

# Picton High School

## Proposed Roadworks Road Safety Audit

Prepared for:

GHD

5/09/2018

The Transport Planning Partnership

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Client: GHD

Version: 01

Date: 5/09/2018

TPPP Reference: 18169

### Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
01 Final	5/09/18	Ken Hollyoak	Wayne Johnson	Ken Hollyoak	

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# 1 ROAD SAFETY AUDIT SUMMARY

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Audited project:	Picton High School
Developer:	GHD
Audit Team:	Ken Hollyoak (Lead level 3 road safety auditor) Wayne Johnson (Level 3 road safety auditor)
Audit type:	Existing Conditions
Commencement meeting:	N/A
Audit date:	5 September 2018
Completion meeting:	N/A
Previous audit:	N/A

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The objective of this road safety audit is to examine and identify road safety concerns resulting from the existing operation of Picton High School. The findings of the road safety audit have been detailed in Section 4.3 of this report.

## 2 INTRODUCTION

### 2.1 Background

This report has been prepared on behalf of GHD to present road safety audit findings resulting from the proposed roadworks associated with the expansion of Picton High School.

The school is located on Argyle Street and currently the only vehicular access is achieved from an access at the north of the site and an egress at the south of the site. This one way "loop road" access provides access to staff car parks and bus zones.

**Figure 2.1: Site Location**



There is a hatched area opposite the allocated bus zone area and this is provided with no stopping signage. The bus zone provides a pick-up/drop-off zone around 15 buses in each peak period. The operation is managed by a school staff member.

There is pedestrian refuge mid way along the school between the access and egress which assists pedestrians to cross from east to west (and vice versa) of Argyle Street.

### 2.2 Proposed Works

Plans of the proposed roadworks are contained at Annexure A and are summarised below

- Provision of Right turn Lane
- Removal / Relocation of on-street parking / drop off zone
- Relocation of crossing point
- Rear access via Wonga Road and mini roundabout

## 2.3 Audit Objective

The objective of this Audit was to ensure that there are no issues which might constitute a road safety risk.

## 2.4 Procedures and Reference Material

The procedures used are these described in the Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices. The Austroads Guide to Road Safety: Part 6 Roads Safety Audit checklist was used by the audit team as a reference in this detailed design audit. Key elements examined included:

- general topics
- design issues
- intersections
- lighting, signs and delineation
- physical objects
- environmental constraints
- other matters.

## 2.5 Audit Team

The RSA was carried out by the following team:

- Ken Hollyoak (RSA-02-0249) – level 3 road safety auditor (team leader).
- Wayne Johnson (RSA-02-0769) – Level 3 road safety auditor (team member)

## 2.6 Previous Audit

The above audit team also undertook a road safety audit of the existing conditions in August 2018 which involved site visits looking at the morning and afternoon conditions. The audit team also undertook an audit of the proposed works in mid-August 2018 prior to new drawings being issued on 4<sup>th</sup> September 2018. This audit is based upon these new drawings.

## 3 ROAD SAFETY AUDIT PROGRAM

### 3.1 Commencement Meeting

A commencement meeting was held by phone prior to the audit.

### 3.2 Site and Field Audit

Day time site visits were undertaken during the morning and afternoon drop off at the school on Monday 13<sup>th</sup> August and Tuesday 14<sup>th</sup> August 2018. Both visits were undertaken in fine conditions. Photographs and videos were taken during both visits.

### 3.3 Completion Meeting

No completion meeting was requested.

## 4 ROAD SAFETY AUDIT FINDINGS

### 4.1 Introduction

The road safety audit findings have been documented in Table 4.2.

Table 4.1 provides specific details of the audit findings and a risk rating as high, medium or low. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from the standard Austroads Risk Matrix.

**Table 4.1: Risk Matrix**

	Likelihood	Highly probable	Occasional	Improbable
Severity				
Major		High	High	Medium
Moderate		High	Medium	Low
Minor		Medium	Low	Low

The terms in Table 4.1 are described below.

Likelihood:

- Highly probable: It is likely that more than one crash of this type could occur within a five-year period.
- Occasional: It is likely that less than one crash of this type could occur within a five-year period.
- Improbable: Less than one crash of this type could occur within a 10-year period.

