

Notice of Local Traffic Committee Meeting

a Local Traffic Committee Meeting will be held in the Ballina Shire Committee Room, 40 Cherry Street, Ballina on **Wednesday 11 October 2017 commencing at 10.30am.**

Business

- 1. Attendance & Apologies
- 2. Minutes of Previous Meeting
- 3. Deputations by Members of Public or Councillors
- 4. Summary Report Recent Decisions of Council in Response to LTC Recommendations
- 5. Items to be Referred to Council
- 6. Items to be Referred to the General Manager's Delegate
- 7. Items for Traffic Engineering Advice
- 8. Information of the Committee
- 9. Regulatory Matters on Classified Roads (GM's Delegate)
- 10. Items Without Notice
- 11. Next Meeting

John Truman

John Truman Group Manager Civil Services

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- 1. Attendance & Apologies
- 2. Minutes of Previous Meeting
- 3. Deputation by Member of Public or Councillors
- 4. Summary Report Recent Decisions

1. Attendance & Apologies

2. Minutes of Previous Meeting

A copy of the Minutes of the Local Traffic Committee Meeting held on Wednesday 9 August 2017 were distributed with the business paper.

RECOMMENDATION

That Council confirms the Minutes of the Local Traffic Committee Meeting held on Wednesday 9 August 2017.

- 3. Deputations by Members of Public or Councillors
- 4. Summary Report Recent Decisions of Council in Response to LTC Recommendations

Nil Items

5. Items to be Referred to Council

5.1 <u>DA 2006/148 Section 96 Application - Commercial Building 31-35 Cherry Street, Ballina</u>

Introduction

An outcome of Council's consideration of a S96 application for DA 2006/148 was a Council resolution to replace the ambulance parking zone adjacent to this building in Cherry Street with disability car parking.

Information

A section 96 application to vary provision of onsite parking arrangements at this development was refused by Council's meeting of 27 July 2017. An outcome of consideration of the S96 application was a further Council resolution to replace the ambulance parking zone adjacent to this building in Cherry Street with disability car parking.

"270717/8 RESOLVED (Cr Sharon Cadwallader/Cr Phillip Meehan)

- 1. That Council refuse the application to modify development consent 2006/148 as the application is not a good outcome for the town centre and will have a range of detrimental impacts, as identified within this report and that development should provide on-site accessible parking as per the existing consent.
- 2. That increased signage be placed to advertise the availability of public parking.
- 3. That the provision for ambulance be removed and be replaced with appropriate disability car parking, subject to Local Traffic Committee approval."

In regard to Part 3 of the resolution, the site of the ambulance parking has been inspected and it is considered unsuitable for conversion to disability parking due to the geometry (levels and grade) of the adjacent footpath and the safety risk for disabled persons disembarking in this heavily trafficked part of Cherry Street.

An alternative more suitable location was identified for disability parking immediately around the corner in the current angle parking zone in Tamar Street. This area has room to accommodate both vehicles and a disembarking area for disabled persons and has well graded paved access via the existing pathway to the building ramp access. It also enables disabled persons to disembark away from adjacent busy traffic lanes.

The ambulance parking bay was created for the convenience of Wave Radiology patients. Wave Radiology was contacted regarding the suitability of the proposed alternative disabled parking space in Cherry Street. Lauren Carey (Radiographer in Charge) advised by email dated 31 August 2017.

"In regard to my email of 14.08.2017 I advise that Wave Radiology would support a change of the designated ambulance parking bay on the Cherry Street side of our premises to a designated disabled parking and relocated to the Tamar Street side of our premises."

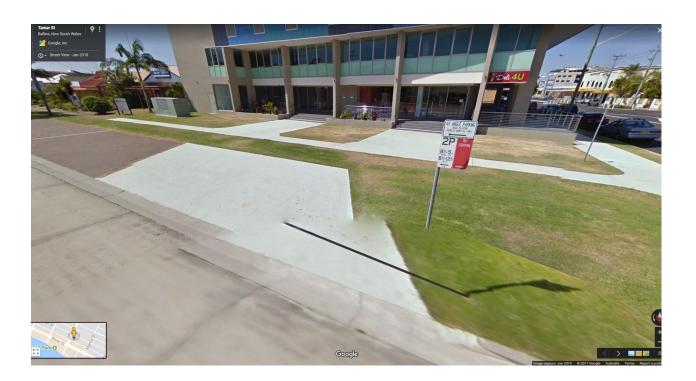
RECOMMENDATIONS

In regard to Part 3 of Council resolution 270717/8 relating to 31-35 Cherry Street, Ballina "That the provision for ambulance be removed and be replaced with appropriate disability car parking, subject to Local Traffic Committee approval." Council is advised:

- The Committee does not support the replacement of the existing ambulance parking in Cherry Street with disability parking due to unsuitable geometry (levels and grade) of the adjacent footpath and safety risk for disabled persons disembarking in this heavily trafficked part of Cherry Street.
- 2. The Committee supports designation of a disabled parking zone on the Tamar Street side of the premises immediately east of the corner which will replace two existing angle parking spaces.
- 3. The Committee also supports the replacement of the designated ambulance parking bay on the Cherry Street side of the premises with 1 Hour Parking as per the adjacent parking zone.

