



CLIENTS | PEOPLE | PERFORMANCE

Wagga Wagga City Council

**Report for Wagga Planning Studies**  
Traffic Management - Copland Street South

September 2008



# Contents

1.	Copland Street South	1
1.1	Introduction	1
1.2	Existing Conditions	1
1.3	Proposed Development	1
1.4	Construction Cost Estimate	2

## Table Index

Table 1	Proposed Improvement Works	2
---------	----------------------------	---

## Appendices

- A Existing Conditions – Copland Street South
- B Post Development Arrangement – Copland Street South



# 1. Copland Street South

## 1.1 Introduction

The area under consideration is along the south side of Copland Street between the Marshalls Creek drainage channel and Blaxland Road.

## 1.2 Existing Conditions

### 1.2.1 Road and Intersection Layouts

Copland Street is an east-west collector road that connects Lake Albert Road to Tasman Street, crossing Koorungal Road at a two-lane roundabout, passing over the Marshalls Creek drainage channel and intersecting Blaxland Road where the intersection is a priority controlled junction.

Copland Street has a posted speed limit of 70 km/hr between Marshalls Creek Bridge and Blaxland Road. The stopping sight distance at the vertical curve over the drainage provides sufficient stopping sight distance for the posted speed limit.

### 1.2.2 Traffic Flow

WWCC provided traffic counts information for Copland Street. The traffic volume on Copland Street is between 3,500 and 3,700 vpd.

## 1.3 Proposed Development

The East Wagga industrial area has a mix of businesses, predominantly light industrial, transport and service industries, wholesaling, storage and bulky goods retailing. There has also been some quasi-commercial (office) uses in the area.

This trend is assumed to continue within the Copland Street South area.

### 1.3.1 Future Traffic Flows

#### Traffic Generation

The assumptions made for traffic generation in Copland Street South are:

- » The area of developable land is 25 hectares, with an assumed take-up of 8 hectares by 2016
- » Gross Floor Area (GFA) is 50% of developable area
- » The peak period trip rate is 1 trip per 100m<sup>2</sup> GFA

Therefore, by 2016 an additional 400 vpd will be generated by the new development.

#### Traffic Distribution

The majority of vehicles entering the site arrive via the Koorungal Road/ Copland Street two-lane roundabout (360 vpd). A relatively small volume (40 vpd) of traffic is expected to use the Blaxland Street/ Copland Street intersection and is expected to comprise a high proportion of heavy vehicles.



The proposal by RTA to upgrade the intersection of Tasman Street and Sturt Highway may have an impact on the traffic distribution in the area. Right turning traffic may prefer to use the roundabout at Tasman Street rather than be delayed at Blaxland Road, thus reducing traffic flow on Blaxland Road and increasing flows on Copland Street.

In the long term, with full development of the available land in Copland, a total of 1250 vpd would be generated. The Koorinal Road/ Copland Street would have sufficient spare capacity and the distribution is unlikely to be affected, with the majority of vehicles still favouring this route.

### 1.3.2 Traffic Analysis

While no intersection turn volumes were available for the two-lane roundabout at Koorinal Road, it is expected that it would have sufficient spare capacity to accommodate the additional traffic flows generated by the proposed developments along Copland Street South.

As development increases, Blaxland Road would need to be extended to the south to form a four-way junction with Copland Street. This intersection would require a single lane roundabout to assist in reducing travel speeds and to safely accommodate the increasing volumes of turning traffic.

## 1.4 Construction Cost Estimate

The proposed improvement works and associated indicative cost estimates are summarised in Table 1.

