

# **Hume Planning Scheme Amendment C207 Sunbury South PSP 600 Sunbury Road**

**Planning Panels Victoria**

**Panel Hearing Date:** 2<sup>nd</sup> – 5<sup>th</sup> October, 2017

**Report Date:** 11<sup>th</sup> August, 2017

**Prepared For:** Hi-Quality Quarry Products Pty Ltd and Tranteret Pty Ltd

**Instructed By:** Norton Rose Fulbright

STATEMENT TO THE PLANNING PANELS VICTORIA BY HENRY TURNBULL, TRAFFIC ENGINEER

**Hume Planning Scheme Amendment C207**  
Sunbury South PSP (600 Sunbury Road)

# Traffic Engineering Assessment

**Hume Planning Scheme Amendment C207**  
**Sunbury South Precinct Structure Plan**

**600 Sunbury Road, Sunbury**

## Document Control

Issue No.	Type	Date	Prepared By	Approved By
A	Final	11/08/2017	J. Place/H. Turnbull	H. Turnbull

**Our Reference: G23360R-01A**

## Table of Contents

<b>1</b>	<b>Executive Summary .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Qualifications and Experience .....	1
1.3	Summary of Opinions .....	1
<b>2</b>	<b>Existing Conditions .....</b>	<b>2</b>
2.1	Subject Site .....	2
<b>3</b>	<b>Sunbury South PSP .....</b>	<b>4</b>
3.1	Land Use.....	5
3.2	Road Network .....	6
<b>4</b>	<b>Submission .....</b>	<b>7</b>
<b>5</b>	<b>Traffic Engineering Assessments .....</b>	<b>9</b>
5.1	Quarry Access .....	9
5.2	Employment Area Access.....	10
5.3	Residential Area Access .....	10
<b>6</b>	<b>Summary of Opinions .....</b>	<b>11</b>

# 1 Executive Summary

## 1.1 Introduction

I have been retained by Norton Rose Fulbright on behalf of Hi-Quality Quarry Products Pty Ltd and Tranteret Pty Ltd (Hi-Quality) in August 2017 to undertake traffic engineering assessments and prepare traffic evidence in relation to the Sunbury South Precinct Structure Plan (PSP).

Specifically, I have been engaged to:

- review Hume Planning Scheme Amendment C207 and background materials,
- provide traffic engineering advice in relation to access arrangements to the land owned by Hi-Quality, and
- prepare an expert report regarding traffic issues associated with the future development of the land owned by Hi-Quality.

In preparing this report, I have relied upon the facts, matters and assumptions detailed in Appendix A.

## 1.2 Qualifications and Experience

Appendix A contains a statement setting out my qualifications and experience, and the other matters raised by “Planning Panels Victoria – Planning Panels – Expert Evidence”.

Appendix B contains my CV.

## 1.3 Summary of Opinions

Having inspected the site, perused relevant documents and plans and undertaken traffic engineering assessments, I am of the opinion that:

- a) from a traffic engineering perspective the proposed Masterplan attached at Appendix C to this statement for the Hi-Quality land is appropriate,
- b) there should not be a road connection between the residential and industrial land uses,
- c) having regard to the significance of the quarry, the substantial heavy vehicle traffic generated and the significant length of time that the site is likely to remain in use, the existing quarry access point should remain fully directional and should be signalised at such time that Sunbury Road is duplicated,
- d) there should be an “emergency access only” connection between the quarry access and the industrial subdivision, and
- e) subject to the above modifications, the Sunbury South PSP (as it affects the Hi-Quality site) is appropriate.

# Hume Planning Scheme Amendment C207 Sunbury South PSP (600 Sunbury Road)

## 2 Existing Conditions

### 2.1 Subject Site

The subject site is located at the north-eastern site of Sunbury Road south of Melbourne-Lancefield Road as shown in Figure 1 below.