Attachment(s)

- 1. Disability Parking Site Tamar Street, Ballina
- 2. Ambulance Parking Cherry Street, Ballina







6. Items Referred to General Manager's Delegate

6.1 NO STOPPING Zone – Skennars Head Road, Skennars Head

Introduction

The approval of permanent NO STOPPING yellow lines on Skennars Head Road, Skennars Head was deferred at the meeting held 14 June 2017.

Information

At the meeting held 14 June 2017:

"The Committee deferred a decision on provision of a NO STOPPING zone on the north side of Skennars Head Road, Lennox Head from Henderson Drive to the existing NO STOPPING zone adjacent to The Coast Road intersection pending a check of the design for expansion of the sporting fields and provision of onsite parking."

It was reported to the 9 August Meeting:

"The designs are not completed, however based on DA Plans the existing parking provision is for approximately 112 cars and the new layout will provide for an additional 87 cars.

The section of proposed NO STOPPING on the north side of Skennars Head Road between the existing pedestrian refuge and the Sportsground entrance is 150 m (27 parking spaces) and the section between the Sportsground entrance and Henderson Drive is 215 (39 spaces)."

The matter was further deferred at the 9 August 2017 Meeting pending an onsite inspection by the RMS delegate. This inspection took place immediately after the meeting and it was confirmed that the NO STOPPING zone should be endorsed.

RECOMMENDATION

A NO STOPPING zone indicated by yellow lines be approved on the north side of Skennars Head Road, Lennox Head from Henderson Drive east to the NO PARKING zone associated with the Bus Stop and from there to the NO STOPPING zone associated with The Coast Road Roundabout.

Attachment(s)

Nil

- 7.1 Request for Traffic Management Changes in the Vicinity of Wollongbar Public School
- 7. Items for Traffic Engineering Advice
- 7.1 Request for Traffic Management Changes in the Vicinity of Wollongbar
 Public School

Introduction

A request by the Wollongbar P & C for changes to traffic management near the school was considered by the Committee's August meeting. A Road Safety Audit of the area has been completed and is tabled for consideration.

Information

The Wollongbar P & C Committee requested the Traffic Committee to investigate the following recommendations:

- "1. Install a pedestrian activated light crossing on Simpson Avenue where there is currently an existing children's crossing.
- 2. Extend the school zone to the west side of Hall Court so that it is visible to cars prior to the curve in Simpson Avenue OR Build speed bumps to Simpson Avenue prior to the curve (on either side of Hall Court) to ensure traffic is approaching the school zone at a safe speed. Either of these changes would increase the safety for both the Public School and the local Preschool community. Both measures would be welcome.
- 3. Support Wollongbar Public School's recommendation to Roads and Maritime Services that we be reconsidered for a crossing supervisor position (as submitted by Wollongbar Public School's Principal Jennifer Thomas in 2016).
- 4. Encourage local police patrols to add Simpson Avenue as a regular location for a mobile speed camera."

The Committee requested RMS perform a Safety Audit of Wollongbar Public School vicinity and requested NSW Police provide a monitoring presence in the area to promote road safety.

The RMS declined to carry out the audit as the school was not on a classified road. Alternative funding was obtained through the PAMP process and Ardill Payne were engaged to do the Audit. The Audit is an attachment to this report.

Following is a list of general comments and recommendations made by the audit team:

• The school zone appears to be in the correct location with good signage and pavement markings.