Severity:

- Major: The crash is likely to result in a fatality or serious injuries  
For example, high/medium speed vehicle collision, high/medium speed collision with a fixed object, pedestrian struck at high speed, and cyclist hit by car.
- Moderate: The crash is likely to result in minor injuries or large scale of property damage  
For example, some slow speed vehicle collisions, cyclist falls, and rear end crashes.
- Minor: The crash is likely to result in minor property damage or many near miss crash events  
For example, some slow speed collisions, pedestrian walks into object (no head injury), and car reverses into post.



Priority:

- High: Very important and needs to be addressed urgently.
- Medium: Important and needs to be addressed as soon as possible.
- Low: Needs to be considered as part of regular maintenance/planning program.

## 4.2 Responding to the Audit Report

As set out in the road safety audit guidelines, the responsibility for the rests with the project manager, not with the auditor. The project manager is under no obligation to accept the audit findings. Neither is it the role of the auditor to agree to, or approve, the project manager's responses to the audit.

The audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager in conjunction with all other project considerations.

## 4.3 Road Safety Audit Findings

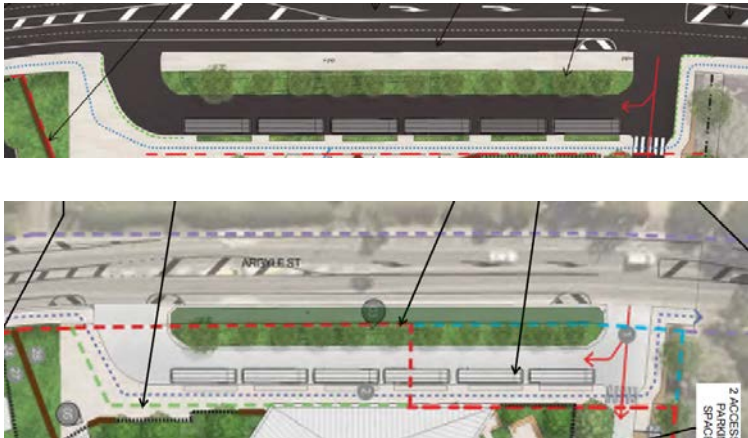

The audit findings are documented in Table 4.2 which provides:

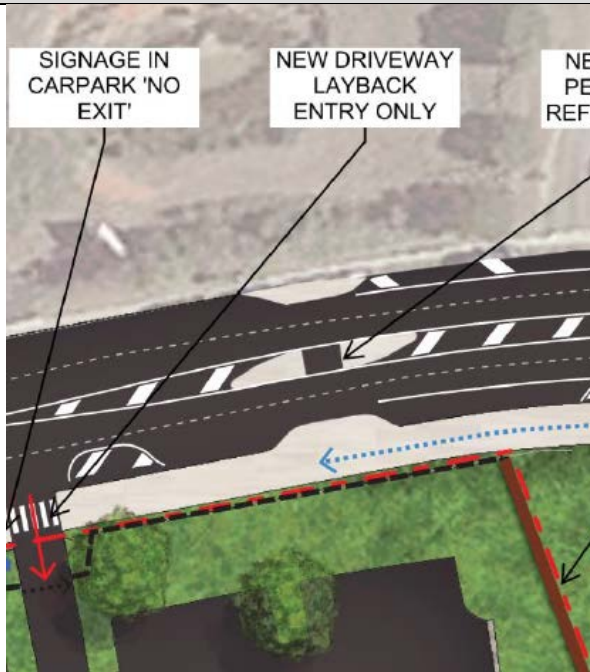
- specific details of the road safety issues identified during the audit
- a risk level rating for each of the road safety audit findings.

It should be acknowledged that positive attributes of the audited road section have not been discussed. Deficiencies that do not cause a safety problem are also not listed.

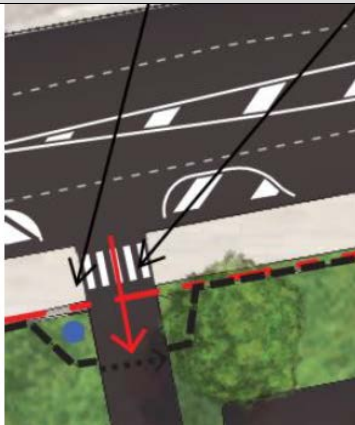

In-line with RMS best practice recommendations have not been included in the road safety audit findings.

