Traffix Group

Hume Planning Scheme Amendment C243

Sunbury South and Lancefield Road Infrastructure Contributions Plan

Date of Statement: 8 October 2020 **Date of Inspections:** 4 October 2020)

Prepared For the Applicant: Hi Quality Quarry Products Pty Ltd

Instructed By: Norton Rose Fulbright

Reference: G29007A-01A

STATEMENT TO PLANNING PANELS VICTORIA BY JASON LEE WALSH, TRAFFIC ENGINEER

STATEMENT TO THE VICTORIAN CIVIL AND ADMINISTRATIVE TRIBUNAL BY JASON LEE WALSH, TRAFFIC ENGINEER

Hume Planning Scheme Amendment C243

Sunbury South and Lancefield Road Infrastructure Contributions Plan

Our Reference: G29007A-01A

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Table of Contents

Introduction	5
Preamble & Background	5
Hi Quality's Land	6
Land Holdings	6
Planning Zones and PSP Context	7
Proposed ICP	8
Are the Bridges Necessary?	10
Sunbury – Diggers Rest Growth Corridor Plan	10
Modelling Report, 2015 (GTA)	11
Panel Report - Amendments C207 and C208	13
Supplementary Reports GTA Consultants 2020	13
Who Will the Bridge Crossings Serve?	15
Functional Design	16
Conclusions	16
List of Figures	
Figure 1: Subject Land Figure 2: Future Urban Structure Plan of Sunbury South PSP with Subject Land Figure 3: Transport Infrastructure Plans 02a/b and 03a/b overlaid Figure 4: Sunbury/Diggers Rest Growth Corridor Plan	7 8 9 10
List of Tables	

Table 2: Excerpt of GTA Consultants Modelling Report 2015 – Options Analysis AM and PM



Peak Outputs

Table 1: Excerpt of GTA Consultants Modelling Report 2015

12

12

List of Appendices

Appendix A Qualifications & CV

Appendix B Comparison of GTA Modelling Outputs



Introduction

- I have been instructed by Norton Rose Fulbright on behalf of Hi Quality Quarry Products Pty Ltd to undertake a review of the proposed Sunbury South and Lancefield Road Infrastructure Contributions Plan proposed to be introduced as part of Hume Planning Scheme Amendment C243.
- In the course of preparing this statement, I have inspected the PSP areas (most recently on 4 October 2020), and reviewed the background material and traffic modelling reports prepared by GTA.
- I have previously provided advice to other landholders in relation to development of their land within the PSP areas.
- 4 My qualifications and experience to undertake this assessment are set out in Appendix A.

Preamble & Background

- The Sunbury South and Lancefield Road Precinct Structure Plans (PSPs) were prepared and incorporated into the Hume Planning Scheme in 2018. An amended PSP was subsequently prepared, dated November 2019.
- An "Interim" Infrastructure Contributions Plan (ICP) was approved by the Minister for Planning and gazetted in December 2019 through Amendment C230 to the Hume Planning Scheme.
- Amendment C243 to the Hume Planning Scheme now proposes to replace the 'Interim' ICP with a final ICP.
- 8 The Amendment was exhibited in April 2020 by the Victorian Planning Authority (VPA).
- There are a number of submissions, including a submission from Hi Quality, dated 10 June 2020.
- The role of the ICP is primarily to establish the mechanism for the funding for infrastructure within the Sunbury South and Lancefield South PSPs.
- Hi Quality owns land at 570, 580, 600 and 650 Sunbury Road. This land is included within the Sunbury South PSP and accordingly is subject to the ICP.
- 12 I have been engaged to provide my expert opinion in relation to the following:
 - a. Whether the two proposed bridge crossings of Jacksons Creek are currently required.
 - b. Whether the Bridge Crossings will primarily service the Sunbury South and Lancefield Road PSP areas, or a broader area.
 - c. The design of the Bridge Crossings.
- 13 The road network and infrastructure projects identified in the ICP were informed by a GTA modelling report of 2015.



