are excellent along the entire length of Nexus Way due to the straight alignment. However, vehicles parking too close to any crossing are likely to be a liability to pedestrian sight lines, necessitating the removal of parking either side of a crossing.

Site photos for context are provided in Figure 1 to 3 below.

Figure 2. Landscaping between Carparking on Nexus Way



Figure 3. Sight Distance South along Nexus Way (approximate mid-point)



Figure 4. Sight Distance North along Nexus Way (approximate mid-point)



## 2. STREET AND MOVEMENT NETWORK

### 2.1. PARKLANDS PDA POLICY

The Parklands Proposed Development Scheme outlines the vision, infrastructure plan, and implementation strategy for the PDA. Some key points relating to the implementation of pedestrian and cycling facilities are extracted from the Street and Movement Network criteria;

- *Provides a safe and pleasant movement network for pedestrians, cyclists and vehicles that has a clear structure, good external connections with the surrounding area, minimises traffic impacts on residential areas and maximises walking, cycling and public transport effectiveness.*
- *Provides opportunities to connect to open space areas within and adjoining the PDA and creates parks and open spaces that are accessible for users.*
- *Ensures the design of 'Main Street' and other key connection streets to the Gold Coast Light Rail (GCLR) station supports strong pedestrian and cycle access, with wider footpaths and narrower carriageways to accommodate peak flows to and from the GCLR station in an attractive and comfortable streetscape environment.*
- *Provides a safe and pleasant movement network for pedestrians, cyclists and vehicles that has a clear structure and maximises walking, cycling and public transport effectiveness.*
- *Supports pedestrian and cycle connections within the site which link to existing facilities and the local pedestrian, cycle and road network and support movement to key district and local destinations such as shops, schools, parks and community facilities.*

The implementation of any pedestrian/cyclist treatments along Nexus Way should be aligned with the goals and intent of the PDA criteria.

## 2.2. EXISTING TRAFFIC VOLUMES AND SPEED SURVEYS

A traffic speed and volumes survey was conducted by Matrix across a 7-day period from 17 May 2024. Data was collected along Nexus Way, opposite the frontage of 16 Nexus Way, Southport. The results of this survey are enclosed within Appendix A and summarised in Table 1 below, 85<sup>th</sup> percentile speeds are reported with a 4 second headway to account for free flow conditions.

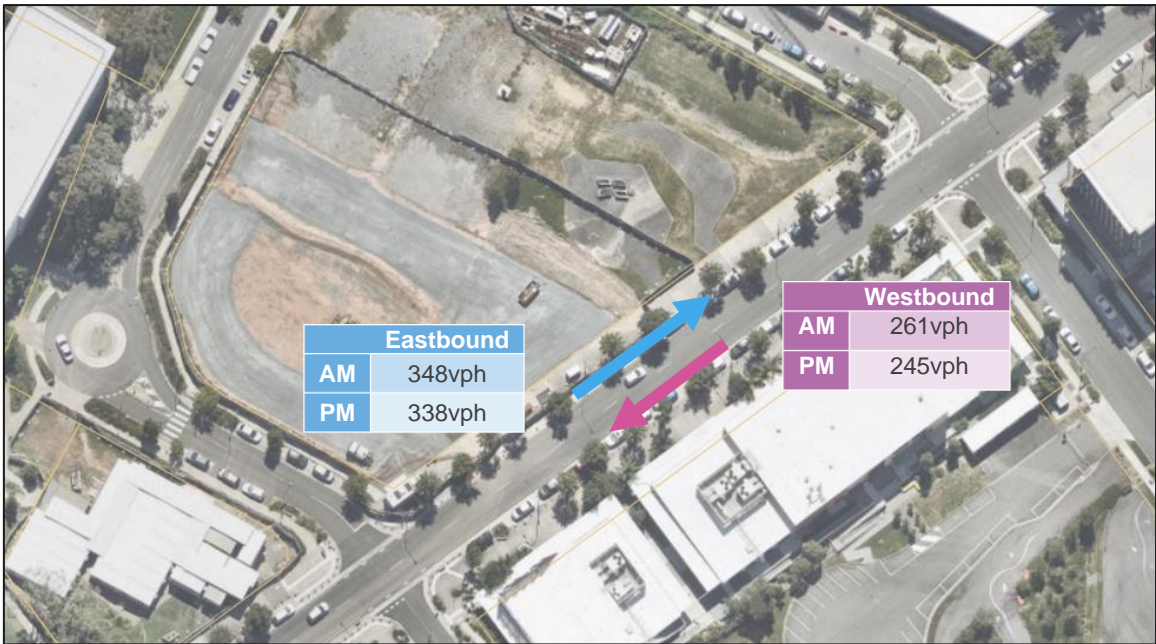
Table 1. Traffic Survey Volumes & Speeds (4s Headway)

	Westbound ( to Parklands Dr)		Eastbound ( Hospital Blvd)		Combined Directions	
	Volume	85 <sup>th</sup> Speed	Volume	85 <sup>th</sup> Speed	Volume	85 <sup>th</sup> Speed
AM Peak	81 vph	37.5kph	73 vph	37.6kph	154vph	37.5kph
PM Peak	82 vph	38.2kph	75 vph	37.9kph	158vph	38kph
7-day Avg	861 vpd	39.7kph	835 vpd	40.7kph	1696vpd	40.2kph

## 2.3. FUTURE TRAFFIC VOLUMES

Within the Traffic Impact Assessment 2014, the traffic volumes along Nexus Way (Main Street) are provided within the modelled intersections. Urbis has extracted this data to provide traffic volumes along the mid-block section of Nexus Way as shown in Figure 5.