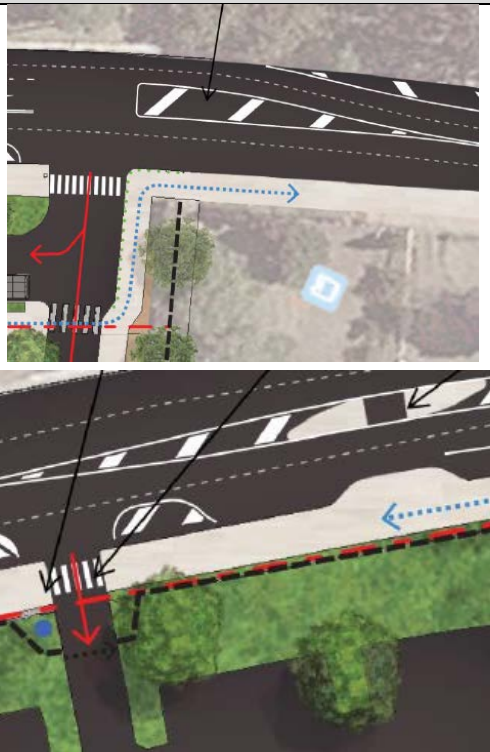

Table 4.2: Road Safety Audit Findings

Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
1.	<p>All pedestrians walking along Argyle Street will need to divert into the site due to the 1200mm fence barriers and the removal of the footpath between the access/egress. Pedestrians may not be sure if they are trespassing into private land owned by the school. Consequently, pedestrians may walk into the road outside the fence which has potential for collisions with vehicles.</p> <p>N.B. The plans are not consistent – the Traffic &amp; Security Design shows the footpath between the entrance / exit retained whilst the Site Context Plan shows this footpath replaced with a wider verge and no footpath but shows no fence.</p>				
2	<p>Provision of a 70m right turn bay for the Argyle Street to School Bus Interchange right turn movement and a new wide painted median in Argyle Street results in the removal of a number of 2 minute on-street parking spaces on the west side of Argyle Street.</p> <p>These car spaces are currently used by parents to drop off and pick up students.</p> <p>Insufficient parking supply may result in motorists' parking/ stopping in unsafe locations.</p>		Occasional	Moderate	Medium


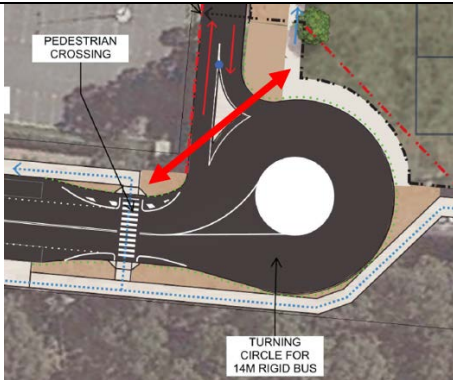
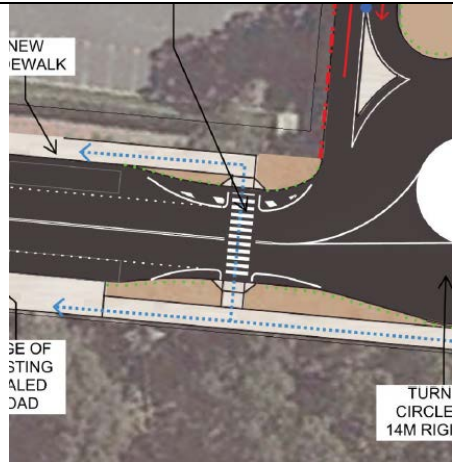
Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
3	<p>Observations have shown that motorists often give priority to pedestrians at the existing pedestrian refuge across Argyle Street which may result in some students becoming conditioned to receiving priority. This may not always be the case resulting in pedestrian conflicts</p> <p>Consideration should be given to other pedestrian crossing treatments where pedestrians have priority over motorist.</p>		Highly Probable	Moderate	High