- 14 Since that time, GTA has been instructed by VPA to prepare further modelling reports as follows.
 - a. Sunbury Growth Corridor Supplementary Modelling Report, 9 September 2020.
 - b. Sunbury Growth Corridor Supplementary Modelling Report 2, 25 September 2020.
 - c. Sunbury Growth Corridor Supplementary Modelling Report 3, 25 September 2020
- 15 I have not sought to interrogate the modelling in any great detail, but rather am basing my opinion on the background material, GTA reports and modelling outputs.
- 16 My assessment, and opinion is set out as follows.

Hi Quality's Land

Land Holdings

- 17 Hi Quality owns a number of land parcels as follows:
 - 570 600 Sunbury Road operates as an organic waste facility which receives and repurposes organic waste from 11 municipalities and converts it to compost and mulch. This site also operates as a landfill and quarry.
 - 630 Sunbury Road is a smaller parcel of land, approximately 24 metres wide and 500 metres in length.
 - 650 Sunbury Road is a rural residential lot, known as Rossett Lodge.
- 18 Each of these lots front and take access from Sunbury Road.
- 19 These land holdings are shown in Figure 1.



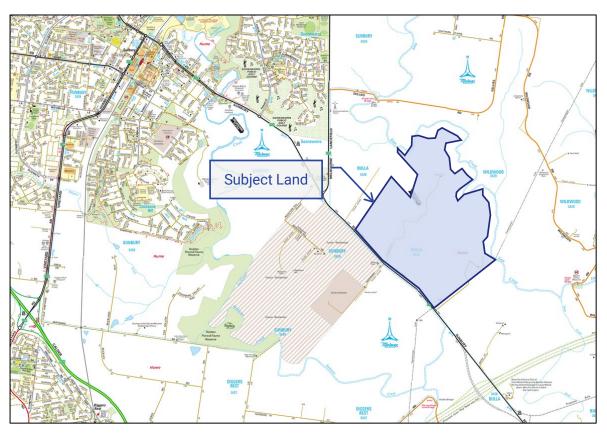


Figure 1: Subject Land

Planning Zones and PSP Context

- The land is subject to various zonings, including Urban Growth Zone (associated with the Sunbury South PSP), Special Use Zones, related to the existing waste and recovery and landfill and guarry uses, and rural conservation zone.
- The Future Urban Structure Plan of the Sunbury South PSP nominates the future development of the site for the purposes of some residential (a small portion in the western extent), a local convenience centre (and a future access road opposite Sheppards Lane), industrial use and open space.
- 22 An excerpt of the Sunbury South PSP identifying Hi Quality's land is provided at Figure 2.