Figure 5. Future Nexus Way Mid-block Traffic Volumes



## 3. NEXUS WAY PEDESTRIAN CROSSING TREATMENT

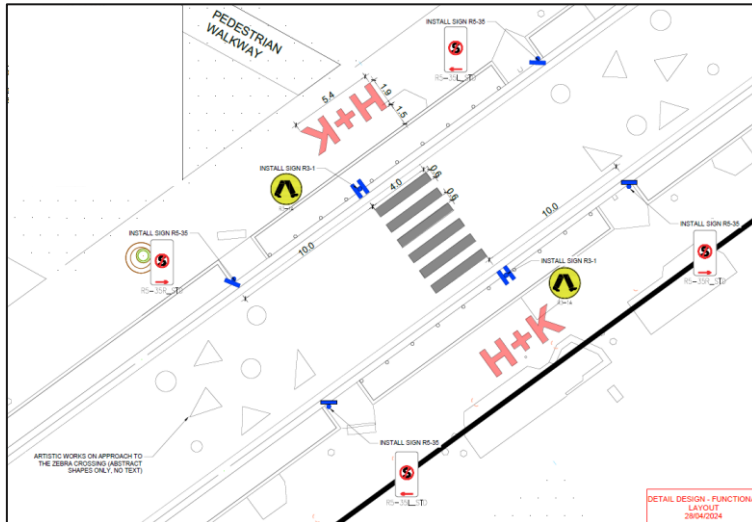
### 3.1. ZEBRA CROSSING

A zebra crossing is an effective solution for the site. Vehicle speeds are reported by the survey data as almost inline with the posted speed at 40.7 km/h, highlighting the slow speed environment. As such, additional speed control measures are not considered to be required. The typical zebra crossing

consists of painted lines at the desired crossing point and forewarning signage. While these are the only visual indicators required as highlighted by AS1742.1 and the Traffic and Road Use Management (TRUM) Volume 3 Part 2, additional road features can be added on the approaches to the crossing to improve the urban amenity. Urbis and Council discussed the implementation of artistic figures or geometric shapes as additional line marking, both to improve the crossing visibility and to encourage pedestrians to cross at the actual zebra crossing. A functional layout drawing of the proposed design is enclosed in Appendix B and shown in

Figure 6 below.

Figure 6. Nexus Way Zebra Crossing Layout



The zebra crossing would prioritise pedestrian movements over vehicles and would have minimal impact to the existing road environment. Supported by the speed surveys, the proposed design conforms to the intent of the PDA criteria to *“provide a safe and pleasant movement network for pedestrians, cyclists and vehicles that has a clear structure and maximises walking, cycling ... effectiveness.”*

In summary, the zebra crossing with additional pavement linemarking is suitable for the local environment to meet the PDA criteria. Supported by the speed surveys, there are no additional requirements for traffic calming required and the maintenance and drainage issues of the wonbat crossing are avoided. Urbis considers the zebra crossing to be an appropriate treatment for Nexus Way to accommodate pedestrian demand.

## 4. SUMMARY

The consideration of the forementioned treatments is recommended to provide traffic calming measures and create the Main Street environment envisaged by the PDA criteria for an attractive and comfortable streetscape environment. In summary:

- Traffic and speed surveys indicate that the road environment of Nexus Way is compatible with a Zebra Crossing treatment. Some additional factors may be applied to the standard Zebra crossing layout to enhance the urban appeal of the crossing and assist in focusing pedestrians to the crossing point.
  - Contrasting pavement colours for abstract shapes or artistic work on approach to the crossing, ensuring appropriate off-set so that the standard Zebra Crossing is clearly defined. Any artworks or pavement markings should avoid similarities to road signage and directional markings.
  - Decorative text/stencils are to be provided on the verge only. Any text or stencil should be clearly legible and not ambiguous to avoid confusion with pedestrian direction.

- Removal of on-street parking in proximity to the pedestrian crossing, in accordance with the TRUM Vol3 Part 2. Bollards or similar physical obstruction are to be used to close off the former parking areas.

Urbis considers the zebra crossing to be an appropriate treatment for Nexus Way to accommodate pedestrian demand.



## **APPENDIX A – TRAFFIC SURVEYS**



**AUQLD9635 Nexus Way ATC Report 2024**

Site	Outside 16 Nexus Way
Location	Southport
Site No	1
Directions	EB WB
Start	17-May-24

Job No

AUQLD9635

Client

Department of State Development & Infrastructure

Site

Outside 16 Nexus Way

Location

Southport

Site No

1

Start Date

17-May-24

Description

Volume Summary

Direction

NB, SB & Combined

MATRIX

Traffic and Transport Data

Eastbound									
Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
AM Peak	62	79	77	83	73	55	45	927	835
PM Peak	79	98	73	105	72	63	60		
0:00	2	1	2	0	2	5	2	1	2
1:00	1	2	1	3	0	1	1	1	1
2:00	1	0	2	2	0	3	2	1	1
3:00	3	1	1	0	0	0	1	1	1
4:00	2	1	0	1	2	1	3	1	1
5:00	16	19	24	23	22	12	4	21	17
6:00	42	48	37	43	36	29	11	41	35
7:00	42	38	44	40	37	24	9	40	33
8:00	57	53	50	58	68	44	22	57	50
9:00	58	65	63	76	53	41	39	63	56
10:00	62	79	77	83	65	43	40	73	64
11:00	60	59	76	73	73	55	45	68	63
12:00	61	66	73	105	72	59	60	75	71
13:00	66	98	71	72	70	51	53	75	69
14:00	67	71	65	79	65	63	53	69	66
15:00	60	74	68	66	71	58	36	68	62
16:00	79	71	72	74	53	43	60	70	65
17:00	55	83	68	58	57	36	50	64	58
18:00	72	48	47	40	43	25	14	50	41
19:00	39	37	34	27	34	21	16	34	30
20:00	28	29	27	27	21	16	17	26	24
21:00	11	8	9	9	6	8	7	9	8
22:00	8	11	14	10	14	11	9	11	11
23:00	2	7	4	5	4	6	2	4	4
Total	894	969	929	974	868	655	556	927	835

7-19	739	805	774	824	727	542	481	774	699
6-22	859	927	881	930	824	616	532	884	796
6-24	869	945	899	945	842	633	543	900	811
0-24	894	969	929	974	868	655	556	927	835

Westbound									
Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
AM Peak	72	78	80	89	97	58	59	946	861
PM Peak	72	88	93	89	82	66	64		
0:00	2	3	4	3	2	4	5	3	3
1:00	0	2	0	0	0	2	5	0	1
2:00	3	1	3	2	2	3	6	2	3
3:00	4	1	0	0	1	0	1	1	1
4:00	4	3	1	4	5	8	3	3	4
5:00	12	10	13	19	15	10	4	14	12
6:00	22	25	25	22	26	14	9	24	20
7:00	44	50	47	77	49	22	9	53	43
8:00	59	68	63	62	58	36	22	62	53
9:00	65	66	47	88	67	45	39	67	60
10:00	72	78	80	78	95	48	59	81	73
11:00	67	68	74	89	97	58	51	79	72
12:00	72	76	93	89	82	62	63	82	77
13:00	67	88	91	87	72	57	51	81	73
14:00	57	80	67	67	73	59	64	69	67
15:00	56	76	51	60	64	49	41	61	57
16:00	71	53	61	76	59	66	53	64	63
17:00	54	64	67	64	54	45	48	61	57
18:00	58	54	48	38	50	31	23	50	43
19:00	36	44	35	29	32	31	15	35	32
20:00	23	28	30	27	26	20	15	27	24
21:00	17	12	9	14	11	15	8	13	12
22:00	7	8	13	7	12	5	3	9	8
23:00	3	6	7	4	4	4	4	5	5
Total	875	964	929	1006	956	694	601	946	861