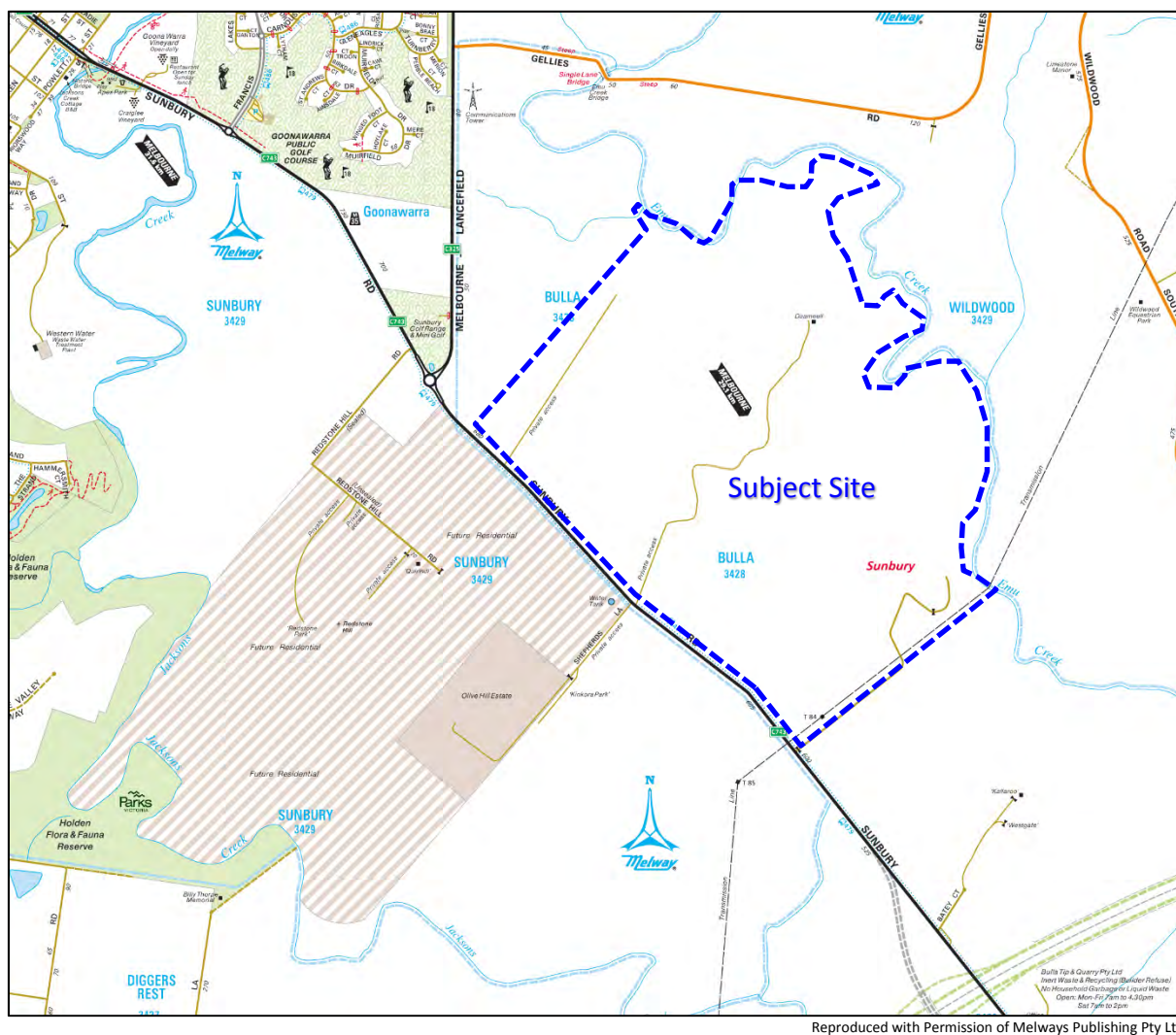


Figure 1: Locality Plan

The eastern portion of the site is currently occupied by a quarry, and the remainder of the site is predominantly farmland, with three existing dwellings. A transmission easement runs along the southern boundary of the site.

An aerial view of the site is shown in Figure 2 below.



**Hume Planning Scheme Amendment C207**  
 Sunbury South PSP (600 Sunbury Road)



**Figure 2: Aerial View**



**Figure 3: Existing Quarry Access**





**Figure 4: Existing Quarry Access – Aerial View**

### 3 Sunbury South PSP

The VPA website describes the Sunbury South PSP as follows:

*The Victorian Planning Authority (VPA), in consultation with Hume City Council and Government agencies, has prepared the Sunbury South Precinct Structure plan (PSP) to guide new urban development in Sunbury.*

*The Sunbury South PSP will provide up to 11,800 homes to accommodate a population of more than 33,000. The precinct will deliver a new Major Town Centre, two new employment areas, regional parklands along Jacksons Creek, as well as a Jacksons Creek road crossing, a new train station near Jacksons Hill, and a range of local schools, sporting fields and community facilities.*

*The PSP applies to approximately 1,798 hectares of land generally bounded by Watsons Road and the Jacksons Creek to the south, Gellies Road and the Emu Creek to the north and north-east, the transmission line easement to the east and Vineyard Road to the west. The precinct abuts a number of existing communities within the Sunbury township, including Goonawarra and Jacksons Hill.*

The relevant sections of the Sunbury South PSP which affect the Hi-Quality land are described below.

## Hume Planning Scheme Amendment C207

Sunbury South PSP (600 Sunbury Road)

### 3.1 Land Use

The northern part of the site is currently zoned Urban Growth Zone (UGZ) and the southern part of the site is currently zoned Special Use Zone – Schedule 1 (SUZ1). Part of the land is also zoned Rural Conservation Zone (RCZ).

Under the draft Sunbury South Precinct Structure Plan (PSP), the land is nominated for the following uses (as shown in Figure 5 below):

- residential use in the northwest part of the site,
- light industrial fronting Sunbury Road approximately centrally along the site's frontage,
- industrial at the southern part of the site with a local convenience centre fronting Sunbury Road,
- retention of the quarry/landfill (which I understand has an 80+ year life),
- service open space in conservation area along Emu Creek, and
- land nominated as "regionally significant landscape values" scattered across the site.