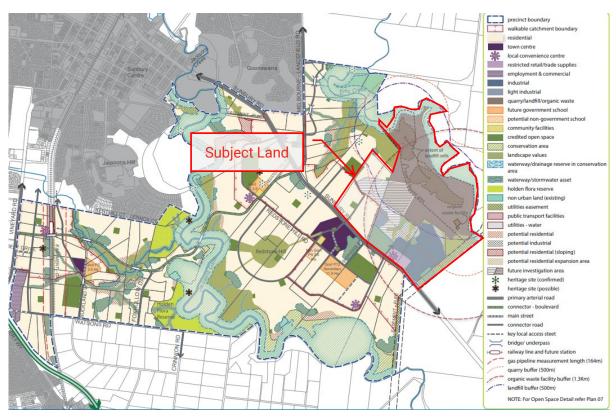


Figure 2: Future Urban Structure Plan of Sunbury South PSP with Subject Land

Proposed ICP

- The Sunbury South and Lancefield Road Infrastructure Contributions Plan, April 2020, details the funding mechanisms and contributions attributable to the land contained within the two PSPs.
- Overall, the ICP identifies \$486,985,498 of levies to be paid to deliver community, transport, and public purpose land- infrastructure identified within the ICP and PSPs.
- In relation to transport infrastructure, the ICP details a number of projects across both PSP areas, including intersection, road and bridge projects.
- The ICP includes in the order of \$175 million of road and infrastructure works (\$167.5 million attributable to the PSPs), plus a further \$249.7 million of supplementary infrastructure works (\$203.7 million attributable to the PSPs).
- 27 Notable costs/projects within the supplementary list include:
 - LR-BR-01 being a 2-lane bridge costing \$103.9 million, \$76.9 million of which is nominated
 as attributable to the ICP. This relates to the construction of a new road crossing of
 Jacksons Creek in the Lancefield Road PSP, known as the "Northern Creek Crossing".
 This project also has an associated road project cost of \$30.8 million for the construction
 of the approaches to the bridge (LR-RD-02-1B and LR-RD-02-2A).

- SS-BR-02 being a 2-lane bridge costing \$41.7 million, \$30.9 million of which is nominated
 as attributable to the ICP. This relates to the construction of a new road crossing of
 Jacksons Creek in the Sunbury South PSP, known as the "Southern Creek Crossing". The
 approach road costs are included within the 'base' infrastructure costs at Plan 2a/b.
- The Northern Creek Crossing is nominated as a Long Term Project.
- The Southern Creek Crossing is nominated as a Short-Medium Term Project.
- Both projects are nominated with 26% external apportionment to the Sunbury North and Sunbury West PSPs.
- For illustrative purposes, I have overlaid Plans 2a and 2b and 3a and 3b at Figure 3 to show the extent and number of transport infrastructure projects and also show the two specific projects identified above.

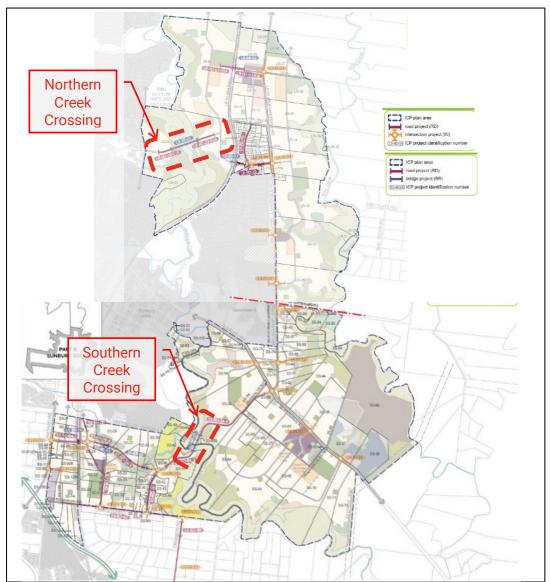


Figure 3: Transport Infrastructure Plans 02a/b and 03a/b overlaid

Are the Bridges Necessary?

Sunbury - Diggers Rest Growth Corridor Plan

- 29 The Sunbury Diggers Rest Corridor Plan, June 2012, is a highlevel land use and transport plan that provides a strategy for the development of this corridor over the coming decades.
- In relation to transport, the plan illustrates new transport projects including new train stations, establishment / extension of the principal public transport network, and new road projects.
- The road projects include both a northern and southern crossing of Jacksons Creek, to in effect, complete / put in place a ring road arrangement for Sunbury town centre. That said, the plan acknowledges investigation is necessary for both creek crossings.
- 32 The corridor plan is shown in Figure 4.