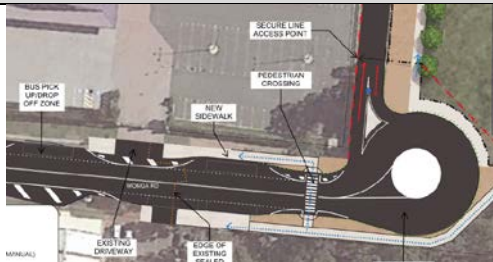
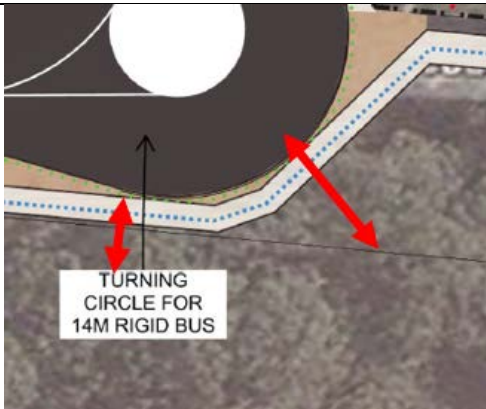

Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
4	<p>Two minute on-street parking on the east side of Argyle Street should be maintained or 'No Parking' signage be installed.</p> <p>Provision of 'No Stopping' signage would result in motorists not being permitted to park/ wait in this area.</p> <p>Given the lack of on-street parking in close proximity to the school entrance, children are likely to be dropped off within school grounds at the new 'taxi pick up/ drop off' area thus mixing pedestrians with traffic which could result in conflicts.</p>		Occasional	Moderate	Medium

Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
5	<p>A dedicated right turn bay is not provided for the right turn movement from Argyle Street into the new access into the staff car park.</p> <p>Lack of a right turn bay may result in rear end incidents.</p>		Occasional	Minor	Low
6	<p>No pedestrian footpath facilities are provided on the west side of Argyle Street south of the proposed pedestrian refuge facility which is where students are likely to walk to reach parked cars</p> <p>The lack of a surfaced footpath can result in pedestrians tripping over.</p>		Occasional	Minor	Low



Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
7.	Left turn auxiliary lanes are not provided on approach to the School bus interchange or staff car park. Lack of left turn auxiliary lanes may result in motorists decelerating within the Argyle Street southbound carriageway which may result in rear end incidents.		Occasional	Minor	Low
8.	The proposed bus interchange has capacity for six buses.  Buses do not appear to have sufficient taper in/ taper out length to enable bus drivers to enter and exit independent of other buses.		Note Only		



Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
9.	The proposed scheme does not propose any cycle facilities.  A lack of cycle facilities connecting may result in cyclists using the footpath or road which in turn may result in collisions.		Occasional	Minor	Low
10.	Pedestrians will undertake the shortest and most direct path between the school and bus pick/ drop off zone.  Pedestrians are likely to cross the new school access even though no pedestrian facilities are proposed which is likely to result in pedestrian collisions.		Occasional	Minor	Low
11.	Wonga Road is a public road. The RMS warrant for a pedestrian crossing is unlikely to be satisfied.		Note only.		

Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
12.	The Wonga Road scheme comprises pick up/ drop off facilities for buses only. Consideration for a pick-up/ drop off area for parents should be considered.		Note only.		
13.	Retaining access to the existing Animal facility should be considered.	 	Note only.		



Item No.	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating
14.	As parking will be in demand, parking on the east side of Wonga Road should be retained.	 <p>SECURE LINE STANDARD FENCE 2100H STANDARD BOUNDARY FENCE OPENING GATES (AUTOMATIC AND MANUAL) VEHICLE ACCESS</p> <p>EXIST DRIVE</p>	Note Only.		
15.	The markings across the access into the property are not clear and may dissuade people from recognising it as a driveway.	 <p>WONGA RD</p>	Note Only		

## 5 CONCLUDING STATEMENT

The findings and opinions in the report are based on the examination of the specific road and environs at the time of the audit.

The auditors have endeavoured to identify features of the road environment that could be modified to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe.

While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.



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Ken Hollyoak  
Level 3 Lead Road Safety Auditor  
The Transport Planning Partnership