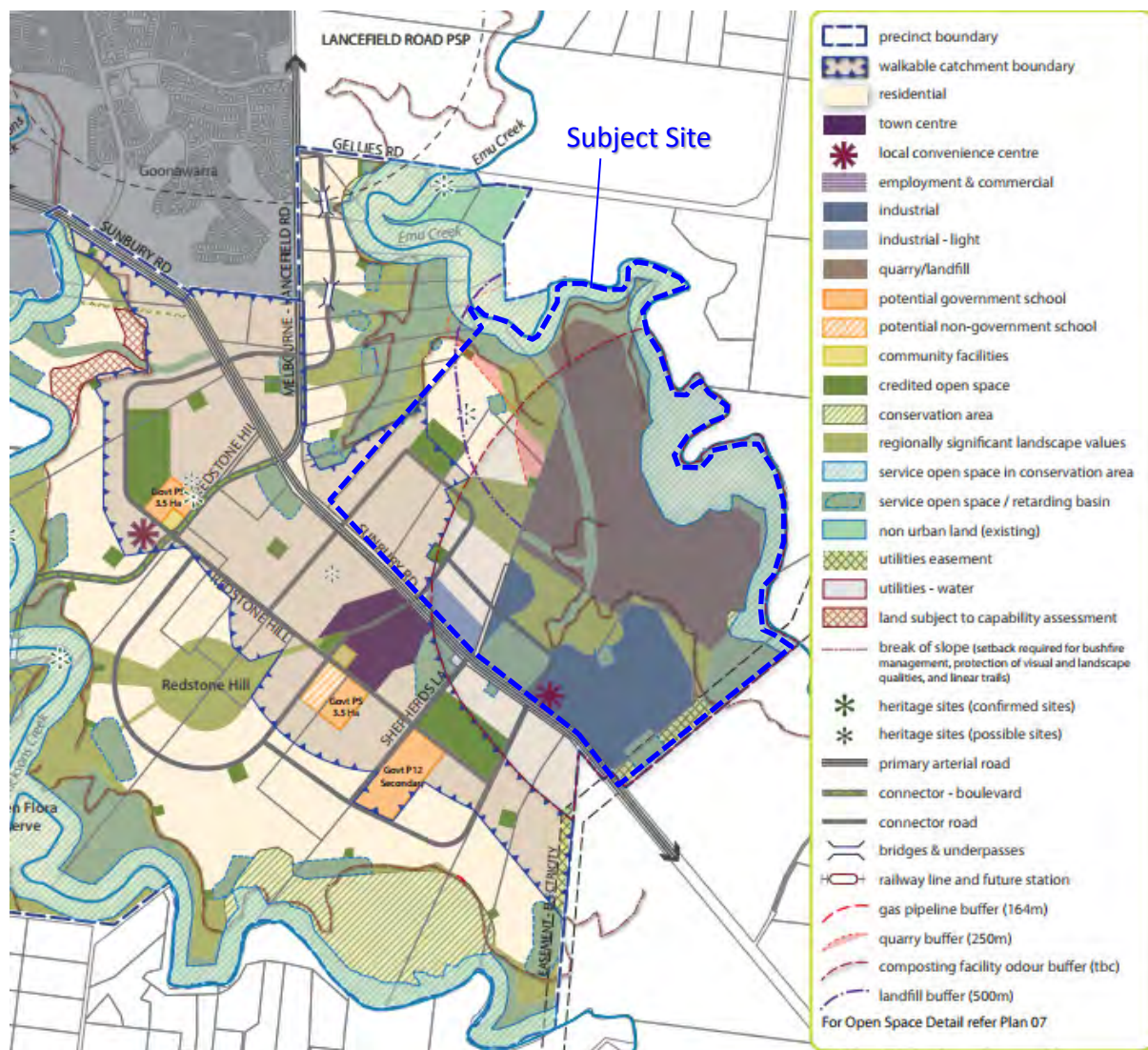


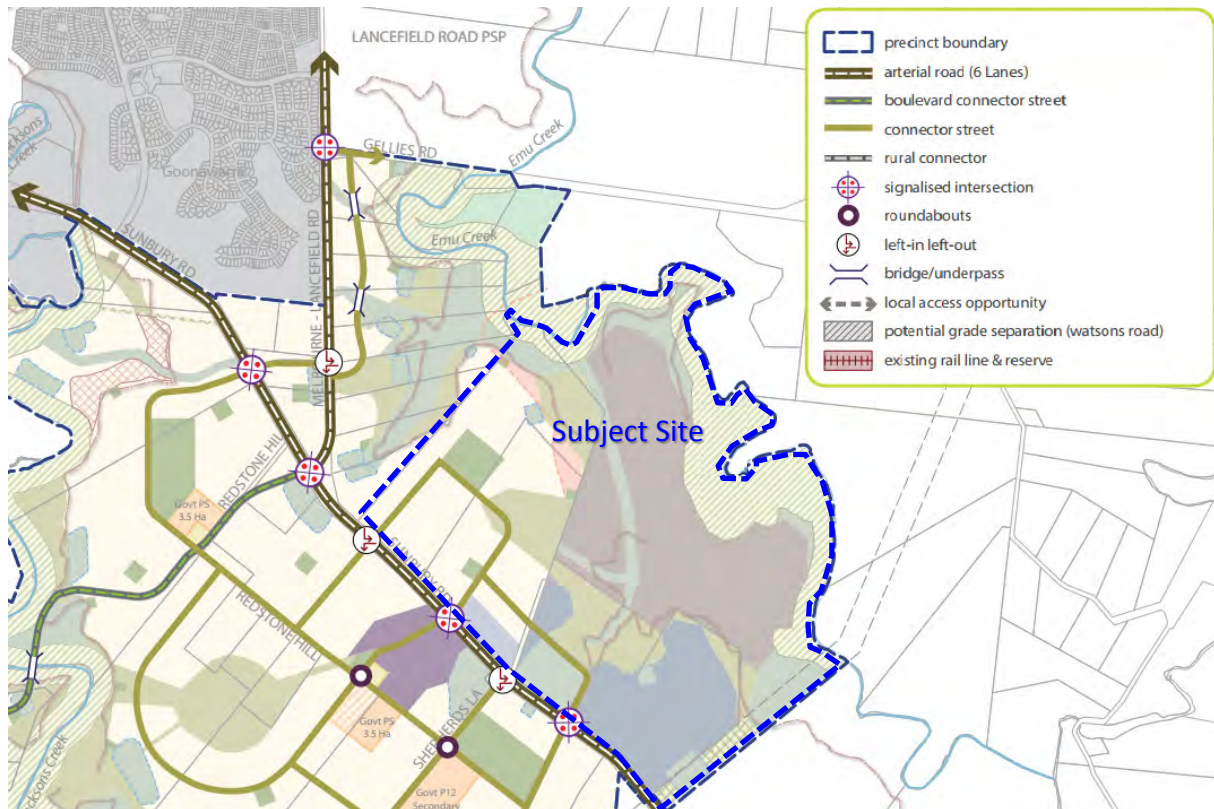
Figure 5: Sunbury South PSP – Future Urban Structure



## Hume Planning Scheme Amendment C207 Sunbury South PSP (600 Sunbury Road)

### 3.2 Road Network

Figure 6 below shows the draft PSP street network plan.



**Figure 6: Sunbury South PSP – Street Network Plan**

In relation to the subject site and surrounds, the street network plan shows:

- Sunbury Road will ultimately be a 6-lane arterial road.
- Three connector streets are proposed to provide access to the site from Sunbury Road, including:
  - a left-in/left-out connection near the northern boundary providing access to the residential land,
  - a signalised four-way cross intersection opposite the proposed future town centre providing access to the residential and light industrial uses, and
  - a signalised four-way cross intersection providing access to the industrial land.
- No connection is shown at the existing quarry access point, as this access intersection and the land opposite the existing quarry access point on the southwest side of Sunbury Road are outside of the PSP area.
- An internal network of connector streets connects all of the three Sunbury Road access points, including a connector road between the residential and industrial land uses.

## 4 Summary of Hi-Quality Submission

A proposed Masterplan has been prepared by Hi-Quality for the subject site. A copy is attached at Appendix C.

The Masterplan has the following similarities with the Sunbury South PSP:

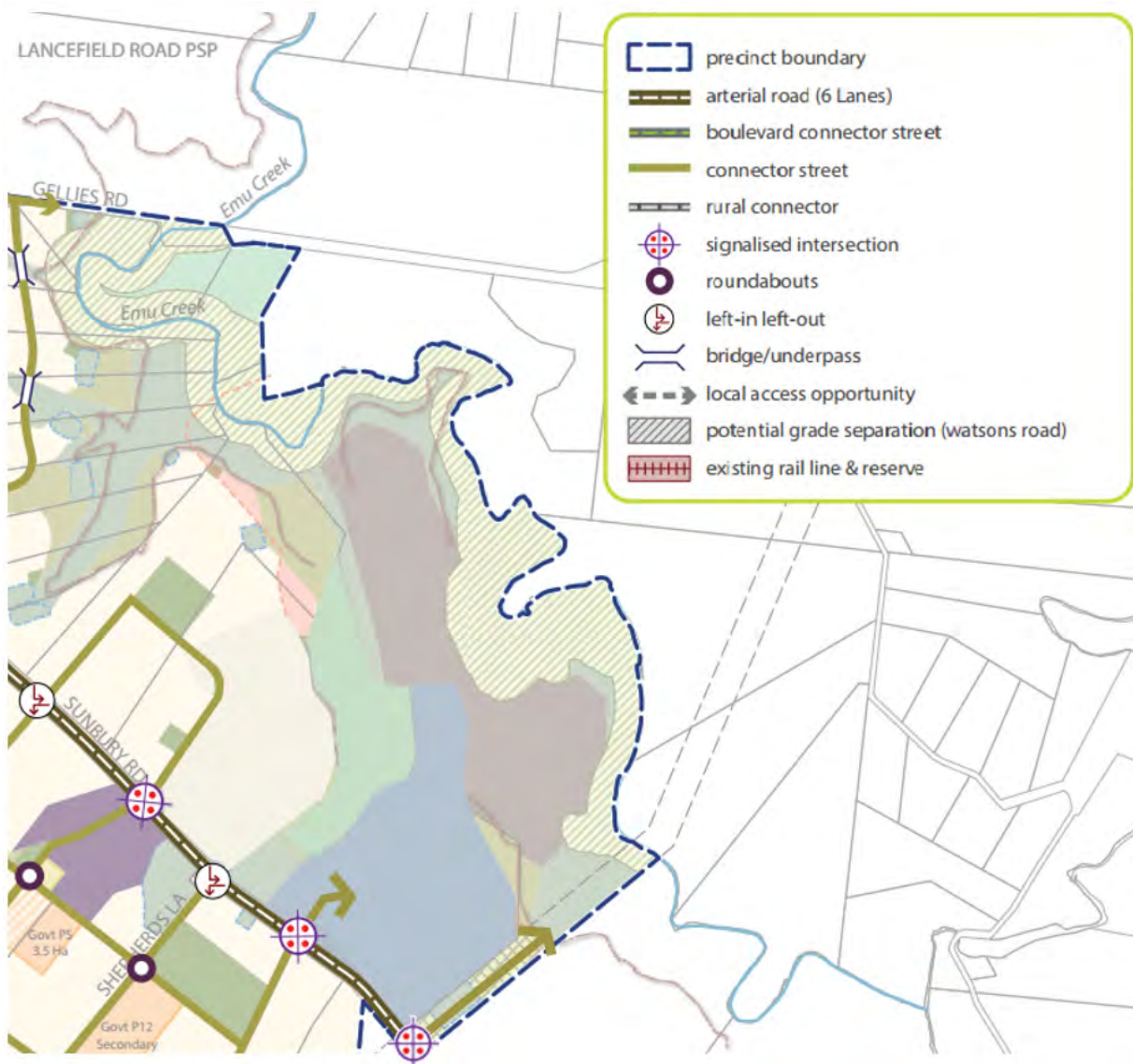
- Residential use in the northwest part of the site.
- Employment (industrial) in the south part of the site.
- Retention of the quarry generally as shown in the draft PSP.
- Conservation reserve along the Emu Creek alignment generally as shown in the draft PSP.
- A local convenience centre within the industrial land, fronting Sunbury Road.
- A left-in/left-out and a signalised intersection providing access to the residential component (generally in the same location as shown in the draft PSP).
- A signalised intersection providing access to the industrial component (generally in the same location as shown in the draft PSP).

The Masterplan differs from the Sunbury South PSP in the following areas:

- The shape and overall area of the residential and industrial components have changed.
- The conservation/landscape area/drainage reserve generally located between the residential and industrial land uses has a different shape and is proposed to serve as a buffer between the uses (with pedestrian/cycle connections only, no internal road connection between residential and employment land).
- The existing access to the quarry is proposed to be retained with full directional access, and ultimately signalised when Sunbury Road is duplicated as part of the duplication works.
- An “emergency access only” is proposed to connect between the employment land and the quarry accessway.

Figure 7 shows the proposed changes to the street network plan for the Sunbury South PSP, in order to be consistent with the proposed Masterplan.

**Hume Planning Scheme Amendment C207**  
**Sunbury South PSP (600 Sunbury Road)**



**Figure 7: Proposed Modified Street Network Plan (Hi-Quality Site) – Sunbury South PSP**



## 5 Traffic Engineering Assessments

### 5.1 Quarry Access

The Hi-Quality Quarry site currently includes the following operations:

- Hard rock (basalt) quarry.
- Sand and pebble quarry.
- Prescribed Industrial Waste (PIW) landfill, able to accept contaminated soil, solid waste, contaminated sludge/slurries, asbestos soils and material, clean-fill and concrete.
- Resource recovery and recycling facility (including green waste).

I understand that the site currently generates in the order of 300 to 500 inbound and 300 to 500 outbound vehicle trips per day, the majority of which are large/articulated trucks. This volume is potentially higher than the AADT (average annual daily traffic) because the site is currently accepting fire debris material from the Coolaroo recycling facility (SKM recycling plant). The site is regionally significant, and accepts waste from locations that are several hours away by road when other facilities are closed for various reasons.

I further understand that parts of the site have an 80+ year lifespan, and accordingly the traffic accessing the quarry site must be planned for in the foreseeable future as part of the Sunbury South PSP.

The existing quarry access point is located within the transmission easement, and includes a dedicated (chanellised) right-turn treatment and an auxiliary left-turn treatment at Sunbury Road.

The draft PSP street network plan does not show retention of any access to Sunbury Road at the existing access location, which suggests that the intention is that the quarry be accessed through the employment land, from the proposed signalised intersection to Sunbury Road.

I am of the opinion that this is not an appropriate arrangement having regard to:

- the volume of traffic accessing the quarry on a daily basis,
- the nature of the traffic, being large and slow moving trucks, and
- the incompatibility of the quarry trucks mixing with the employment precinct (including a potential local convenience centre which would likely attract employees on foot to a café or similar).