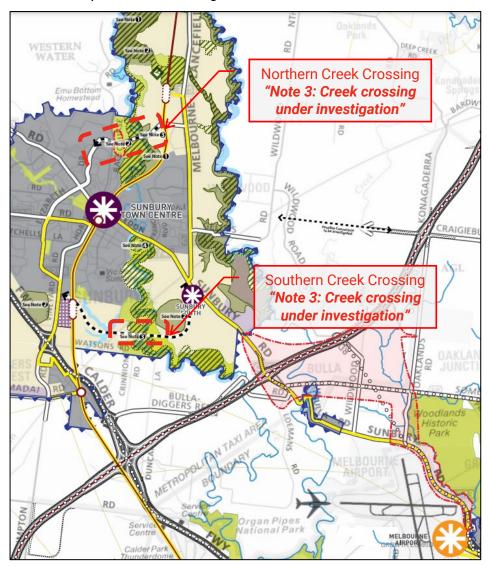


Figure 4: Sunbury/Diggers Rest Growth Corridor Plan

- 33 The Sunbury Growth Corridor is unique from a transport perspective when compared to the other growth corridors.
- The other corridors largely have an established arterial grid network, that typically includes existing road reservations and a level of infrastructure in such reservations (normally a single two-lane carriageway).
- PSP's then build on the established arterial grid by funding (through ICP's) a widening of the reservation and upgrading of the road infrastructure. Often, the road authority will also plan and then fund, when necessary, further improvements to the arterial network.
- 36 For example, an existing arterial road may have a reservation of 20 metres, with a centrally located carriageway providing for a single lane in each direction. The PSP would then fund, through an ICP, a widening of the reservation and duplication of the road to provide for two lanes in each direction. The allowed reservation is often wide enough to facilitate further improvements by the Road Authority, such as providing a 3rd lane in each direction when it is necessitated.
- Accordingly, the costs of the arterial network are shared between State Government and the development of those PSPs.
- This approach is consistent with the ICP Guidelines commentary regarding equity. In particular, the Guidelines state (pg 9):
 - 'Developers, local government, state agencies and other stakeholders all share the responsibility for funding infrastructure'
- 39 Sunbury does not have such an established grid network. The network is devoid of crossings of Jacksons Creek both to the north and east of Sunbury. This means there is existing pressure on the road network as there are limited alternatives compared to what one would usually have access to in a typical grid network.
- In this regard, there is clear strategic benefit in planning for completion of the Sunbury Road network as envisioned by the corridor plan, including both creek crossings.
- However, in my view, it is also clear that the establishment of the network is of benefit to the entire Sunbury area, comprising the already established residential area and town centre, as well as the future residential areas contained within the five planned PSP areas, being Sunbury South, Lancefield Road, Sunbury North, Sunbury West and Diggers Rest.
- Whilst there is a logical long term strategic need, this needs to be weighed against the cost of establishing such a network, the timing of works, and how such works should be funded.

Modelling Report, 2015 (GTA)

The question of the need for the bridges was, in part, investigated in the 2015 GTA modelling report, and was then discussed at the panel hearing relating to the Sunbury South and Lancefield Road PSPs.



- The 2015 report investigated a variety of modelling scenarios, including options with both creek crossings, a single creek crossing, and no creek crossings.
- An excerpt of the report is provided at Table 1 summarising the different options. For comparative purposes, the relevant options are Options 1 5. Options 1 and 5 include both creek crossings, Option 2 only provides the southern creek crossing, Option 3 only the northern creek crossing, and Option for does not have either of the creek crossings.

Table 1: Excerpt of GTA Consultants Modelling Report 2015

Table 7.1: 2046 Options

Option	Creek Crossing in PSP 1074	Railway Station in PSP 1074 (Jacksons Hill Station)	Creek Crossing in PSP 1075	Railway Station in PSP 1075 (Raes Road Station)	Additional Connection to Calder Highway south of PSP 1074	Comments
1	✓	✓	✓	✓		_
2	✓	✓		✓		
3			✓	✓		
4				✓		
5	✓	✓	✓	✓	✓	
6	✓	✓	✓	✓	✓	No OMR
7	✓	✓		✓	✓	No OMR
8			✓	✓	√	No OMR
9				✓	✓	No OMR

- The results of the modelling are then shown in Table 2. I have identified the options that include each of the bridge crossing scenarios, where **blue** is both crossings, **green** is the southern crossing only, **red** is the northern crossing only and **brown** is no crossings.
- The colours in the table are representative of the Degree of Saturation and Level of Service, whereby green is Level of Service A (excellent) and Red is Level of Service F (very poor).