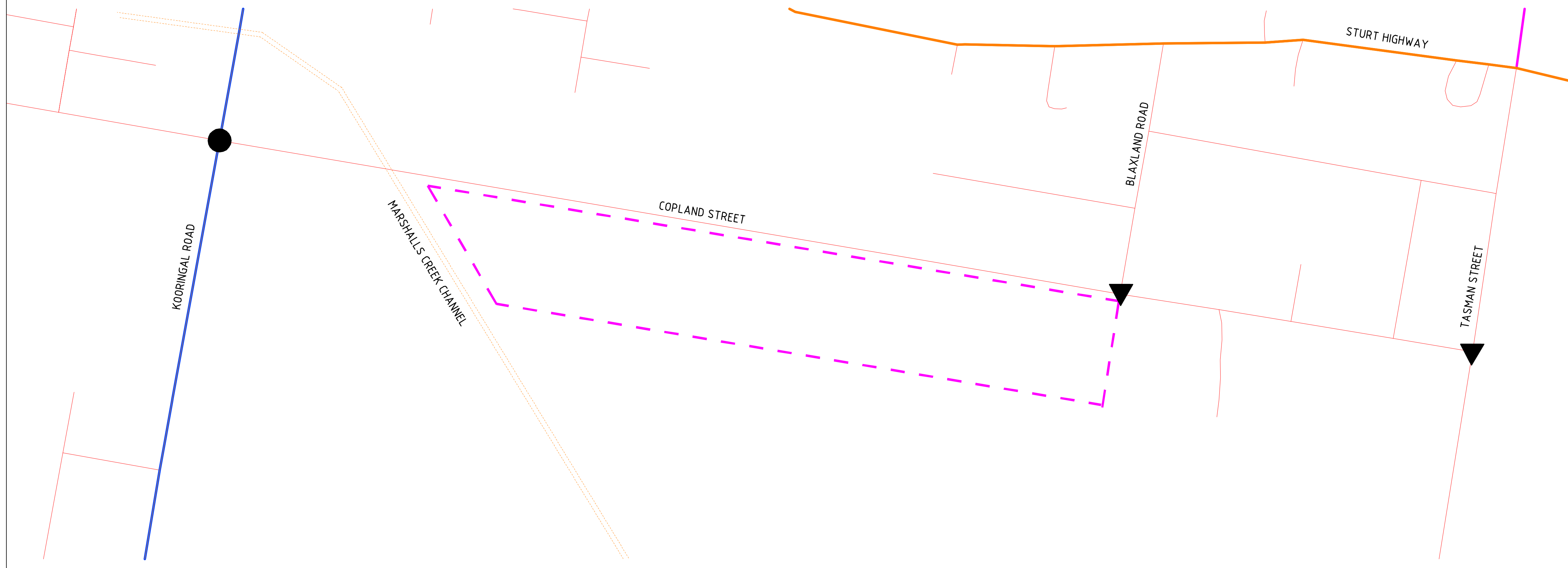
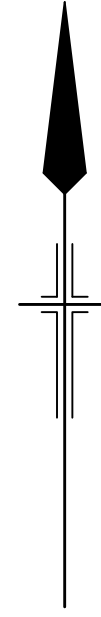
**Table 1 Proposed Improvement Works**

Location	Proposed Upgrade Works	Estimated Cost
Blaxland Road/ Copland Street	Single lane roundabout	\$500,000

The indicative cost estimates are based on typical rates for projects undertaken by WWCC in 2005 and are accurate to +/- 50%. As the estimates are based on indicative information only, they may change when preliminary and detailed design investigations are undertaken. The estimates exclude the costs of escalation to time of construction, design and construction contingency allowances, the costs of detailed investigations, survey, authority approvals, design, documentation, procurement, and project management of the works.



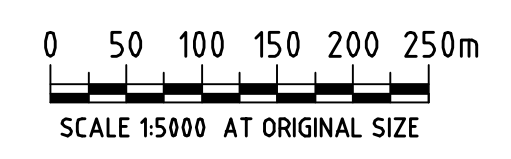
Appendix A  
Existing Conditions – Copland Street South



- LEGEND**
- EXISTING PRIORITY CONTROLLED INTERSECTION
  - EXISTING ROUNDABOUT
  - HIGHWAY
  - ARTERIAL
  - SUB-ARTERIAL
  - COLLECTOR
  - LOCAL
  - RAILWAY LINE
  - WALKING TRACK
  - STUDY AREA

**PRELIMINARY**

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date
B	MINOR LINEWORK CHANGES		TM	GG*	TC*	19.3.08
A	PRELIMINARY		SOK			



