



# TOOLERN PRECINCT STRUCTURE PLAN

EXPERT REPORT (ADDENDUM)

27 AUGUST 2024

## CONTENTS

---

1.	INTRODUCTION	1
2.	EXECUTIVE SUMMARY	2
3.	TRANSPORT INFRASTRUCTURE COSTINGS	4

## APPENDICES

---

APPENDIX A	INDEPENDENT TRANSPORT INFRASTRUCTURE COST ESTIMATES - ROADS
APPENDIX B	INDEPENDENT TRANSPORT INFRASTRUCTURE COST ESTIMATES - INTERSECTIONS

# 1. INTRODUCTION

## 1.1 DECLARATION

- 1.1.1 I, Sian McKenna, am a Director of WTP Australia Pty Ltd (WT), an Australian owned quantity surveying practice.
- 1.1.2 I have been assisted in preparing this report by Asri Rahman, an Associate of WTP Australia Pty Ltd (WT).
- 1.1.3 WT provides specialist consultancy services to the construction and engineering industries. The principal services provided by WT are cost management and quantity surveying, asset and facilities management, project controls and contract support services.
- 1.1.4 I have made all inquiries which I believe are desirable and appropriate and no matters of significance which I regard as relevant have to our knowledge been withheld from the Panel.
- 1.1.5 In preparing this revised report we have had regard to the duties and responsibilities set out in the PPV Practice Note 1 – Expert Witness.
- 1.1.6 This update to the previously issued Expert Report (document ref: PR-025803-01 Rev 1) includes the review of selected items based upon the discussions during the Toolern DCP Engineering and Costings Conclave held in Stantec's offices on 22 August 2024.
- 1.1.7 This report does not purport to prove facts. All references to facts are to be read as references to assumed facts. Facts have been assumed for the purpose of carrying out the cost estimates and reaching the conclusions contained within this report. When a fact has been assumed based on the readings of a document, a reference to that document is generally provided to that document in the relevant section of this report.
- 1.1.8 We have used the relevant reference material briefed to us in the email from Harwood Andrews dated 24 July 2024 regarding the Toolern Precinct Structures Plan & Development Contributions Plan.
- 1.1.9 We understand that the immediate use of this statement is for Melton City Council and Planning Panels Victoria.

27 August 2024

Date



Sian McKenna



Asri Rahman

## 2. EXECUTIVE SUMMARY

- This report has been prepared for Melton City Council as an independent review of the Toolern Precinct Structure Plan (PSP) and Development Contributions Plan (DCP) – amendment C232melt. Transport Project costings proposed by the Victorian Planning Authority (VPA) and seeks to identify any differences in scope and estimated costs.
- This report is to be read in conjunction with the previously issued Expert Report dated 19 August 2024 (document ref: PR-025803-01 Rev 1) and only addresses the revised cost estimates for the following Roads and Intersections projects:
  - a. Roads – RD02-RD08 inclusive, RD11, RD14-RD17 inclusive, RD19
  - b. Intersections - IT01-IT06 inclusive, IT10, IT12, IT13, IT16, IT17, IT18, IT20, IT21, IT22, IT23, IT25, IT29.
- Based upon discussions at the Toolern DCP Engineering and Costings Conclave held on 22 August 2024, and in consideration of additional information subsequently received, the following assumptions forming the basis of our estimates have been amended:
  - a. Shared user paths and footpaths – deletion of surface paint finish to shared user paths, this assumption now only applies to on road bike lanes
  - b. Drainage – sub soil drainage rate has been reduced (aligned to assumptions for rock excavation)
  - c. Rock excavation – based upon geotechnical information received post conclave for current and past projects within the Melton South area, the assumption for extra over allowances for rock excavation to pavement areas has now reduced to 5% (from 20%)
  - d. Services relocations – removal of duplicated cost allowance for overhead power relocations (roads only)
- The resultant impact of incorporating the amendments noted above is:
  - a. Road projects - WT's overall cost estimate for Road projects is **\$92.4M**, a reduction of \$9.1M.
  - b. Intersection projects - WT's overall cost estimate for Intersection projects is **\$168.9M**, a reduction of \$10.2M.
  - c. Bridge projects - there is no impact to WT's cost estimates prepared for Bridge projects
- WT's revised cost estimates for Roads and Intersections projects are summarised in Section 3 of this report, with detailed estimates found in Appendices A & B.

- The following table summarises the Estimated Total Cost of Transport projects and highlights an overall difference between the VPA project costings and WT's updated cost estimates of **\$76.1M or 26%**:

TOOLERN PSP - TRANSPORT PROJECTS	VPA TOTAL COST 2021 <sup>1</sup>	VPA TOTAL COST 2024 <sup>2</sup>	WT TOTAL COST 2024	WT TOTAL COST 2024 (UPDATED 26.08.2024)	DIFFERENCE	(%)
	A	B	C	D	(B - D)	
Roads	64,276,729	75,931,391	101,509,728	92,372,093	(16,440,702)	-22%
Intersections	122,275,575	144,711,443	179,074,775	168,899,465	(24,188,022)	-17%
Bridges	61,696,172	72,841,363	108,354,933	108,354,933	(35,513,570)	-49%
<b>ESTIMATED TOTAL COST - TRANSPORT PROJECTS</b>	<b>\$248,248,476</b>	<b>\$293,484,197</b>	<b>\$388,939,436</b>	<b>\$369,626,491</b>	<b>(\$76,142,294)</b>	<b>-26%</b>

- All costs in this report exclude Goods & Services Tax (GST).