Table 2: Excerpt of GTA Consultants Modelling Report 2015 – Options Analysis AM and PM Peak Outputs

	Road Name	Opt1	Opt2	Opt3	Opt4	Opt5
	ury Road between Evans t and Francis Boulevard NWB	0.48	0.58	0.53	0.64	0.46
	nbury Road between Evans eet and Francis Boulevard SEB	0.45	0.51	0.48	0.55	0.46
	Jacksons Creek Crossing in Sunbury South PSP EB	0.36	0.39	-	-	0.36
	Jacksons Creek Crossing in Sunbury South PSP WB	0.60	0.65	-		0.70
	Jacksons Creek Crossing in Lancefield Road PSP NEB	0.51	-	0.55	-	0.51
	Jacksons Creek Crossing in Lancefield Road PSP SWB	0.66	-	0.69	-	0.66
	Horne Street between Gap Road and Riddell Road NB	0.59	0.59	0.75	0.75	0.46
	Horne Street between Gap Road and Riddell Road SB	0.59	0.54	0.62	0.59	0.51
,	Sunbury Road north of Bulla- Diggers Road NWB	0.62	0.63	0.61	0.63	0.62
	Sunbury Road north of Bulla- Diggers Road SEB	1.02	1.03	1.04	1.05	1.02
	Melbourne-Lancefield Road south of Gellies Road NB	0.38	0.48	0.37	0.47	0.39
	Melbourne-Lancefield Road south of Gellies Road SB	0.64	0.72	0.59	0.69	0.65
	Vineyard Road north of Interchange NB	0.60	0.60	0.58	0.57	0.59
	Vineyard Road north of interchange SB	0.87	0.86	0.91	0.90	0.85

- Review of these tables suggests that whilst "both creek crossing" scenarios result in better network performance, there is not a significant deterioration in the operation of the network with the "Southern Creek Crossing only", "Northern Creek Crossing only", or "No Creek Crossing" options.
- This is re-enforced in the Summary Section of the GTA report, where it states:

'The two bridges are anticipated to carry up to 15,000 vehicles per day and would likely fit the operation category of a lower order arterial or connector road. They provide more flexibility in the network and reduce volumes in the town centre. Notwithstanding, the results demonstrate from a transport perspective that the two PSPs are able to function regardless of the introduction of the river crossings.'

In other words, whilst the bridges might provide some benefits they are **not essential** infrastructure for the PSPs.

Panel Report - Amendments C207 and C208

- The Panel Report for Amendments C207 and C208 to the Hume Planning Scheme, which related to the Sunbury South and Lancefield Road PSPs, included discussion on the 'need' for the two creek crossings.
- The Panel identified there was "unanimous support for the southern crossing" (p62) and recommended this be given "high priority" (p42).
- However, this needs to be read in the context that the priority for the southern crossing relates to the early development of the PSPs to allow an alternative route to the Calder Freeway until such time as the Bulla Bypass and duplication of Sunbury Road are complete.
- These projects are state lead projects, and neither of them are currently funded. Hence, the desire for the early delivery of the southern creek crossing.
- 55 It is for this reason that the southern creek crossing was deemed to be 'essential'.
- In relation to the northern creek crossing, the Panel had 'some lingering reservations about the strength of the strategic justification for the northern crossing' (p37), concluding the northern creek crossing should remain in the PSP "to provide for its construction in the longer term" but that "strategic justification of the northern crossing should be confirmed".

Supplementary Reports GTA Consultants 2020

- 57 A number of supplementary GTA Modelling Reports have been exhibited by VPA as part of this Panel process, namely:
 - Supplementary Report #1 V198070 Issue A dated 09/09/2020
 - Supplementary Report # 2 V198070 Issue A dated 25/09/2020
 - Supplementary Report # 3 V198070 Issue A dated 09/09/2020