**GHD** CLIENTS | PEOPLE | PERFORMANCE

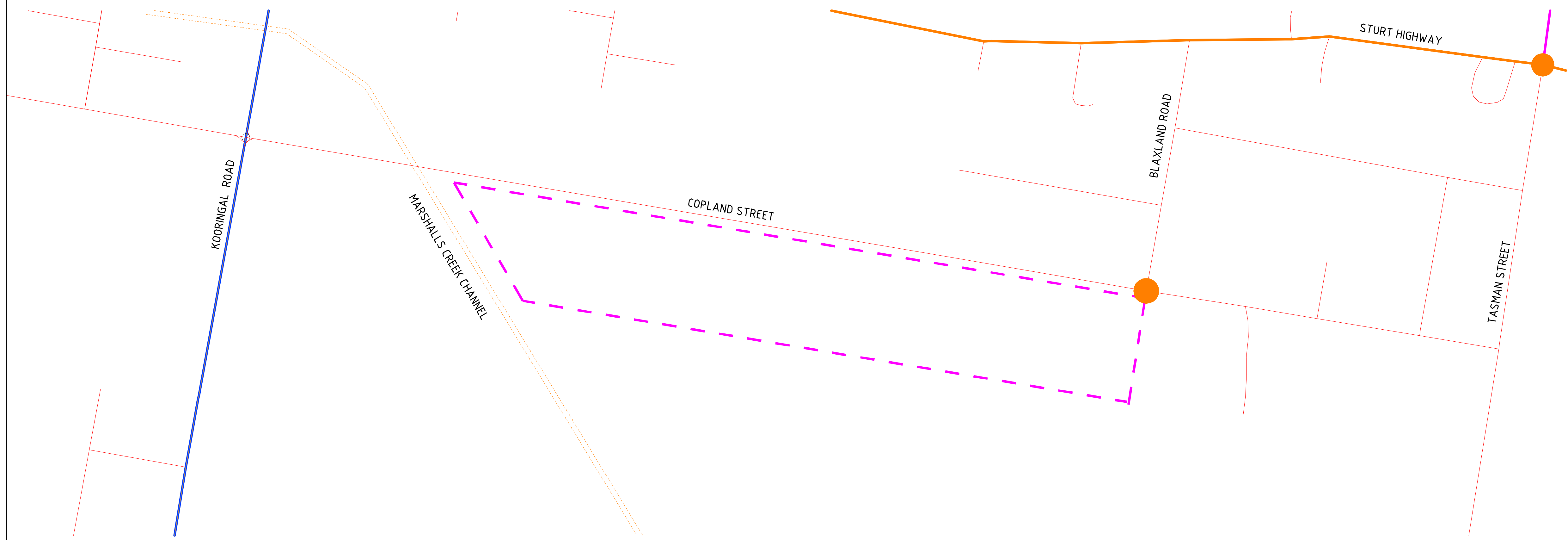
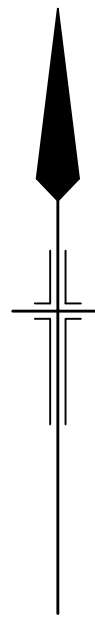
2nd Floor, Belconnen Chambers  
59 Cameron Ave Belconnen ACT 2617 Australia  
PO Box 36 Belconnen ACT 2617  
T 61 2 6253 1999 F 61 2 6253 1911  
E cbmail@ghd.com.au W www.ghd.com.au

<b>DO NOT SCALE</b>	Drawn T.MUSE	Designed H.VANDERHOEK
Conditions of Use. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.	Drafting Check	Design Check
	Approved	
	Date	
	Scale AS SHOWN	This Drawing must not be used for Construction unless signed as Approved

Client	<b>WAGGA CITY COUNCIL</b>
Project	<b>WAGGA WAGGA DRAFT LEP STUDY 2007</b>
Title	<b>COPLAND EXISTING CONDITIONS</b>
Original Size	<b>A1</b>
Drawing No:	<b>23-12229-SK102</b>
Rev:	<b>B</b>



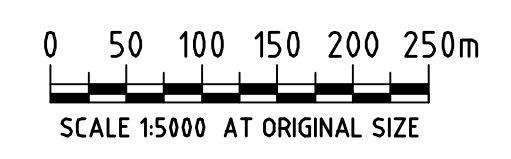
Appendix B  
Post Development Arrangement – Copland  
Street South



- LEGEND**
- NEW/UPGRADED ROADS
  - NEW/UPGRADED INTERSECTION
  - NEW/UPGRADED ROUNDABOUT
  - NEW TRAFFIC SIGNALS
  - HIGHWAY
  - ARTERIAL
  - SUB-ARTERIAL
  - COLLECTOR
  - LOCAL
  - RAILWAY LINE
  - NEW ROAD
  - WALKING TRACK
  - STUDY AREA

**PRELIMINARY**

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date
B	MINOR LINEWORK CHANGES		TM	GG*	TC*	19.3.08
A	PRELIMINARY		SOK			



**GHD** CLIENTS | PEOPLE | PERFORMANCE

2nd Floor, Belconnen Chambers  
59 Cameron Ave Belconnen ACT 2617 Australia  
PO Box 36 Belconnen ACT 2617  
T 61 2 6253 1999 F 61 2 6253 1911  
E cbmail@ghd.com.au W www.ghd.com.au

<b>DO NOT SCALE</b>	Drawn T.MUSE	Designed H.VANDERHOEK
Conditions of Use. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.	Drafting Check	Design Check
	Approved	Date
Scale AS SHOWN	This Drawing must not be used for Construction unless signed as Approved	

Client	<b>WAGGA CITY COUNCIL</b>
Project	<b>WAGGA WAGGA DRAFT LEP STUDY 2007</b>
Title	<b>COPLAND POST DEVELOPMENT</b>
Original Size	<b>A1</b>
Drawing No:	<b>23-12229-SK110</b>
Rev:	<b>B</b>





**GHD Pty Ltd** ABN 39 008 488 373

59 Cameron Avenue Belconnen ACT 2617



PO Box 36 Belconnen ACT 2616 Australia

T: 61 2 6253 1999 F: 61 2 6253 1911 E: cbrmail@ghd.com.au

© **GHD Pty Ltd 2007**

This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the Consultancy Agreement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

**Document Status**

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	M Lyons	G Gardner	GG	T Chapman	TC	27/9/07
1	M Lyons	T Yeats	TY	T Chapman	TC	18/3/08
2	M Lyons	T Yeats		T Chapman		08/09/08