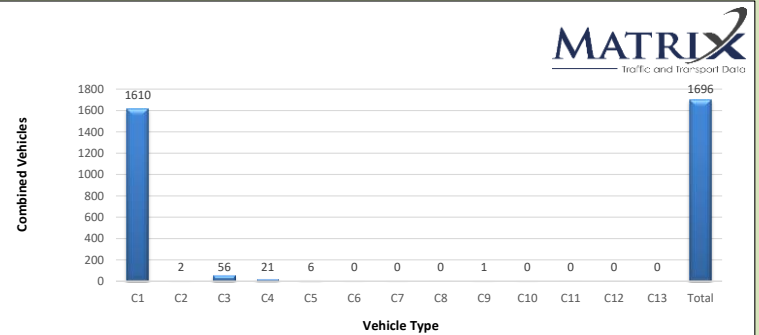
7-19	742	821	789	875	820	578	523	809	735
6-22	840	930	888	967	915	658	570	908	824
6-24	850	944	908	978	931	667	577	922	836
0-24	875	964	929	1006	956	694	601	946	861

COMBINED									
Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
AM Peak	134	157	157	164	170	113	99	1873	1696
PM Peak	150	186	166	194	154	122	123		
0:00	4	4	6	3	4	9	7	4	5
1:00	1	4	1	3	0	3	6	2	3
2:00	4	1	5	4	2	6	8	3	4
3:00	7	2	1	0	1	0	2	2	2
4:00	6	4	1	5	7	9	6	5	5
5:00	28	29	37	42	37	22	8	35	29
6:00	64	73	62	65	62	43	20	65	56
7:00	86	88	91	117	86	46	18	94	76
8:00	116	121	113	120	126	80	44	119	103
9:00	123	131	110	164	120	86	78	130	116
10:00	134	157	157	161	160	91	99	154	137
11:00	127	127	150	162	170	113	96	147	135
12:00	133	142	166	194	154	121	123	158	148
13:00	133	186	162	159	142	108	104	156	142
14:00	124	151	132	146	138	122	117	138	133
15:00	116	150	119	126	135	107	77	129	119
16:00	150	124	133	150	112	109	113	134	127
17:00	109	147	135	122	111	81	98	125	115
18:00	130	102	95	78	93	56	37	100	84
19:00	75	81	69	56	66	52	31	69	61
20:00	51	57	57	54	47	36	32	53	48
21:00	28	20	18	23	17	23	15	21	21
22:00	15	19	27	17	26	16	12	21	19
23:00	5	13	11	9	8	10	6	9	9
Total	1769	1933	1858	1980	1824	1349	1157	1873	1696

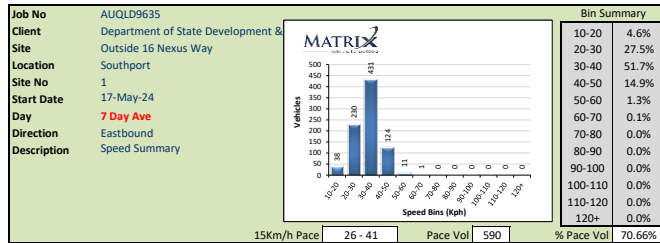
7-19	1481	1626	1563	1699	1547	1120	1004	1583	1434
6-22	1699	1857	1769	1897	1739	1274	1102	1792	1620
6-24	1719	1889	1807	1923	1773	1300	1120	1822	1647
0-24	1769	1933	1858	1980	1824	1349	1157	1873	1696

**Job No** AUQLD9635  
**Client** Department of State Development & Infrastructure  
**Site** Outside 16 Nexus Way  
**Location** Southport  
**Site No** 1  
**Start Date** 17-May-24  
**Day** 7 Day Ave  
**Description** Class Summary  
**Classification** AustRoads94

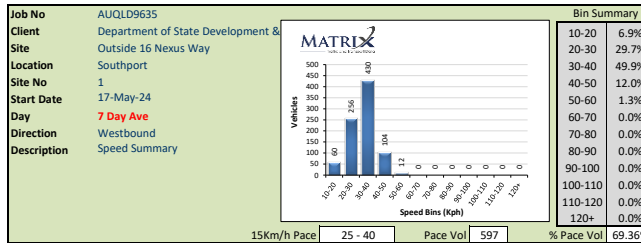
Class Summary		C	EB	WB
Light	C1	95%	94%	96%
	C2	0%	0%	0%
Medium	C3	3%	5%	2%
	C4	1%	1%	2%
	C5	0%	0%	0%
Heavy	C6	0%	0%	0%
	C7	0%	0%	0%
	C8	0%	0%	0%
	C9	0%	0%	0%
	C10	0%	0%	0%
	C11	0%	0%	0%
	C12	0%	0%	0%
Unclassified	C13	0%	0%	0%