- The formal children's crossing in Location 1 works well when supervised.
 Without a supervisor, it appears to be underutilised and less safe for users. Providing a supervisor between 8:30am and 9:15am is recommended.
- It was noted that the crossing supervisors observed during the afternoon audit did not have a 'Stop – Children Crossing' sign. Such a sign would increase the visibility for vehicles approaching over the crest from the north by adding height when pedestrians are crossing.
- White painted pavement markings are recommended to designate priority at the driveway entrance to the school staff parking area.
- The location of the pedestrian refuge in Location 2 appears to be chosen to serve pedestrians crossing between the shopping centre or tavern on the southern side of Simpson Avenue and the bus shelter on the northern side. However, the location is too far from the school gate in Location 2 to be sufficiently convenient to serve the majority of pedestrians associated with the school. Relocating or extending the refuge to align with the school gate would cause problems for right-turn manoeuvres into and out of the driveways within Location 2. Thus it is recommended that a children's crossing is established at the school gate, similar to the crossing at Location 1, including two small blister islands and appropriate signage and pavement markings.
- Relocating the existing school fence to be further offset from the parallel parking bay/bus zone in Location 2 would allow for the construction of a footpath between the bay and the fence.
- Prohibiting parking on the southern side of Simpson Avenue along the 40m stretch between the western and central driveways to the shopping centre/tavern (or part thereof) is recommended to significantly improve the available sight distance for vehicles exiting the shopping centre/tavern from the western-most driveway.
- Many vehicles were observed making U-turns over the double barrier centreline during the morning and afternoon audits in both locations.
- Further education for students and parents/guardians of general road safety in relation to crossing the road would also be constructive, particularly with regard to:
 - Safe crossing locations (e.g. at a designated crossing or refuge etc.)
 - Unsafe crossing locations (e.g. on bends, near crests, between parked vehicles etc.)
 - o Crossing directly, not diagonally
 - Looking both ways before stepping off the kerb
 - Never assuming a driver can see you
 - Holding hands with an adult
 - Not using a mobile phone or earphones while crossing the road
 - Adults setting an example for children.

RECOMMENDATION

The Road Safety Audit be forwarded to the School Principal for Consideration of comments and recommendations relating to the school and for further discussion with Council staff of recommendations that involve works on the road reserve (copy to be forwarded to the P&C).

7.1 Request for Traffic Management Changes in the Vicinity of Wollongbar Public School

Attachment(s)

1. Wollongbar Primary School Road Safety Audit





ENGINEERS PLANNERS SURVEYORS ENVIRONMENTAL PROJECT MANAGEMENT

ROAD SAFETY AUDIT

Existing School Zone Wollongbar Public School, Simpson Avenue

for:

Ballina Shire Council

August 2017

BALLINA

45 River Street PO Box 20 BALLINA NSW 2478 02 6686 3280

GUNNEDAH

Germane House 285 Conadilly Street GUNNEDAH NSW 2380 02 6742 9955





Document Control Sheet

Filename:	8451 Wollongbar Public School RSA v0.docx					
Job No.:		8451				
Job Captain:		Michelle Erwin				
Author:	Michelle Erwin					
Client:	Ballina Shire Council					
File/Pathname	S:\01 Jobs\8400-8499\8451 RSA of children's crossing - Wollongbar Public School\01 Administration\02 Reports\8451 Wollongbar Public School RSA v0.docx					
Revision No:	Date:	Checked By Issued By			ed By	
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1. Project Information

1.1 Introduction

Ballina Shire Council (Council) has engaged Ardill Payne & Partners (APP) to undertake a Road Safety Audit (RSA) of the existing school zone at the Wollongbar Public School on Simpson Avenue. Refer **Figure 1** and **2** below for the study area and the study site.



Figure 1: Study Area



Figure 2: Study Site



1.2 Description of the Site

The section of the Simpson Avenue to be audited, herein referred to as 'the site', is the school zone associated with the Wollongbar Public School which includes two locations where school children are known to cross the road when travelling to and from the school. One crossing at the front entrance to the school is a formal children's crossing (hereafter referred to as Location 1), including advance warning signage and flags during operation. The other location (hereafter referred to as Location 2) is further south on Simpson Avenue, near a pedestrian refuge and opposite the Palm Shopping Centre. The latter is not a formal crossing, however it is a popular spot for children to cross to meet parents parked in the shopping centre car park.

The study site is a designated school zone with a speed limit of 40km/h between the hours of 8-9:30am, and 2:30-4pm. The school zone is clearly marked with signage, flashing lights and painted pavement markings. Outside these hours, Simpson Avenue is a 50km/h area.

On approach to the formal crossing in both directions, there is clear 'Children Crossing Ahead' signage. Adjacent to the formal crossing on the school side of the road, there is a bus zone including a pick-up/set-down bay approximately 46m in length plus tapers. Opposite this area is a sign-posted 'No Stopping' zone between the hours of 8-9:30am and 2:30-4pm. There is a similar 'No Stopping' zone on the school side of the road approaching the formal crossing from the north.

Location 2 includes another pick-up/set-down bay approximately 40m in length. Approximately half of this bay is sign-posted as 'Parallel Parking', with the eastern end of the bay sign-posted a 'Bus Zone', including a 'Hail and Ride' bus stop. About 10m east of the bay is a bus shelter.