- The first of the reports updates the previous Modelling prepared by GTA in 2015 to account for updated transport infrastructure, and updated population projections for broader Melbourne. The revised modelling only models the option that includes the infrastructure outlined in the ICP (Option 5).
- Report #2 includes updated population figures for the Lancefield Road and Sunbury South PSPs, as well as Council's current figures for Sunbury North and Sunbury West, but retains the same transport infrastructure scenario as Report #1.
- Report #3 then includes an alternative scenario whereby LR-BR-01 (the Northern Creek Crossing) is removed and provides a comparison to the results in Report #2.
- As one would expect, the removal of the northern creek crossing increases traffic volumes on Sunbury Road and Melbourne-Lancefield Road, as well as the southern creek crossing.
- However, based on a comparison of the Volume Capacity Ratio for the AM and PM peak hours for Option 5 with Two Bridge Crossings (from Report #2), and Option 2 with the Southern Bridge Crossing only (from Report #3), there appears to be manageable changes to the network as a whole without the northern creek crossing.
- The comparison is represented at Appendix B to this report.
- 64 The relevant changes are as follows:
 - There are marginal increases in the Degrees of Saturation along parts of Sunbury Road (south of Melbourne Lancefield Road) and also on the new Connector Road that forms part of the Southern Creek Crossing access route.
 - Melbourne Lancefield Road experiences some increases in degrees of saturation, and in some areas changes from an "excellent" or "good" level of service to an "acceptable" level of service (some parts increase to 0.8-0.9).
 - The biggest impact appears to be felt in the northernmost section of the Lancefield Road PSP where there are some extra demands for the northernmost part of the precinct to access Melbourne Lancefield Road. This could be addressed locally through refinements to the intersection.
- However, in the context of the overall operation of the network, the changes are not in my view material, in the sense they would result in unacceptable outcomes for the network.
- Based on the foregoing assessment, I am of the view the southern creek crossing should be retained as part of the ICP. However, the northern crossing is **not essential** infrastructure. Further on the basis of a cost of circa \$130 million, it is difficult to describe it as 'basic'.
- 67 Accordingly, I am of the view the northern creek crossing should not be funded by the ICP.
- Notwithstanding the deletion of the bridge as a project funded by the ICP, the road reservations and construction of roads leading to the bridge could remain so as not to preclude the future construction funded through some other mechanism.



Who Will the Bridge Crossings Serve?

- 69 As the bridges will complete the strategic road network for the Sunbury area, it is logical to conclude the bridges will serve the broader Sunbury community, including the two new PSPs, future PSPs at Sunbury West and Sunbury North, as well as the existing Sunbury community.
- 70 The bridges will also benefit the broader road network by diverting some external traffic off Sunbury Road and Lancefield Road.
- 71 The modelling reports do not specifically outline what percentage of traffic comes from specific PSPs, but rather gives a grouping of traffic from within the two PSPs and external to the PSP's.
- More specifically for Option 5 (both bridge crossings) the 2015 report identifies the southern creek crossing will have a peak utilisation of 75-79% of traffic from the two PSP areas, whilst the northern creek crossing will have a utilisation of 70-75% from the two PSP areas.
- I do note in the option with no OMR but both bridge crossings (Option 6), the proportion of external traffic increases such that the southern creek crossing will have a peak utilisation of 57-63% of traffic from the 2 PSPs, and the northern creek crossing will have a utilisation of 71% from the 2 PSPs.
- A review of the panel report for the Sunbury South and Lancefield Road PSPs reveals the panel was of the view costs would be most appropriately, and simply, apportioned based on the projected populations for the Sunbury South, Lancefield Road, Sunbury West and Sunbury North PSPs.
- 75 The most recent population projections are:
 - a. Sunbury South 32,100
 - b. Lancefield Road 22,000
 - c. Sunbury West 11,585
 - d. Sunbury North 26,315
 - e. Total 92,000
- The Sunbury South and Lancefield Road PSPs make up approximately 59% of the population within the four PSP areas.
- 77 This does not account for any further population increases in the existing Sunbury township or the benefit derived for existing residents from the construction of the bridges.
- The ICP identifies an apportionment of 74% for the two bridge crossings. The apportionment appears to be premised on the older populations projection as it is the same as expressed in the PSP panel report. That said, I cannot reconcile the 74% apportionment with the older population projections in the GTA supplementary modelling report, where it advised the population projections that were used in the 2015 modelling.