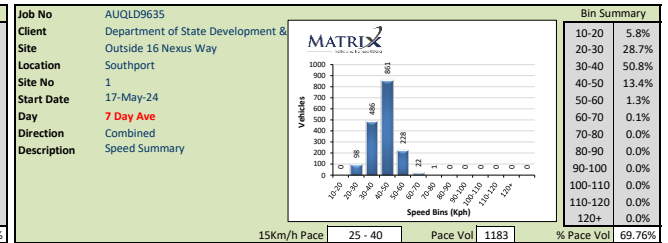
Hour Starting	EB														Total	WB														Total	COMBINED														Total
	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C1		C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C1	C2		C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13				
	Short	Short Towing	2 axle Truck or bus	3 Axle Truck or Bus	4 or 5 Axle Truck	3 axle Articulated	4 Axle Articulated	5 Axle Articulated	6 Axle Articulated	B Double	Double Road Train	Triple Road Train	Undersizable	Short		Short Towing	2 axle Truck or bus	3 Axle Truck or Bus	4 or 5 Axle Truck	3 axle Articulated	4 Axle Articulated	5 Axle Articulated	6 Axle Articulated	B Double	Double Road Train	Triple Road Train	Undersizable	Short	Short Towing		2 axle Truck or bus	3 Axle Truck or Bus	4 or 5 Axle Truck	3 axle Articulated	4 Axle Articulated	5 Axle Articulated	6 Axle Articulated	B Double	Double Road Train	Triple Road Train	Undersizable				
0:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	5				
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3				
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4				
3:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2				
4:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	5				
5:00	15	0	2	0	0	0	0	0	0	0	0	0	0	17	11	0	0	1	0	0	0	0	0	0	0	0	12	25	0	3	1	0	0	0	0	0	0	0	0	29					
6:00	33	0	2	0	0	0	0	0	0	0	0	0	0	35	19	0	0	1	0	0	0	0	0	0	0	0	20	52	0	2	1	0	0	0	0	0	0	0	0	0	56				
7:00	31	0	1	0	0	0	0	0	0	0	0	0	0	33	41	0	0	1	0	0	0	0	0	0	0	0	43	73	0	1	1	1	0	0	0	0	0	0	0	0	76				
8:00	47	0	3	0	0	0	0	0	0	0	0	0	0	50	50	0	1	1	0	0	0	0	0	0	0	0	53	97	0	4	1	1	0	0	0	0	0	0	0	0	103				
9:00	52	0	4	0	0	0	0	0	0	0	0	0	0	56	57	0	1	1	0	0	0	0	0	0	0	0	60	109	0	5	1	0	0	0	0	0	0	0	0	0	116				
10:00	60	0	4	0	0	0	0	0	0	0	0	0	0	64	69	0	2	1	0	0	0	0	0	0	0	0	73	129	0	6	1	1	0	0	0	0	0	0	0	0	137				
11:00	59	0	4	0	0	0	0	0	0	0	0	0	0	63	69	0	1	1	0	0	0	0	0	0	0	0	72	128	0	5	1	0	0	0	0	0	0	0	0	0	135				
12:00	67	0	3	0	1	0	0	0	0	0	0	0	0	71	72	0	2	1	1	0	0	0	0	0	0	0	77	139	0	6	1	1	0	0	0	0	0	0	0	0	148				
13:00	64	0	4	0	0	0	0	0	0	0	0	0	0	69	70	0	2	1	0	0	0	0	0	0	0	0	73	135	0	5	1	1	0	0	0	0	0	0	0	0	142				
14:00	63	0	2	1	0	0	0	0	0	0	0	0	0	66	64	0	2	1	0	0	0	0	0	0	0	0	67	127	0	4	2	0	0	0	0	0	0	0	0	0	133				
15:00	59	0	3	0	0	0	0	0	0	0	0	0	0	62	54	0	1	1	0	0	0	0	0	0	0	0	57	113	0	4	1	0	0	0	0	0	0	0	0	0	119				
16:00	62	0	2	0	0	0	0	0	0	0	0	0	0	65	60	0	1	1	0	0	0	0	0	0	0	0	63	123	0	3	1	0	0	0	0	0	0	0	0	0	127				
17:00	56	0	2	1	0	0	0	0	0	0	0	0	0	58	54	0	1	2	0	0	0	0	0	0	0	0	57	109	0	2	2	0	0	0	0	0	0	0	0	0	115				
18:00	39	0	2	0	0	0	0	0	0	0	0	0	0	41	43	0	0	0	0	0	0	0	0	0	0	0	43	82	0	2	0	0	0	0	0	0	0	0	0	0	84				
19:00	28	0	1	1	0	0	0	0	0	0	0	0	0	30	30	0	0	1	0	0	0	0	0	0	0	0	32	58	0	1	2	0	0	0	0	0	0	0	0	0	61				
20:00	23	0	1	0	0	0	0	0	0	0	0	0	0	24	23	0	0	0	0	0	0	0	0	0	0	0	24	46	0	1	1	0	0	0	0	0	0	0	0	0	48				
21:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8	12	0	0	0	0	0	0	0	0	0	0	0	12	20	0	0	1	0	0	0	0	0	0	0	0	0	21				
22:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11	8	0	0	0	0	0	0	0	0	0	0	0	8	18	0	0	0	0	0	0	0	0	0	0	0	0	19				
23:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	5	9	0	0	0	0	0	0	0	0	0	0	0	0	9				
Total	787	1	38	5	3	0	0	0	0	0	0	0	0	835	823	1	17	16	3	0	0	0	0	0	0	0	861	1610	2	56	21	6	0	0	0	1	0	0	0	0	0	1696			



Hour Starting	Vehicle Speed Bins (kph)											Speed		
	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120	Average	85%ile	95%ile
0:00	0	0	1	1	0	0	0	0	0	0	0	38.6	48.8	53.4
1:00	0	0	0	0	0	0	0	0	0	0	0	40.4	49.5	53.2
2:00	0	0	1	0	0	0	0	0	0	0	0	33.8	-	-
3:00	0	0	0	0	0	0	0	0	0	0	0	32.5	51.8	54.6
4:00	0	1	0	0	0	0	0	0	0	0	0	30.7	-	-
5:00	1	3	9	4	1	0	0	0	0	0	0	34.9	43.7	47.3
6:00	2	12	15	5	1	0	0	0	0	0	0	32.4	41.2	46.0
7:00	2	9	18	4	0	0	0	0	0	0	0	32.2	39.7	43.3
8:00	4	17	23	5	0	0	0	0	0	0	0	31.1	37.9	43.2
9:00	3	22	26	5	0	0	0	0	0	0	0	30.9	38.2	42.1
10:00	4	29	26	5	0	0	0	0	0	0	0	30.1	37.6	41.7
11:00	3	25	30	5	0	0	0	0	0	0	0	30.5	37.0	41.2
12:00	4	22	39	6	0	0	0	0	0	0	0	31.7	38.2	41.6
13:00	4	24	34	6	0	0	0	0	0	0	0	31.2	37.9	42.2
14:00	3	17	39	6	0	0	0	0	0	0	0	32.2	38.8	42.4
15:00	1	11	36	13	1	0	0	0	0	0	0	35.5	41.8	47.1
16:00	1	10	38	14	1	0	0	0	0	0	0	35.4	41.5	44.8
17:00	1	10	36	10	1	0	0	0	0	0	0	35.1	40.8	43.8
18:00	1	6	23	10	1	0	0	0	0	0	0	35.3	42.2	45.8
19:00	1	5	16	7	1	0	0	0	0	0	0	36.0	43.0	47.2
20:00	0	2	13	7	1	0	0	0	0	0	0	37.5	44.1	48.1
21:00	0	1	3	3	1	0	0	0	0	0	0	39.1	46.7	54.6
22:00	0	2	4	4	0	0	0	0	0	0	0	37.4	45.6	49.4
23:00	0	1	2	1	1	0	0	0	0	0	0	38.6	45.9	54.0
Total	38	230	431	124	11	1	0	0	0	0	0	33.0	40.4	44.7