Opposite the school in this location there is a shopping centre, including a chemist, doctor, dental surgery, vet clinic, post office, hair salon, bakery, restaurant, take-away food shop, news agency and an IGA supermarket. The shopping centre is surrounded by car parking areas which also provide access to the Pioneer Tavern located further to the south.

Simpson Avenue in the vicinity of the site is in good condition with upright kerb and gutter on both sides, edge lines and a double barrier centerline. There is a concrete footpath on the southern/western side of the road extending from beyond the start of the school zone in the south east to the formal children's crossing opposite the front entrance to the school. There is also a concrete footpath on the eastern side of the road extending from beyond the start of the school zone in the north west to the southern end of the bus bay immediately in front of the school. There is another short section of footpath between the kerb ramp on the northern side of the road opposite the pedestrian refuge and the bus shelter.

Refer to **Attachment 1** for the location of footpaths, signs, bus zones etc. within the study area. Photographs are provided in **Attachment 2**.

1.3 Information Provided by the Client

No additional information was provided by Council other than the scope of the audit as discussed at the pre-commencement meeting (refer to **Section 2.1**).

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Road Safety Audit Wollongbar Public School



1.4 Audit Scope and Objective

This report is for the RSA for the school zone at Wollongbar Public School in Simpson Avenue, including two crossings (one formal and one informal) within the designated school zone.

The scope of the RSA has been limited to assessment of the school zone as shown in **Figure 2** from the perspective of all road users, including pedestrians and motorists, during the morning and afternoon school drop-off and pick-up periods.

The objective of this RSA is to identify any potential road safety issues/deficiencies associated with the existing arrangement from the perspective of all road users that may need to be investigated and rectified. Positive aspects of the design have not been recorded.

This RSA is not a design check, although some design issues may be raised during the audit process. APP does not take responsibility for any suggested design changes made in this report.

1.5 Audit Team

The audit has been carried out by Michelle Erwin and Tony Cromack. Both members of the audit team are completely independent of the Council and the Wollongbar Primary School.

Lead Auditor - Michelle Erwin

- Civil Engineer with 12 years' experience in urban and rural road design;
- Completed Lead Road Safety Audit Course through IPWEA, 2015;
- Completed Road Safety Audit Course through IPWEA, 2013;
- Completed Master of Traffic through Monash University, 2013;
- Completed Bachelor of Engineering through University of Tasmania, 2004;
- Member Engineers Australia;
- Member Institute of Public Works Engineering Australasia (IPWEA); and
- Registered Level 3 Road Safety Auditor (NSW).

Auditor - Tony Cromack

- Civil Engineer with 30 years' experience in urban and rural road design;
- Completed Road Safety Audit Course through IPWEA, 2014;
- Completed Bachelor of Technology (Engineering) through University of Southern Queensland, 1999;
- Technologist Member Engineers Australia;
- Member Institute of Public Works Engineering Australasia (IPWEA);
- NSW Roads and Maritime Services Accreditation to Prepare a Work Zone Traffic Management Plan; and
- Registered Level 2 Road Safety Auditor (NSW) [Level 3 pending]



2. Road Safety Audit Program

2.1 Commencement Meeting

The commencement meeting was held via teleconference on 21st August 2017. Helen Carpenter represented Council (the client) and Michelle Erwin represented the audit team.

Issues discussed included:

- Ms Erwin outlined the scope of the audit, reiterating that the audit is not a design check, and that recommendations will not be provided as part of the audit report;
- Ms Carpenter advised that the audit was to include the official children's crossing at the front
 entrance to the school, as well as the informal crossing location opposite the shopping centre
 to the south of the school;
- Ms Carpenter advised that Council are interested to know how the area is being used (by all road users) during the peak school drop-off and pick-up periods;
- Ms Erwin advised that the audit team had contacted the school principal, Jennifer Thomas by telephone on Friday 18th August 2017 to advise of the impending audit to be carried out the following week and that photographs may need to be taken of children utilising the crossings. Ms Thomas freely agreed for the audit to take place and confirmed that neither parents nor teachers would be informed of the audit to ensure normal behavior may be observed;
- Ms Carpenter provided a written letter outlining the engagement and audit scope to be taken
 to site during the audit and shown to anyone concerned about the presence of the audit team
 at the school;
- Ms Erwin confirmed the audit would be carried out between 8am and 9:15am and again between 2:30pm and 3:45pm on Tuesday 22nd August (with school starting and ending at 9:15am and 3:15pm respectively);
- Further details regarding any pre-existing concerns held by the client (if any) were not raised
 or discussed to ensure the audit team could undertake an unbiased RSA.