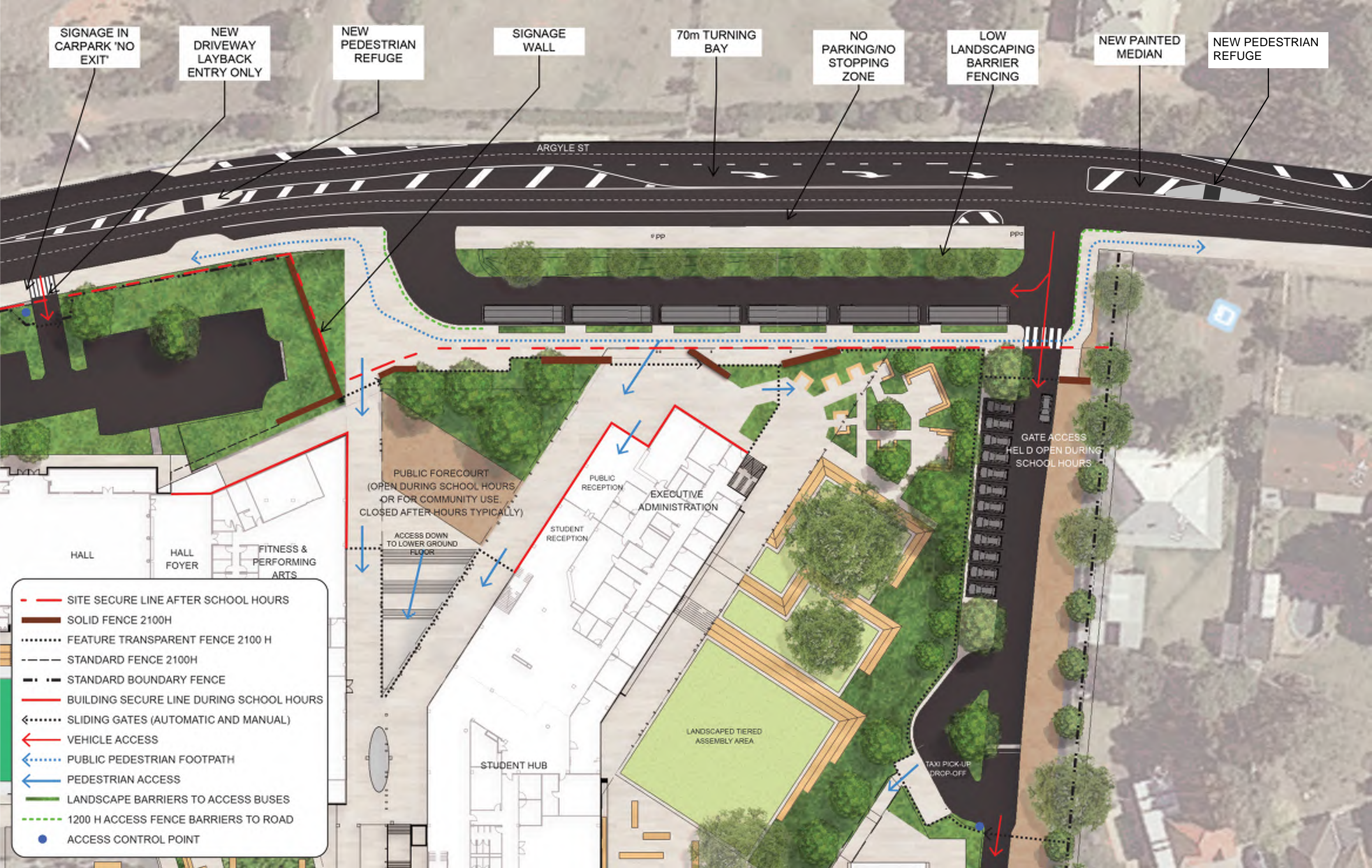
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Wayne Johnson  
Level 3 Road Safety Auditor  
The Transport Planning Partnership

# Annexure A

Drawings Provided





SIGNAGE IN CARPARK 'NO EXIT'

NEW DRIVEWAY LAYBACK ENTRY ONLY

NEW PEDESTRIAN REFUGE

SIGNAGE WALL

70m TURNING BAY

NO PARKING/NO STOPPING ZONE

LOW LANDSCAPING BARRIER FENCING

NEW PAINTED MEDIAN

NEW PEDESTRIAN REFUGE

ARGYLE ST

ppp

ppp

GATE ACCESS HELD OPEN DURING SCHOOL HOURS

PUBLIC FORECOURT (OPEN DURING SCHOOL HOURS OR FOR COMMUNITY USE. CLOSED AFTER HOURS TYPICALLY)