I believe that mixing quarry traffic within the industrial precinct would completely change the nature of the road design to accommodate the significant additional loads, and also has potential safety implications with the mix of traffic (including pedestrians and cyclists).

Having regard to the above, it is proposed that the draft Sunbury South PSP be modified to include full directional access at the existing quarry access point (separate from the employment land) consistent with the existing provision, with the access point to be signalised at such time that Sunbury Road is duplicated as part of the duplication works having regard to the slow moving nature of the very large trucks turning into and out of the quarry.

## 5.2 Employment Area Access

The employment area is proposed to be accessed by a single signalised cross-intersection.

I am satisfied that a signalised intersection could be designed to accommodate the entire traffic generated by the proposed employment area.

However, it will be important to include an “emergency access only” connection between the Quarry accessway and the employment area, so that if either of the access points are closed for any reason (such as a crash), the alternative access can be utilised.

## 5.3 Residential Area Access

The residential area is proposed to be accessed via two connector road intersections with Sunbury Road, including one left-in/left-out connection and one signalised intersection.

I am satisfied that these access arrangements are appropriate having regard to the size of the residential area, and the provision of two access points allows for an alternative in case of an emergency closure of one.

Under the draft PSP, a connector road is proposed between the employment and residential areas, however the Hi-Quality proposed Masterplan does not show a road connection.

I am of the opinion that not only is an internal connection between the two uses unnecessary, but it is also undesirable for the following reasons:

- it would introduce a mix of industrial (including truck) traffic within residential areas,
- the potential mixing of industrial and residential traffic would result in a reduced amenity for residents, and
- industrial traffic in the residential area would have implications in relation to the strength of pavement required which also has construction cost implications.

In the event that residents on the site were employed within the industrial land on the site, the two areas are close enough that a pedestrian/cyclist connection between the two area (across the drainage reserve) would be appropriate to accommodate this movement, and driving between home and work on the same site should be discouraged (but is facilitated via Sunbury Road if required).

## 6 Summary of Opinions

Having inspected the site, perused relevant documents and plans and undertaken traffic engineering assessments, I am of the opinion that:

- a) from a traffic engineering perspective the proposed Masterplan for the Hi-Quality land is appropriate,
- b) there should not be a vehicular connection between the residential and industrial land uses,
- c) having regard to the significance of the quarry, the substantial heavy vehicle traffic generated and the significant length of time that the site is likely to remain in use, the existing quarry access point should remain fully directional and should be signalised at such time that Sunbury Road is duplicated as part of the duplication works,
- d) there should be an “emergency access only” connection between the quarry access and the industrial subdivision, and
- e) subject to the above modifications, the Sunbury South PSP (as it affects the Hi-Quality site) is appropriate.

*I have made all the inquiries that I believe are desirable and appropriate and there are no matters of significance which I regard as relevant which, to the best of my knowledge, have been withheld from the Panel.*



HENRY H TURNBULL, RFD  
 B.E.(Civil), M.I.E.Aust., M.I.T.E., F.V.P.E.L.A.  
 11<sup>th</sup> August, 2017



# Appendix A: Practice Note – PNVCAT2 Expert Evidence

## STATEMENT OF WITNESS

### **Name**

Henry Hume Turnbull

### **Position**

Principal Consultant, Traffix Group

### **Address**

Suite 8, 431 Burke Road  
GLEN IRIS  
VICTORIA 3146

### **Qualifications**

My qualifications and membership of professional associations are as follows:-

- My educational qualifications and membership of professional associations are as follows:-
- Bachelor of Civil Engineering, University of Melbourne
- Life Member, Institute of Transportation Engineers
- Member, Institution of Engineers, Australia
- Life Fellow, Victorian Planning & Environmental Law Association

### **Experience**

I have approximately 40 years' experience in Engineering including:

- ten years Country Roads Board of Victoria,
- two years with TTM Consulting, and
- twenty-eight years with Turnbull Fenner Pty Ltd/Traffix Group Pty Ltd.
- Additional activities and appointments include:-
- Sessional Member, Planning Panels Victoria (1982 - 2017)
- Member, Priority Development Panel (2004 - 2010)
- Councillor, Shire of Euroa (1980-1983)  
Shire President (1982-1983)
- President, Victorian Planning and Environmental Law Association (1999-2002)  
Life Fellow, Victorian Planning and Environmental Law Association (2003)
- Bail Justice (Victoria)

### **Area of Expertise**

I have substantial experience and expertise in major road design and construction, contract administration, road construction material and construction methods, development impact assessment, including traffic generation and parking generation characteristics, traffic management and general traffic engineering, road safety and transportation planning.

I was a member of the former Ministers for Planning Advisory Committees making a review of Clause 52.06 (Car Parking) that led to changes being incorporated into the scheme on 5th June, 2012.