Hour Starting	Vehicle Speed Bins (kph)												Speed		
	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120	120+	Average	85%ile	95%ile
0:00	0	1	2	1	0	0	0	0	0	0	0	0	37.2	43.0	50.0
1:00	0	0	0	1	0	0	0	0	0	0	0	0	38.8	47.4	48.2
2:00	0	1	1	1	0	0	0	0	0	0	0	0	35.6	-	-
3:00	1	0	0	0	0	0	0	0	0	0	0	0	22.9	33.6	36.2
4:00	0	1	2	1	0	0	0	0	0	0	0	0	36.0	-	-
5:00	1	4	5	2	0	0	0	0	0	0	0	0	31.6	40.2	47.6
6:00	2	5	9	4	1	0	0	0	0	0	0	0	33.1	42.2	47.0
7:00	2	11	18	10	1	0	0	0	0	0	0	0	34.1	43.3	47.1
8:00	5	14	27	7	1	0	0	0	0	0	0	0	32.1	40.0	44.7
9:00	6	21	25	7	0	0	0	0	0	0	0	0	30.7	39.2	43.9
10:00	8	27	32	6	0	0	0	0	0	0	0	0	30.2	37.5	43.6
11:00	8	29	30	4	0	0	0	0	0	0	0	0	29.2	36.6	41.3
12:00	7	25	38	6	1	0	0	0	0	0	0	0	31.0	37.9	43.0
13:00	7	28	32	5	0	0	0	0	0	0	0	0	29.9	37.8	41.0
14:00	3	22	36	5	1	0	0	0	0	0	0	0	31.8	38.0	43.8
15:00	3	12	32	9	1	0	0	0	0	0	0	0	33.8	40.4	46.0
16:00	2	15	37	8	1	0	0	0	0	0	0	0	33.7	39.8	45.4
17:00	1	11	34	9	1	0	0	0	0	0	0	0	34.1	40.6	45.2
18:00	1	10	26	6	0	0	0	0	0	0	0	0	33.7	39.8	45.1
19:00	1	8	18	3	1	0	0	0	0	0	0	0	33.5	39.5	45.3
20:00	1	4	14	5	0	0	0	0	0	0	0	0	34.8	41.2	43.6
21:00	0	3	5	3	0	0	0	0	0	0	0	0	34.9	44.7	49.4
22:00	0	2	4	2	0	0	0	0	0	0	0	0	36.1	43.7	49.1
23:00	0	1	3	0	0	0	0	0	0	0	0	0	34.0	39.7	47.9
Total	60	256	430	104	12	0	0	0	0	0	0	0	32.1	39.6	44.9



Hour	Starting	Vehicle Speed Bins (kph)											Speed		
		10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120	120+	Average	85%ile
0:00	0	1	2	2	1	0	0	0	0	0	0	0	37.7	47.1	52.8
1:00	0	0	1	1	0	0	0	0	0	0	0	0	39.6	48.2	51.3
2:00	0	1	2	1	0	0	0	0	0	0	0	0	35.0	47.9	49.6
3:00	1	0	0	0	0	0	0	0	0	0	0	0	27.3	40.1	52.6
4:00	0	1	2	1	0	0	0	0	0	0	0	0	34.6	46.8	54.7
5:00	2	7	14	5	1	0	0	0	0	0	0	0	33.6	42.9	47.6
6:00	4	17	24	9	1	0	0	0	0	0	0	0	32.7	41.2	46.5
7:00	4	21	35	14	2	0	0	0	0	0	0	0	33.3	41.9	45.7
8:00	9	31	50	13	1	0	0	0	0	0	0	0	31.6	39.4	44.3
9:00	9	43	52	12	0	0	0	0	0	0	0	0	30.8	38.8	42.5
10:00	12	56	58	11	0	0	0	0	0	0	0	0	30.2	37.5	42.4
11:00	11	54	60	9	0	0	0	0	0	0	0	0	29.8	36.9	41.3
12:00	11	47	76	12	1	0	0	0	0	0	0	0	31.3	38.0	42.3
13:00	11	53	66	11	0	0	0	0	0	0	0	0	30.5	37.9	41.4
14:00	6	39	75	11	1	0	0	0	0	0	0	0	32.0	38.4	42.8
15:00	4	23	69	22	1	0	0	0	0	0	0	0	34.7	41.4	46.4
16:00	3	25	74	22	3	0	0	0	0	0	0	0	34.6	41.1	44.9
17:00	3	22	70	19	2	0	0	0	0	0	0	0	34.6	40.8	45.0
18:00	2	17	49	15	1	0	0	0	0	0	0	0	34.5	41.2	45.5
19:00	2	13	34	11	2	0	0	0	0	0	0	0	34.7	42.0	46.6
20:00	1	7	27	13	1	0	0	0	0	0	0	0	36.1	42.3	46.8
21:00	0	5	8	6	1	0	0	0	0	0	0	0	36.6	45.2	50.4
22:00	1	4	8	6	1	0	0	0	0	0	0	0	36.8	45.2	49.7
23:00	0	2	4	2	1	0	0	0	0	0	0	0	36.2	45.3	51.5
Total	98	486	861	228	22	1	0	0	0	0	0	0	32.6	39.9	44.8

Job No	AUQLD9635
Client	Department of State Development & Infrastructure
Site	Outside 16 Nexus Way
Location	Southport
Site No	1
Start Date	17-May-24
Description	Daily Speed Statistics

The MATRIX logo features the word "MATRIX" in a bold, sans-serif font. Below it, in a smaller font, is the tagline "Traffic and Transport Data".