- Nonetheless, the apportionment should be updated to reflect the new population projections. Excluding the existing township, the Sunbury South and Lancefield Road PSPs account for 59% of the population across the 4 PSP areas.
- The updated apportionment should be applied to SS-BR-01 and SS-BR-04 in the Sunbury South PSP, and if the panel, despite my evidence, elects to retain the northern creek crossing, then the revised apportionment should also be applied to LR-BR-01 and LR-BR-02.

Functional Design

- In assessing the functional design of the bridges, I have only assessed the traffic capacity of the bridges for the projected traffic volumes.
- I have not sought to identify whether there are other alternative locations for the bridges that may result in lower costs.
- The GTA Report #3 projects a daily two-way traffic volume of 12,300 vehicles and 15,700 vehicles for the southern and northern creek crossings respectively.
- The functional designs for the bridges include a single carriageway providing for a traffic lane in each direction, a shared path on one side and a footpath on the other side.
- 85 I am satisfied this is appropriate for the projected traffic volumes.

Conclusions

- 86 Based on the preceding assessment, I am of the view that:
 - a) The southern creek crossing should be retained as a funded project in the ICP.
 - b) The northern creek crossing should not be funded by the ICP as it is not essential.
 - c) The apportionment of funding for the bridge/s should be updated based on the more recent population projections.
- I have made all the inquiries that I believe are desirable and appropriate and there are no matters of significance I regard as relevant, which to the best of my knowledge, have been withheld from the Panel.

JASON LEE WALSH DIRECTOR

TRAFFIX GROUP

8 October 2020

Hume Planning Scheme Amendment C243

Sunbury South and Lancefield Road Infrastructure Contributions Plan





Appendix AQualifications & CV

Name

Jason Lee Walsh - Director, Traffix Group Pty Ltd

Address

Level 28, 459 Collins Street

MELBOURNE

VICTORIA 3000

Qualifications

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

- · Bachelor of Civil Engineering, Monash University
- Bachelor of Science, Monash University
- Member, Victorian Planning & Environmental Law Association

Experience

I have approximately 25 years experience in Traffic Engineering including,

- 1995-2000 at Turnbull Fenner (now Traffix Group), including short term placements at the cities of Bayside and Whittlesea.
- 2000-2011 at Grogan Richards Pty Ltd (now Cardno).
- 2011-present at Traffix Group.

Areas of Expertise

- · Car parking and Traffic.
- Traffic advice and assessment of land uses and development proposals to planning authorities, government agencies, corporations and developers (including major residential, retail, food and drink, commercial, industrial, institutional and mixed use projects).
- Preparation and presentation of evidence before VCAT and Panels.

Expertise to Prepare this Assessment

My experience and expertise over the past 25 years, including involvement with varied forms of developments, qualifies me to comment on the traffic implications of the proposed development.

Instructions

I was instructed by Norton Rose Fulbright on behalf of Hi Quality Quarry Products Pty Ltd to undertake a traffic engineering assessment and prepare an evidence statement in relation to Hume Planning Scheme Amendment C243 and the proposed amendment to Sunbury South and Lancefield Road Infrastructure Contributions Plan.



Facts, Matters and Assumptions Relied Upon

- Infrastructure Contributions Plan Guidelines, November 2019.
- Sunbury Diggers Rest Growth Corridor Plan.
- GTA Consultant Traffic Modelling Reports (2015 and 2020 reports)
- Sunbury South and Lancefield Road PSPs
- Amendment C207 and C208 Panel Report
- Sunbury South and Lancefield Road Interim (November 2019) and Proposed (April 2020)
 Infrastructure Contribution Plans
- · Submissions.
- Site inspection.
- Relevant experience.

Documents Taken into Account

See above.

Identity of Persons Undertaking Work

Jason Walsh as per the evidence statement.

Carlo Morello (Senior Associate, Traffix Group) assisted with preparation of the evidence report.

Summary of Opinions

See Conclusions section of the evidence statement.



Appendix B

Comparison of GTA Modelling Outputs