## **Hume Planning Scheme Amendment C207**

Sunbury South PSP (600 Sunbury Road)

### **Disclosure of Interests**

I disclose that I have no private relationship with the Planning Scheme Amendment applicant. Traffix Group has worked with other companies involved in this application.

These relationships have not impacted on my ability to provide impartial Expert Evidence to the Panel.

### **Engagement and Scope of Report**

I was retained by Norton Rose Fulbright on behalf of Hi-Quality in August 2017 to undertake traffic engineering assessments and prepare traffic evidence in relation to Amendment C207 to the Hume Planning Scheme.

### **Facts and Assumptions**

As detailed in evidence.

### **Reference Documents**

I have reviewed the following documents as part of my assessment:

- Amendment C207 Explanatory Report,
- Sunbury South Precinct Structure Plan (exhibition version dated November 2016),
- Masterplan for Hi-Quality site prepared by Taylors,
- Relevant sections of the Hume Planning Scheme, and
- Relevant experience.

### **Summary of Opinions**

See Conclusions section of the evidence statement.

### **Provisional Opinions**

Not applicable.

### **Identity of Persons Undertaking Work**

Henry H Turnbull as per the evidence statement.

Jodie Place (Associate, Traffix Group) assisted with preparation of the evidence report.

### **Report Completeness**

Final report.