2.2 Field Audit

The field audit was carried out by all audit team members on the morning and afternoon of Tuesday 22nd August 2017. The team drove the route three times in each direction and filmed the drive from the dashboard of the vehicle. The team also walked the route in both directions then observed the two crossing locations from the roadside from 8:15am to 9:15am and again from 2:45pm to 3:45pm.

The 'drop-off' audit took place between 8am and 9:15am, and the 'pick-up' audit was undertaken between 2:30pm and 3:45pm. Two audits were considered warranted given that the movement of children and vehicular traffic will be significantly different for the drop-off and pick-up periods.

The weather on the day was clear and sunny. There had been less than 1mm of rain in the previous 24 hours and the road surface was dry. There was little wind during the audits.

Photographs of any deficiencies found were taken and notes were made.



2.3 Behavioural Observations

The following observations were noted during the morning and afternoon audits:

- It appeared that the majority of students arrived by bus (approximately five buses in the morning and again in the afternoon).
- School buses appeared to operate safely and effectively.
- School buses did not stop at Location 2. All school buses picked up and dropped off children at Location 1.
- During the morning audit, the majority of students not arriving by bus were dropped off by parents or guardians within the school zone (either at the front entrance in Location 1 or at the playground gate in Location 2) on the school side of the road.
- During the morning audit, approximately 50 children and parents were observed crossing the road within sight of the formal children's crossing at the main entrance of the school (Location 1). Of these, approximately 50% crossed at the formal crossing, and 50% crossed elsewhere (generally wherever was convenient depending on where their vehicle was parked).
- Children riding bicycles and scooters dismounted prior to crossing the road.
- There was no crossing supervisor present at the formal children's crossing during the morning audit, however the crossing was managed by two teachers wearing fluorescent vests during the afternoon audit between 3:15 and 3:30pm. The teachers did not have a 'Stop – Children Crossing' sign.
- The majority of students and parents who crossed at the formal crossing during the morning audit (i.e. without a supervisor) did so tentatively.
- Two vehicles were observed to continue through the crossing while children were standing at the crossing waiting to cross the road.
- The location of the formal children's crossing provided poor sight distance to the north.
- The majority of parents who attended the school to drop off and/or pick up children did so safely and within the road rules.
- However, several vehicles were observed making U-turns over the double barrier line after dropping off children in both locations.
- During the afternoon audit, the majority of children and parents crossing the road in the vicinity of the formal children's crossing (Location 1) did so at the designated crossing, with only two children accompanied by an adult observed to cross elsewhere.
- During the afternoon audit, the majority of children and parents crossing the road within Location 2 did not use the refuge, with only three people observed to cross with the aid of the refuge island. Most appeared to cross wherever was convenient for them to access their car. Many instances of jay-walking and pedestrians entering the roadway from between parked cars was observed.
- Parents and guardians arrived to pick up children from approximately 2:45pm and by 3:15pm the majority of available street parking within the school zone was full. By 3:30pm, almost all parked vehicles had left the area.

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- Location 1 was generally observed to be functioning in a safe, orderly fashion during the morning and afternoon audits.
- Location 2 was generally observed to be functioning in a safe, orderly fashion during the morning audit. However, during the afternoon audit, this location appeared to be chaotic with a number of safety hazards. Many children and parents were crossing at various locations along the 100m+ length of road and many cars were required to stop in the roadway to give way to pedestrians.
- At Location 2, parked vehicles east of the shopping centre's western exit severely limited the sight distance for motorists exiting the car park and there were a number of near-collisions observed.
- The footpath opposite the main school entrance at Location 1 (on the western side of Simpson Avenue) has a steep cross fall, particularly in the vicinity of the kerb ramp at the formal crossing.
- Access to the school staff/visitors car parking area is immediately adjacent to the children's crossing at Location 1. Some staff/visitors were observed existing the car park during peak pedestrian activity. Priority was unclear.
- Public buses stopping at the shelters within Location 2 provided sufficient space within the road carriageway to allow other vehicles to pass safely.
- The vast majority of vehicles travelling through the school zone appeared to be travelling between 40 and 50km/h. Only three cars were observed to be noticeably exceeding the 40km/h speed limit.

2.4 Completion Meeting

A completion meeting generally involves the auditor and the client and/or designer, and is an opportunity for clarification of aspect of the audit. A completion meeting has not been held at the time of preparing this report.



3. Risk Level Determination

Deficiencies raised in relation to the site have been given a risk level based on the associated safety priority, as categorised using **Table 1** to **Table 4**.