PUBLIC RECEPTION

EXECUTIVE ADMINISTRATION

STUDENT RECEPTION

HALL

HALL FOYER

FITNESS & PERFORMING ARTS

LANDSCAPED TIERED ASSEMBLY AREA

STUDENT HUB

TAXI PICK-UP/DROP-OFF

- SITE SECURE LINE AFTER SCHOOL HOURS
- SOLID FENCE 2100H
- ..... FEATURE TRANSPARENT FENCE 2100 H
- STANDARD FENCE 2100H
- - - STANDARD BOUNDARY FENCE
- BUILDING SECURE LINE DURING SCHOOL HOURS
- ←..... SLIDING GATES (AUTOMATIC AND MANUAL)
- ← VEHICLE ACCESS
- ←..... PUBLIC PEDESTRIAN FOOTPATH
- ← PEDESTRIAN ACCESS
- LANDSCAPE BARRIERS TO ACCESS BUSES
- 1200 H ACCESS FENCE BARRIERS TO ROAD
- ACCESS CONTROL POINT

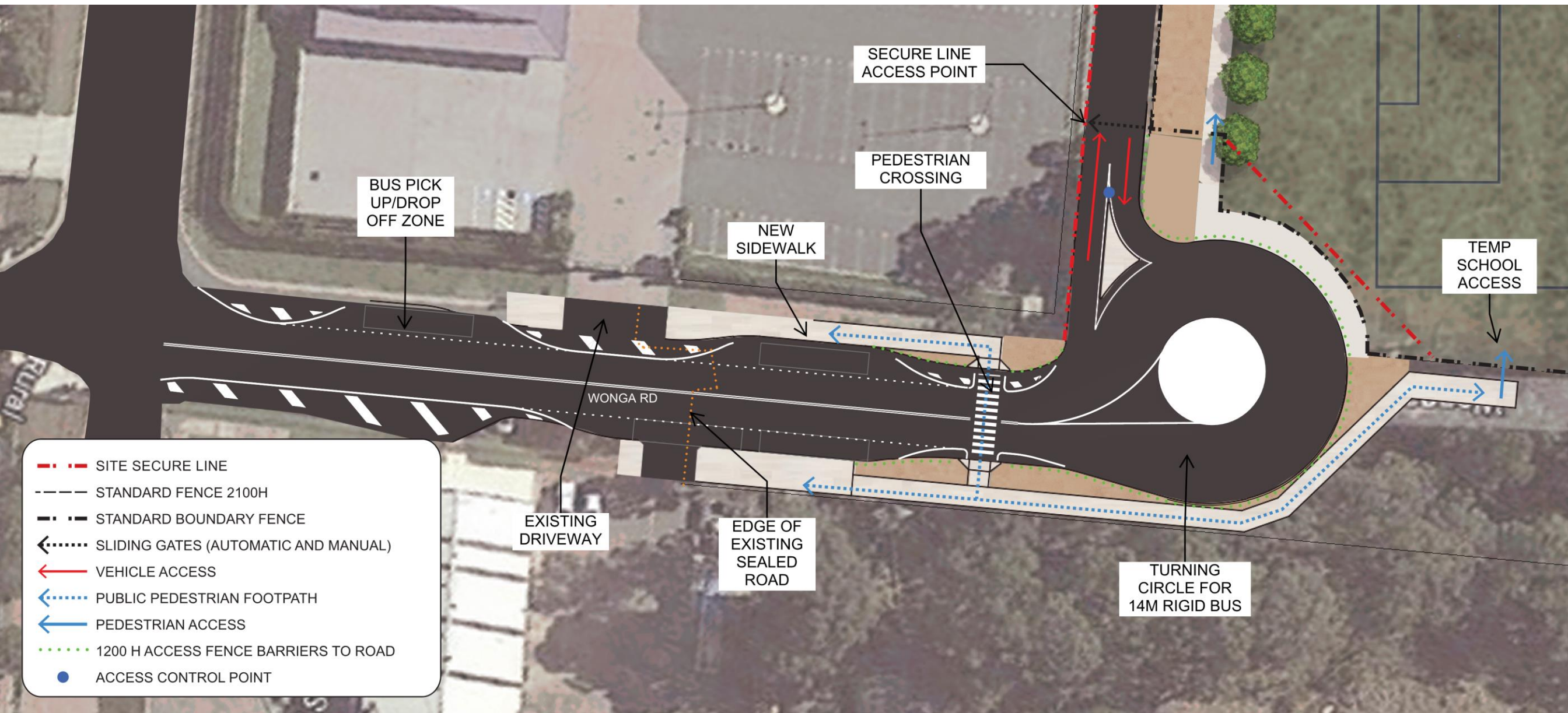
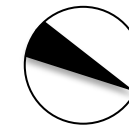






# Traffic & Security Design

## Wonga Road – Upgrade Works



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