## Appendix B: CV



# Curriculum Vitae

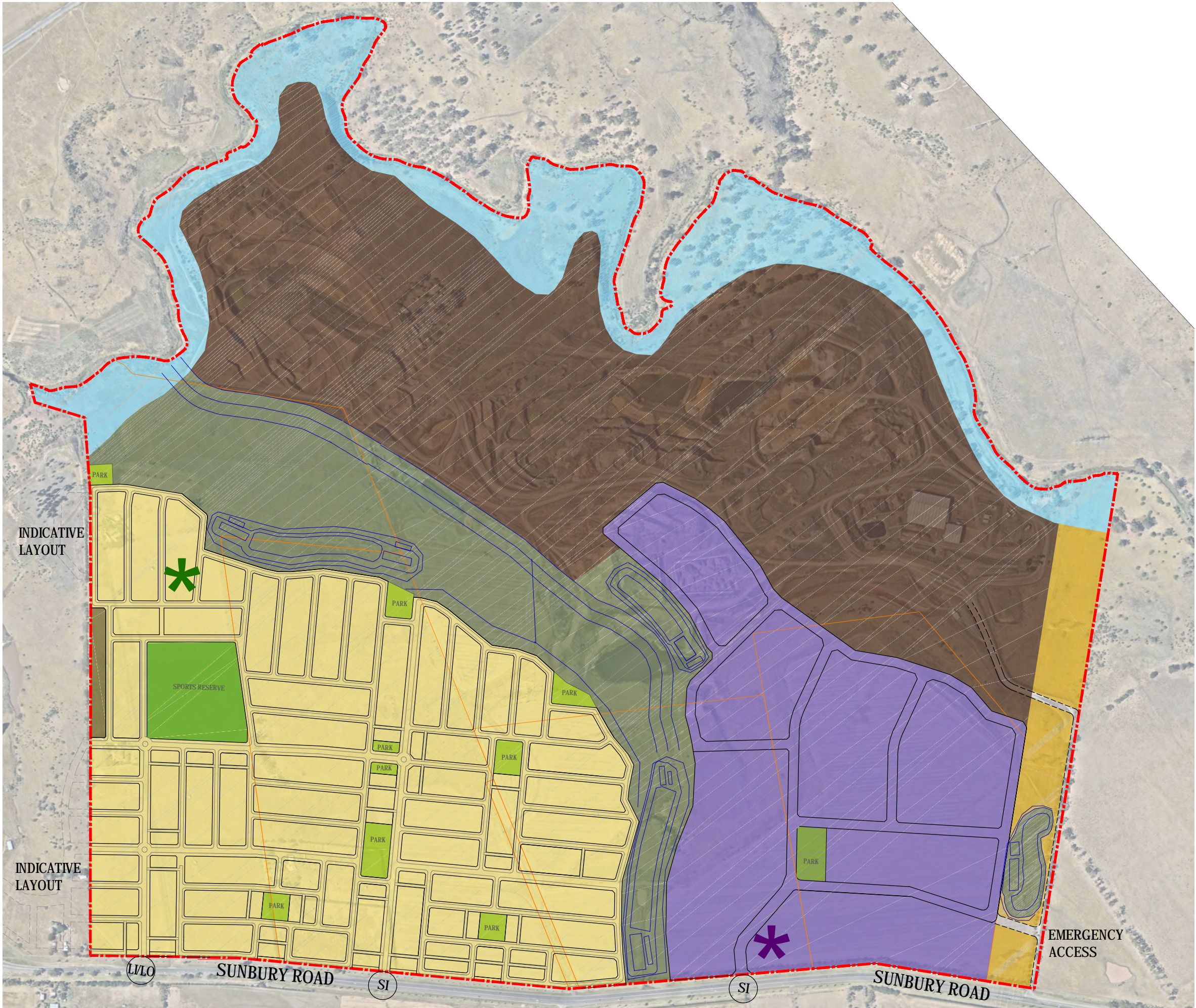
## Henry Turnbull



<b>Position</b>	Principal Consultant	<b>Professional Affiliations</b>	Life Member, Institute of Transportation Engineers Member, Institution of Engineers Australia Life Fellow, Victorian Planning and Environmental Law Association (VPELA)
<b>Contact Details</b>	(03) 9822 2888 henry@traffixgroup.com.au	<b>Work Experience</b>	Traffix Group (1988 – current) TTM Consulting Pty Ltd (1986 – 1988) Peat Marwick Hungerfords (1982 – 1986) Country Roads Board (1972 – 1982)
<b>Qualifications</b>	Bachelor of Civil Engineering (Melbourne University)		
<b>Transport Planning</b>		<b>Strategic Planning &amp; Statutory Planning</b>	
<b>Skills &amp; Experience</b>	<ul style="list-style-type: none"> <li>Preparation of Traffic Impact Assessment Reports (TIAR) and Evidence for presentation at VCAT and Planning Panels for a range of land-use developments.</li> <li>Other significant commissions include: <ul style="list-style-type: none"> <li>Co-ordination of a development contribution plan for the City of Maribyrnong including extensive traffic investigations and assessments.</li> <li>Preparation of Parking Precinct Plans for Ocean Grove and Belmont (City of Greater Geelong).</li> <li>TAC funding strategies and priority assessment for VicRoads – Northern Region.</li> <li>Preston and Fairfield Parking and Access Strategy Studies including Parking Precinct Plans.</li> </ul> </li> <li>Preparation of transport planning studies and Integrated Travel Plans including consideration of sustainable transport modes and green travel plans, pedestrian access, bicycle paths, parking and access to public transport.</li> <li>Provision of advice on traffic engineering and transport planning issues for major infrastructure projects for government and private clients.</li> <li>Extensive stakeholder interaction and consultation with community bodies on technical transport issues and project planning issues.</li> <li>Management of numerous other projects including local and district traffic management studies, heavy vehicle route assessments, pedestrian safety research, public transport passenger surveys and route studies, property rezoning and health care projects.</li> </ul>	<b>Skills &amp; Experience</b>	<ul style="list-style-type: none"> <li>Regularly appointed as a Planning Panel member by the Minister for Planning with over thirty years experience as a sessional Planning Panel member.