Table 1 - Frequency

Frequency	Description
Frequent	Once or more per week
Probable	Once or more per year (but less than once a week)
Occasional	Once every five to ten years
Improbable	Less often than once every ten years

Table 2 - Severity

Severity	Description			
Catastrophic	Likely multiple deaths, for example:			
	High-speed multi-vehicle crash			
	Car runs into crowded bus stop			
	Bridge collapse			
Serious	Likely death or serious injury, for example:			
	 High/medium speed two-vehicle collision 			
	High/medium speed single-vehicle collision with fixed roadside object			
	 Pedestrian/cyclist struck at speed 			
Minor	Likely minor injury, for example:			
	Low speed vehicle collision			
	Cyclist falls from bike at low speed			
	Rear-end collision			
Limited	Likely trivial injury or property damage only, for example:			
	Low speed vehicle collisions			
	Car reverses into a post			
	Pedestrian walks into object (no head injury)			

Table 3 - Risk

Severity	Frequency					
Severity	Frequent	Probable	Occasional	Improbable		
Catastrophic	Intolerable	Intolerable	Intolerable	High		
Serious	Intolerable	Intolerable	High	Medium		
Minor	Intolerable	High	Medium	Low		
Limited	High	Medium	Low	Low		



Table 4 - Treatment

Risk	Suggested Treatment Approach		
Intolerable	Must be corrected		
High	Should be corrected or the risk significantly reduced, even if the treatment cost is high.		
Medium	Should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high.		
Low	Should be corrected or the risk reduced, if the treatment cost is low.		



4. Findings

The following audit findings were identified during the inspection. Audit findings are a listing of identified safety deficiencies: what is potentially dangerous about the road or what could lead to crashes occurring or injury resulting.

Table 5 – Audit Findings

Table 5 – Audit Findings					
Number	Description	Risk Rating			
01	Children's Crossing Not Supervised During Morning Peak	Frequency:	Occasional		
	The formal children's crossing outside the main entrance to the school (Location 1) is not supervised during the morning school drop-off period, presumably due to the longer time frame over which children are arriving at the school compared to the afternoon pick-up period.	Severity: Risk:	Serious <mark>High</mark>		
	Many more children and parents/guardians were observed crossing within sight of the crossing but not at the crossing during the morning audit compared to the afternoon audit when the crossing had some level of supervision.				
	There is a risk that children and/or parents could be struck by a vehicle travelling along Simpson Avenue not expecting pedestrians crossing away from the designated crossing area. Location: At formal children's crossing				
02	Sight Distance at Formal Children's Crossing	CROSSING WITH ADULT:			
	There is limited sight distance to the north at the formal children's crossing outside the main entrance to the school (Location 1) due to the presence of a curve and a slight crest north of the designate crossing location. Sight distance is further compromised for children crossing without an adult or crossing supervisor, given	Frequency:	Improbable		
		Severity: Risk:	Serious <mark>Medium</mark>		
	their shorter stature. There is a risk that vehicles travelling south on Simpson Avenue may not see pedestrians, particularly children, crossing the road with sufficient time to stop their vehicle, resulting in a collision between a vehicle and a pedestrian. Refer to Photo 1	CHILD CROSSING ALONE:			
		Frequency:	Occasional		
		Severity:	Serious		
		Risk:	High		
	Location: At formal children's crossing				
03	Priority at School Entrance Unclear	Frequency:	Improbable		
	It is unclear who has priority (pedestrians or motorists) at the driveway entrance to the school, creating a risk of a collision occurring between pedestrians and motorists	Severity: Risk:	Minor Low		
	Refer to Photo 1				
	Location: Driveway access to school staff parking in Location 1				
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04	Pedestrians Jay-walking within Location 2	Frequency:	Occasional
	Numerous pedestrians, comprising primarily school children and parents/guardians were observed jay-walking during the afternoon audit at Location 2 to reach their vehicles parked either within the shopping centre car park or on the southern side of Simpson Avenue.	Severity: Risk:	Serious High
	Several vehicles were observed stopping in the roadway to allow pedestrians to cross the road.		
	There is a risk that a pedestrian could be struck by a vehicle.		
	Location: Within Location 2		
05	Connectivity Issues within Location 2	Frequency:	Improbable
	There is no footpath between the parallel parking bay/bus zone and the fence in front of the school oval within Location 2, and no connectivity for pedestrians between the school gate and the pedestrian refuge.	Severity: Risk:	Minor <mark>Low</mark>
	Pedestrians (including children) exiting vehicles at the parking bay or leaving the school gate in an easterly direction are forced to walk along the parking/bus bay or within the adjacent roadway to access the kerb ramp, pedestrian refuge and/or bus shelter, with the risk of being struck by passing/parking vehicles.		
	Refer to Photo 13		
	Location: Indented parking/bus bay within Location 2		
06	Crossfall on Footpath	Frequency:	Improbable
	The crossfall on the concrete footpath on the western side of Simpson Avenue within Location 1 has a steep crossfall likely exceeding 5%.	Severity: Risk:	Minor Low
	There is a risk that cyclists or children riding scooters could lose control on the slope and fall into the roadway.		
	Refer to Photo 3		
	Location: Opposite school front entrance		
07	Parked Vehicles Restricting Sight Distance	Frequency:	Probable
	Vehicles parked within Simpson Avenue between the two driveways at the western end of the shopping centre severely restrict the sight distance to the east for vehicles exiting the western-most driveway.	Severity: Risk:	Minor <mark>High</mark>
	There is a risk that a collision may occur between vehicles leaving the shopping centre or tavern car park via this driveway and vehicles travelling west on Simpson Avenue.		
	Refer to Photos 15 and 16		
	Location: Southern side of Simpson Avenue within Location 2		