0 SECONDS HEADWAY DATA													
NORTHBOUND													
Day of Week	Date	Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	% Exceeding PSL (40km/h)
Monday	20-May	10.2	32.7	32.5	40.4	44.8	61.3	7.8	27 - 42	894	615	68.8%	144
Tuesday	21-May	10.5	31.0	31.2	38.6	43.1	71.0	7.6	24 - 39	969	684	70.6%	105
Wednesday	22-May	11.0	33.1	33.0	40.4	44.5	65.4	7.3	25 - 40	929	665	71.6%	145
Thursday	23-May	12.5	33.1	32.7	39.7	44.1	62.2	7.2	25 - 40	974	704	72.3%	136
Friday	17-May	10.6	33.3	32.9	40.1	44.6	57.9	7.3	26 - 41	868	622	71.7%	133
Saturday	18-May	10.1	35.1	34.8	41.9	45.5	61.3	7.3	29 - 44	655	475	72.5%	146
Sunday	19-May	13.3	36.0	36.0	41.9	46.6	62.3	6.7	29 - 44	556	438	78.8%	138
Weekdays Avg	W'days Avg.	10.2	32.6	32.4	39.8	44.3	71.0	7.4	25 - 40	927	653	70.4%	133
7 days Avg	7 days Avg.	10.1	33.3	33.0	40.4	44.7	71.0	7.5	26 - 41	835	590	70.7%	135

SOUTHBOUND													
Day of Week	Date	Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	% Exceeding PSL (40km/h)
Monday	20-May	10.4	31.8	31.7	39.0	44.1	59.5	7.7	25 - 40	875	617	70.5%	100
Tuesday	21-May	10.2	30.2	30.0	37.8	43.0	57.7	7.9	22 - 37	964	577	59.9%	85
Wednesday	22-May	10.1	31.8	31.7	38.9	44.0	56.4	7.6	25 - 40	929	662	71.3%	108
Thursday	23-May	10.4	32.0	31.9	39.5	44.4	72.6	7.8	25 - 40	1006	701	69.7%	130
Friday	17-May	10.1	32.7	32.5	39.7	45.1	67.5	7.8	24 - 39	956	676	70.7%	134
Saturday	18-May	10.1	33.7	33.5	41.4	45.8	57.6	7.9	27 - 42	694	482	69.5%	124
Sunday	19-May	10.8	35.4	35.0	41.9	46.7	75.9	7.5	28 - 43	601	446	74.2%	124
Weekdays Avg	W'days Avg.	10.1	31.7	31.5	39.0	44.4	72.6	7.8	25 - 40	946	655	69.2%	111
7 days Avg	7 days Avg.	10.1	32.3	32.1	39.6	44.9	75.9	7.9	25 - 40	861	597	69.3%	115

COMBINED													
Day of Week	Date	Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	% Exceeding PSL (40km/h)
Monday	20-May	10.2	32.3	32.1	39.6	44.5	61.3	7.8	26 - 41	1769	1219	68.9%	244
Tuesday	21-May	10.2	30.7	30.6	38.3	43.1	71.0	7.8	24 - 39	1933	1318	68.2%	190
Wednesday	22-May	10.1	32.4	32.4	39.6	44.4	65.4	7.5	25 - 40	1858	1327	71.4%	253
Thursday	23-May	10.4	32.5	32.3	39.6	44.3	72.6	7.5	25 - 40	1980	1405	71.0%	266
Friday	17-May	10.1	32.9	32.7	39.9	45.0	67.5	7.6	25 - 40	1824	1290	70.7%	267
Saturday	18-May	10.1	34.4	34.2	41.7	45.7	61.3	7.7	29 - 44	1349	955	70.8%	270
Sunday	19-May	10.8	35.7	35.5	41.9	46.7	75.9	7.1	28 - 43	1157	880	76.1%	262
Weekdays Avg	W'days Avg.	10.1	32.2	32.0	39.5	44.3	72.6	7.6	25 - 40	1873	1308	69.8%	244
7 days Avg	7 days Avg.	10.1	32.8	32.6	39.9	44.8	75.9	7.7	25 - 40	1696	1183	69.8%	250

4+ SECONDS HEADWAY DATA													
NORTHBOUND													
Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	Vol Exceeding PSL (40km/h)	% Exceeding PSL (40km/h)	
10.2	32.5	32.5	40.5	45.1	61.3	8.0	27 - 42	894	504	56.4%	126	14.1%	
10.5	31.2	31.4	39.0	43.5	71.0	7.8	24 - 39	969	560	57.8%	93	9.6%	
11.3	33.2	33.1	40.6	45.0	65.4	7.4	25 - 40	929	562	60.5%	133	14.3%	
13.4	33.2	32.8	40.2	44.4	62.2	7.3	25 - 40	974	593	60.9%	134	13.8%	
10.6	33.5	33.1	40.3	45.0	57.9	7.3	26 - 41	868	560	64.5%	128	14.7%	
10.7	35.2	34.9	42.1	45.7	61.3	7.4	29 - 44	655	432	66.0%	143	21.8%	
13.3	36.0	36.1	42.3	47.4	62.3	6.8	29 - 44	556	383	68.9%	129	23.2%	
10.2	32.7	32.6	40.2	44.7	71.0	7.6	25 - 40	927	554	59.8%	123	13.3%	
10.2	33.4	33.2	40.7	45.1	71.0	7.6	26 - 41	835	503	60.2%	127	15.2%	

SOUTHBOUND													
Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	Vol Exceeding PSL (40km/h)	% Exceeding PSL (40km/h)	
10.4	32.1	31.9	39.2	44.2	59.5	7.7	25 - 40	875	577	65.9%	98	11.2%	
10.2	30.8	30.4	38.2	43.7	57.7	7.9	24 - 39	964	577	59.9%	83	8.6%	
10.1	31.9	31.8	39.1	44.5	56.4	7.6	25 - 40	929	619	66.6%	104	11.2%	
10.4	32.1	32.0	39.6	44.6	72.6	7.8	25 - 40	1006	649	64.5%	124	12.3%	
10.1	32.8	32.6	39.7	45.1	67.5	7.9	24 - 39	956	633	66.2%	128	13.4%	
10.1	33.6	33.6	41.5	45.9	57.6	8.0	27 - 42	694	456	65.7%	122	17.6%	
10.8	35.4	35.1	42.0	46.8	75.9	7.5	28 - 43	601	436	72.5%	123	20.5%	
10.1	32.0	31.7	39.2	44.6	72.6	7.8	25 - 40	946	609	64.4%	107	11.3%	
10.1	32.5	32.3	39.7	45.0	75.9	7.9	25 - 40	861	559	64.9%	112	13.0%	