</li> <li>Relevant major Panels and Advisory Committees include: <ul style="list-style-type: none"> <li>Armstrong Creek Urban Framework Plan</li> <li>Armstrong Creek North East Industrial Precinct Structure Plan.</li> <li>Traralgon Bypass.</li> <li>Webb Dock EES.</li> <li>Melbourne Airport Rail Link.</li> </ul> </li> <li>Served successive Governments on Advisory Committees to assist with policy development, including the: <ul style="list-style-type: none"> <li>Priority Development Panel Steering Committee on the development of Practice Notes for Parking Precinct Plans.</li> <li>Advisory Committee reviewing Clause 52.06 Carparking in the VPPs.</li> </ul> </li> <li>Significant experience and expertise in the provision of traffic engineering and transport planning advice to support the development of structure plans, site/precinct plans and development contribution plans.</li> <li>Skills include working as part of project teams, analysis and design of transport projects and consultation with stakeholders and the community.</li> <li>Relevant projects include: <ul style="list-style-type: none"> <li>Toolern Structure Plan.</li> <li>Greenvale R1 Precinct Structure Plan.</li> <li>Greenvale R3 Precinct Structure Plan.</li> <li>Sale, Wurruk and Longford Structure Plan.</li> </ul> </li> </ul>
<b>Significant Appointments</b>	Sessional Member Planning Panels Victoria (1982 - 2017) Member Priority Development Panel (2004 - 2010) Member Growth Areas Authority Expert Panels for Urban Planning and Urban Design. (Appointed 2010)	<b>Key Activities</b>	Councillor, Shire of Euroa, 1980 – 1983 (Shire President, 1982 – 1983) President, VPELA, 1999 - 2002 Bail Justice (Victoria)

## Appendix C: Hi-Quality Masterplan





LEGEND

- Site Boundary
- Vicmap Boundaries
- Emu Creek Corridor
- Drainage Reserve
- Extractive Industry / Landfill (E/L)
- Landscape Values
- Residential NDA
- Employment NDA
- Local Park
- Sports Reserve
- Utilities Easement
- Potential Heritage Site
- Local Convenience Centre
- Left-In / Left-Out Access
- Signalized Intersection

PLAN NOTES

- This Master plan is conceptual in nature.
- Further requirements may be needed but not finalized until the appropriate investigations have been reported, including but not limited to:
  - Feature Survey, Flora and Fauna, Arboricultural Survey,
  - Archaeological, Engineering Services, Traffic Engineering.

SOURCE DATA

- All boundary and contour information derived from supplied VICMAP digital data.
- PSP land budget plan from Sunbury South PSP
- Buffer and proposed land uses via supplied GHD 31-33652-FIG02
- B.O.S via supplied CAD files from VPA