08	U-Turns over Double Barrier Line	Frequency:	Occasional
	Several vehicles were observed making illegal U-turns across the	Severity:	Serious
	double barrier centerlines during the morning and afternoon audits at both locations.	Risk:	High
	There is a risk that vehicles making such manoeuvres may collide with vehicles travelling in the opposite direction.		
	Location: Location 1 and 2		

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Road Safety Audit Wollongbar Public School



5. Concluding Statement

The audit has been carried out for the sole purpose of identifying any features of the road which could be altered or removed to improve the safety of the existing arrangement within the audit scope. The accompanying findings are put forward for consideration by the Client for implementation. General comments are provided in **Attachment 3**.

It should be noted that while every effort has been made to identify potential safety hazards, there is no guarantee that every deficiency has been identified.

No 'intolerable' risks were identified during the audit. As per **Table 4**, risks with a medium ranking 'should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high.' Risks with a high ranking 'should be corrected or the risk significantly reduced, even if the treatment cost is high'. It is recommended that audit findings be investigated with satisfactory corrective actions identified and implemented.

Michelle Erwin, Civil Engineer AUDIT TEAM LEADER 28/08/2017

28/08/2017

Tony Cromack, Senior Civil Engineer

AUDIT TEAM MEMBER



Attachments

Attachment 1 The Site

Attachment 2 Site Photographs

Attachment 3 General Comments and Recommendations



ATTACHMENT 1

Attachment 1: The Site





ATTACHMENT 2

Attachment 2: Site Photographs





Photo No. 1: Location 1 AM: Children's Crossing, view to the North



Photo No. 2: Location 1 AM: Bus Zone, view to the East





Photo No. 3: Location 1 AM: Footpath on western side of Simpson Avenue, view to the South



Photo No. 4: Location 1 PM: Parked vehicles, view to the North





Photo No. 5: Location 1 PM: Buses in bus zone and supervisor at crossing, view to the South



Photo No. 6: Location 1 PM: Buses in bus zone and supervisor at crossing, view to the South





Photo No. 7: Location 2 AM: Footpath, bus zones and pedestrian refuge, view to the West



Photo No. 8: Location 2 AM: Bus at shelter with car passing, view to the West





Photo No. 9: Location 2 AM: Playground gate, view to the North



Photo No. 10: Location 2 AM: Bus at bus stop with space for vehicles to pass, view to the West





Photo No. 11: Location 2 PM: Pedestrian refuge and bus shelter, view to the East



Photo No. 12: Location 2 PM: School zone signage, view to the West







Photo No. 13: Location 2 PM: Bus zone and parallel parking area, view to the West



Photo No. 14: Location 2 PM: Parked vehicles, view to the East





Photo No. 15: Location 2 PM: Limited sight distance for vehicles exiting car park, view to the East



Photo No. 16: Location 2 PM: Near-collision for vehicle exiting car park, view to the East





Photo No. 17: Location 2 PM: The Palm Shopping Centre, view to the South



Photo No. 18: Location 2 PM: Foodworks Shopping Centre, view to the South



ATTACHMENT 3

Attachment 3: General Comments and Recommendations

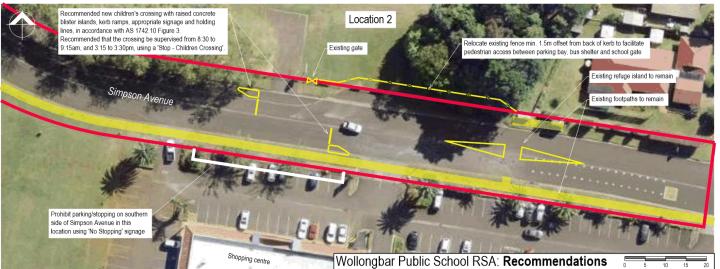


General Comments and Recommendations

Following is a list of general comments and recommendations made by the audit team:

- The school zone appears to be in the correct location with good signage and pavement markings.
- The formal children's crossing in Location 1 works well when supervised. Without a supervisor, it appears to be underutilised and less safe for users. Providing a supervisor between 8:30am and 9:15am is recommended.
- It was noted that the crossing supervisors observed during the afternoon audit did not have a 'Stop – Children Crossing' sign. Such a sign would increase the visibility for vehicles approaching over the crest from the north by adding height when pedestrians are crossing.
- White painted pavement markings are recommended to designate priority at the driveway entrance to the school staff parking area.
- The location of the pedestrian refuge in Location 2 appears to be chosen to serve pedestrians crossing between the shopping centre or tavern on the southern side of Simpson Avenue and the bus shelter on the northern side. However, the location is too far from the school gate in Location 2 to be sufficiently convenient to serve the majority of pedestrians associated with the school. Relocating or extending the refuge to align with the school gate would cause problems for right-turn manoeuvres into and out of the driveways within Location 2. Thus it is recommended that a children's crossing is established at the school gate, similar to the crossing at Location 1, including two small blister islands and appropriate signage and pavement markings.
- Relocating the existing school fence to be further offset from the parallel parking bay/bus zone
 in Location 2 would allow for the construction of a footpath between the bay and the fence.
- Prohibiting parking on the southern side of Simpson Avenue along the 40m stretch between the
 western and central driveways to the shopping centre/tavern (or part thereof) is recommended
 to significantly improve the available sight distance for vehicles exiting the shopping
 centre/tavern from the western-most driveway.
- Many vehicles were observed making U-turns over the double barrier centreline during the morning and afternoon audits in both locations. Parents/guardians should be reminded that such behaviour is prohibited under the NSW road rules.
- Further education for students and parents/guardians of general road safety in relation to crossing the road would also be constructive, particularly with regard to:
 - Safe crossing locations (e.g. at a designated crossing or refuge etc.)
 - Unsafe crossing locations (e.g. on bends, near crests, between parked vehicles etc.)
 - Crossing directly, not diagonally
 - Looking both ways before stepping off the kerb
 - Never assuming a driver can see you
 - Holding hands with an adult
 - Not using a mobile phone or earphones while crossing the road
 - Adults setting an example for children





7.2 Request for One Way Traffic - Swift Lane, Ballina

Introduction

A resident has requested consideration of providing One Way Traffic in Swift Lane, Ballina

Information

A resident has requested consideration of providing One Way Traffic in Swift Lane, Ballina, preferably entering from Swift Street and exiting to Owen Street.

Swift Lane proceeds southwards from Swift Street and turns a right angle eastwards to terminate at Owen Street.

The resident advises that due to the right angle corner in the lane, visibility of oncoming vehicles on the other leg is not possible and vehicles must sometimes reverse all the way back to Swift Street to allow opposing vehicles through. It is understood that there are many vehicles parked in the lane making two way traffic difficult and reversing manoeuvres dangerous.

RECOMMENDATION

The Committee provide Traffic Engineering Advice on this matter.

Attachment(s)

1. Aerial View - Swift Lane, Ballina



8. Information for the Committee

8.1 Pedestrian Access and Mobility Plan Update

Introduction

Council is developing a new Pedestrian Access and Mobility Plan (PAMP) during 2016-2017.

The PAMP will identify footpath planning needs including connections, crossings and refuges, line marking, ramps, and other fixtures (such as lighting and signage). Data for the PAMP is collected using literature research, analysis of pedestrian crash data, and community consultation.

Issues identified through the PAMP process are subject to assessment and prioritization. The information is used to create a works schedule for footpaths for the Shire. It is also used to attract funding to implement the PAMP.

Information

The Draft PAMP has been completed and includes 86 prioritized projects for implementation from 2018/2019 to 2026/2027.

The Draft PAMP will be presented to Council on 28 September 2017.

If approved, the Draft PAMP will go to public exhibition for four weeks during October and November 2017 for additional community consultation.

RECOMMENDATION

That the Committee note the update on the Pedestrian Access and Mobility Plan.

Attachment(s)

Nil

- 9 Regulatory Matter on Classified Roads (GM's Delegate)
- 10 Items Without Notice
- 11 Next Meeting

9. Regulatory Matters on Classified Roads (GM's Delegate)

Nil Items

10. Items Without Notice

11. Next Meeting

Next meeting is scheduled for Wednesday 13 December 2017 at 10.00am.