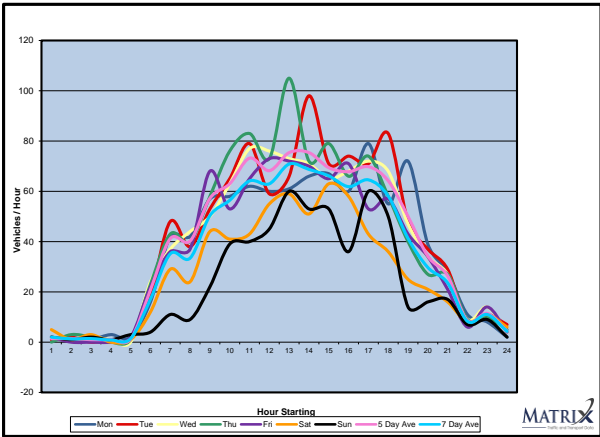
COMBINED													
Min	Median	Average	85 %ile	95 %ile	Max	StDev	15km/h Pace	Total Volume	Volume in Pace	% in Pace	Vol Exceeding PSL (40km/h)	% Exceeding PSL (40km/h)	
10.2	32.4	32.2	39.8	44.8	61.3	7.9	25 - 40	1769	1075	60.8%	224	12.7%	
10.2	31.0	30.9	38.5	43.6	71.0	7.9	24 - 39	1933	1137	58.8%	176	9.1%	
10.1	32.4	32.4	39.8	44.7	65.4	7.6	25 - 40	1858	1181	63.6%	237	12.8%	
10.4	32.7	32.4	39.8	44.5	72.6	7.6	25 - 40	1980	1242	62.7%	258	13.0%	
10.1	33.1	32.8	40.1	45.1	67.5	7.6	25 - 40	1824	1187	65.1%	256	14.0%	
10.1	34.4	34.2	41.9	45.8	61.3	7.7	29 - 44	1349	887	65.8%	265	19.6%	
10.8	35.8	35.6	42.2	47.1	75.9	7.2	28 - 43	1157	815	70.4%	252	21.8%	
10.1	32.3	32.1	39.7	44.6	72.6	7.7	25 - 40	1873	1163	62.1%	230	12.3%	
10.1	32.9	32.7	40.2	45.1	75.9	7.8	25 - 40	1696	1060	62.5%	238	14.0%	

Job No AUQLD9635  
Client Department of State Development & Infrastructure  
Site Outside 16 Nexus Way  
Location Southport  
Start Date 17-May-24

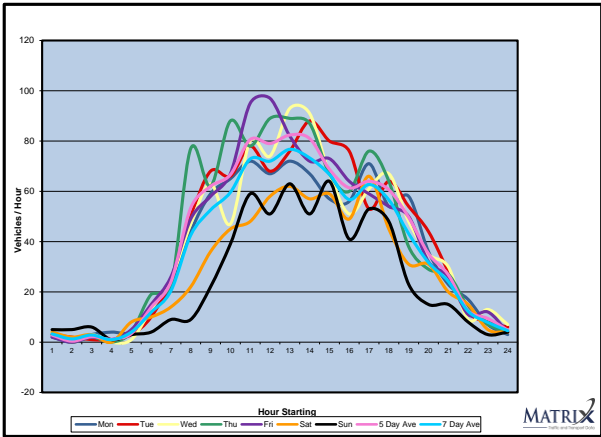


Volume Graphs

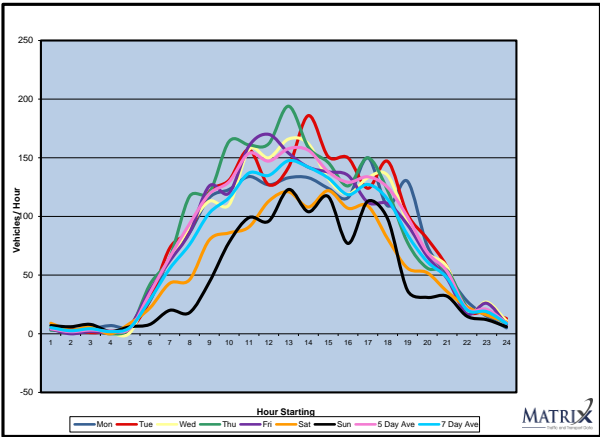
Eastbound



Westbound



Combined Volumes





Menu

Select Site

1. Outside 16 Nexus Way

## TRAFFIC COUNT SITE SUMMARY

Street Name :	Outside 16 Nexus Way	Location :	Southport
Suburb :		Start Date :	Fri 17 May 2024
Posted Speed Limit	40	Finish Date :	Fri 24 May 2024

GPS information:		Direction of Travel		
		Eastbound	Westbound	Combined
<a href="#">Load Google Map</a> <a href="#">(internet required)</a>	Lat -27.96218			
	Lon 153.3858			
Traffic Volume : (Vehicles/Day)	Weekdays Only Average	927	946	1,873
	7 Day Average	835	861	1,696
Weekday Peak Hour Volume:	AM 10:00	73	81	154
	PM 12:00	75	82	158
Peak Day Peak Day Volume		Thu 23 May 2024	Thu 23 May 2024	Thu 23 May 2024
		974	1006	1980
Total Speeds : (Km/Hr)	85th Percentile	40.4	39.6	39.9
	Average	33.0	32.1	32.6
	Number of Vehicles	5845	6025	11870
7 Day Pace	15Km/h Pace	26 - 41	25 - 40	25 - 40
	% Pace Volume	70.64%	69.41%	69.78%
Exceeding PSL		16.20%	13.36%	14.76%
Average Weekday Classification % :	Light Vehicles	93.98%	95.18%	94.59%
	Heavy Vehicles	6.02%	4.82%	5.41%

## DEFINITIONS

**85th Percentile Speed** = the speed at or below which 85 percent of vehicles are observed to travel.

**15kph Pace Speed** = the 15kph speed range within which the largest percentage of vehicles is observed to travel.

**Light Vehicles:** Austroads Classes 1 and 2

**Heavy Vehicles:** Austroads Classes 3 to 12



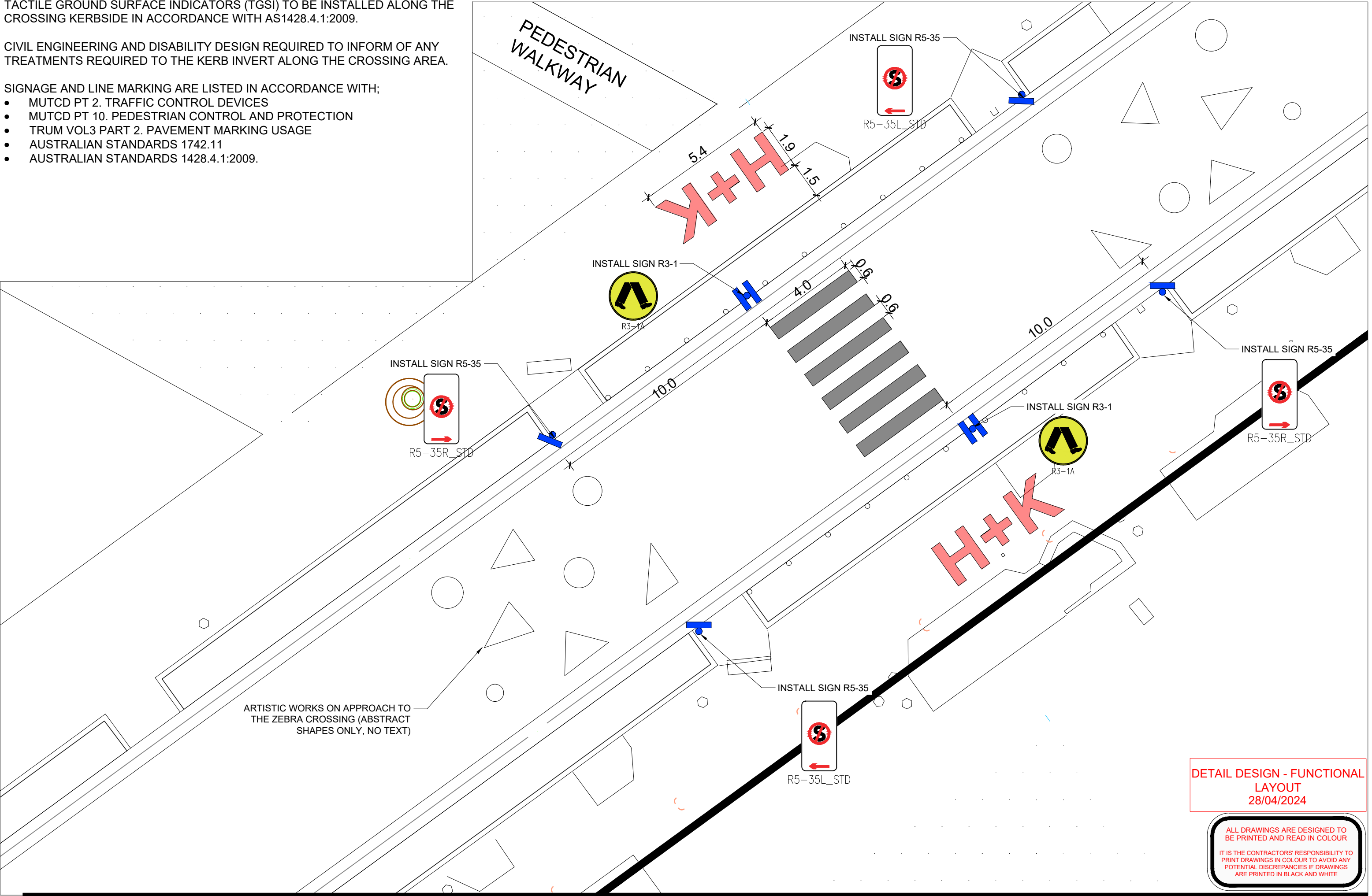
## **APPENDIX B – FUNCTIONAL LAYOUT**

TACTILE GROUND SURFACE INDICATORS (TGSI) TO BE INSTALLED ALONG THE CROSSING KERBSIDE IN ACCORDANCE WITH AS1428.4.1:2009.

CIVIL ENGINEERING AND DISABILITY DESIGN REQUIRED TO INFORM OF ANY TREATMENTS REQUIRED TO THE KERB INVERT ALONG THE CROSSING AREA.

SIGNAGE AND LINE MARKING ARE LISTED IN ACCORDANCE WITH;

- MUTCD PT 2. TRAFFIC CONTROL DEVICES
- MUTCD PT 10. PEDESTRIAN CONTROL AND PROTECTION
- TRUM VOL3 PART 2. PAVEMENT MARKING USAGE
- AUSTRALIAN STANDARDS 1742.11
- AUSTRALIAN STANDARDS 1428.4.1:2009.



DETAIL DESIGN - FUNCTIONAL  
LAYOUT  
28/04/2024

ALL DRAWINGS ARE DESIGNED TO  
BE PRINTED AND READ IN COLOUR

IT IS THE CONTRACTORS' RESPONSIBILITY TO  
PRINT DRAWINGS IN COLOUR TO AVOID ANY  
POTENTIAL DISCREPANCIES IF DRAWINGS  
ARE PRINTED IN BLACK AND WHITE



## LUMINA PEDESTRAIN CROSSING PROPOSED PASSENGER PICK-UP / DROP-OFF

Level 32, 300 George Street | Brisbane QLD 4000 Australia | +61 7 3007 3800 | URBIS Pty Ltd | ABN 50 105 256 228

REV	DESCRIPTION	DWN	CHK	DATE
C	ZEBRA CROSSING	LF	AJ	28/04/2024
B	REVISION	J.Y.	A.J.	26/03/2024
A	ORIGINAL ISSUE	J.Y.	A.J.	18/03/2024

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CLIENT  
LUMINA

SCALE AS DRAWN



PROJECT NO.  
P0046236

DATE  
28/04/2024

DRAWING NO.  
SK01

REVISION  
C

## **APPENDIX C – COUNCIL CORRESPONDENCE**

## Lee Flueckiger

---

**From:** STEWART Lucas <LDSTEWART@goldcoast.qld.gov.au>  
**Sent:** Friday, 21 June 2024 3:20 PM  
**To:** Lee Flueckiger  
**Cc:** Andy Johnston  
**Subject:** RE: Nexus Way - Lumina Ped Crossing

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Hi Lee,

Thanks for the email, and sorry for not getting to you in your requested timeframe – I'm still sifting through the sea of unread emails that result from my being absent from work for a month.

I'm comfortable with that arrangement – the speeds certainly seem appropriate for the environment and the zebra crossing complies with all the relevant requirements of AS1742.10/MUTCD Part 10. There should be adequate sight lines between crossing users and approaching pedestrians with the proposed no stopping restrictions as well, given the operating speed.

There will be other considerations that will need to be further considered as the design progresses, such as floodlighting for the crossing and the exact layout of the bollards (to ensure they are clearly visible and prevent parking while not obstructing visibility to pedestrians), but overall, I have no objection to the proposed treatment in principle.

Thanks to you, Andy and the team for working with us to achieve a solution that was feasible and acceptable to all parties.

Kind regards,

**Lucas Stewart RPEQ**  
Principal Traffic Engineer  
Infrastructure Operations  
Infrastructure Gold Coast

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**GOLDCOAST.**

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**From:** Lee Flueckiger <leef@urbis.com.au>  
**Sent:** Wednesday, 19 June 2024 9:00 AM  
**To:** STEWART Lucas <LDSTEWART@goldcoast.qld.gov.au>  
**Cc:** Andy Johnston <ajohnston@urbis.com.au>  
**Subject:** FW: Nexus Way - Lumina Ped Crossing

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