<sup>1</sup> VPA Benchmarked costings as per Amendment C232melt. (indexed to 2021)

<sup>2</sup> VPA Benchmarked costings (2018) indexed to 1 July 2024 based upon VPA indexation factors for FY2024/2025 (indicative only and subject to confirmation)

### 3. TRANSPORT INFRASTRUCTURE COSTINGS

#### 3.1 ROADS

The table below is a summary comparison of the costs for Toolern PSP Road projects, with the overall variance highlighting that the VPA project costings are **\$16.4M or 22%** lower than WT's updated cost estimates.

TOOLERN PSP - ROAD PROJECTS	BY VPA TOTAL COST (2021)	BY VPA TOTAL COST (2024) *	BY WT TOTAL COST (2024)	WT TOTAL COST 2024 (UPDATED 26.08.2024)	DIFFERENCE	%
	A	B	C	D	(B - D)	
RD-02 - Secondary Divided Interim Arterial Road (E-W Arterial)	4,496,855.00	5,321,965.16	6,531,709.00	6,079,803.00	-757,837.84	-14%
RD-03 - Secondary Divided Interim Arterial Road (Exford Road)	1,954,992.00	2,313,705.83	1,689,571.00	1,594,672.00	719,033.83	31%
RD-04 - Secondary Undivided Interim Arterial Road (Exford Road)	13,092,554.00	15,494,857.81	26,618,080.00	25,035,533.00	-9,540,675.19	-62%
RD-05 - Secondary Divided Interim Arterial Road (Toolern Road [Exford to Toolern Ck])	641,228.00	758,884.51	6,777,291.00	6,290,970.00	-5,532,085.49	-729%
RD-06 - Secondary Divided Interim Arterial Road (Toolern Road [Toolern Ck to Ferris])	6,751,787.00	7,990,645.61	10,245,211.00	9,228,951.00	-1,238,305.39	-15%
RD-07 - Secondary Divided Interim Arterial Road (Toolern Road [Ferris to Mt Cottrell])	5,615,593.00	6,645,976.25	7,032,041.17	6,340,017.00	305,959.25	5%
RD-08 - Secondary Interim Arterial Road (Toolern Road [Mt Cottrell to Paynes])	7,114,863.00	8,420,341.10	10,380,870.00	9,458,598.00	-1,038,256.90	-12%
RD-11 - Primary Interim Arterial Road (Mt Cottrell Road [UGB to Toolern Rd to Rail])	9,307,858.00	11,015,720.70	3,741,519.00	3,375,091.00	7,640,629.70	69%
RD-14 - Primary Interim Arterial Road (Shogaki Drive West [Mt Cottrell to Ferris])	5,071,142.00	5,760,883.99	11,208,482.00	9,656,246.00	-3,895,362.01	-68%
RD-15 - Primary Ultimate Arterial Road (Ferris Road [Western Hwy to Shogaki])	4,731,581.00	5,599,759.63	8,022,599.00	7,087,881.00	-1,488,121.37	-27%

<b>TOOLERN PSP - ROAD PROJECTS</b>	<b>BY VPA TOTAL COST (2021)</b>	<b>BY VPA TOTAL COST (2024) *</b>	<b>BY WT TOTAL COST (2024)</b>	<b>WT TOTAL COST 2024 (UPDATED 26.08.2024)</b>	<b>DIFFERENCE</b>	<b>%</b>
RD-16 - Secondary Divided Interim Arterial Road (Ferris Road [Shogaki to Rail])	665,655.00	787,792.12	1,015,317.00	863,499.00	-75,706.88	-10%
RD-17 - Secondary Divided Interim Arterial Road (Ferris Road [Rail to Toolern])	Excl	Excl	Excl	Excl	Excl	
RD-19 - Primary Interim Arterial Road (Shogaki Drive East [Mt Cottrell to Ferris])	4,832,621.00	5,820,858.34	8,247,038.00	7,360,832.00	-1,539,973.66	-26%
<b>ESTIMATED TOTAL COST - ROAD PROJECTS</b>	<b>\$64,276,729</b>	<b>\$75,931,391</b>	<b>\$101,509,728</b>	<b>\$92,372,093</b>	<b>(\$16,440,702)</b>	<b>-22%</b>

The following amendments to WT's assumptions have been applied in WT's updated cost estimates for Roads:

- Shared user paths and footpaths – deletion of surface paint finish to shared user paths, this assumption now only applies to on road bike lanes (intersections only)
- Drainage – sub soil drainage rate has been reduced (aligned to assumptions for rock excavation)
- Rock excavation – based upon geotechnical information of projects within the local Melton South area received post conclave, the assumption for extra over allowances for rock excavation to pavement areas has now reduced to 5% (from 20%)
- Services relocations – removal of duplicated cost allowance for overhead power relocations (RD14, RD15 & RD16 only)

Copies of WT's revised cost estimates for Roads projects can be found in Appendix A.

### 3.2 INTERSECTIONS

The table below is a summary comparison of the costs for Toolern PSP Intersection projects, with the overall variance highlighting that the VPA project costings is **\$24.2M or 17%** lower than WT's updated cost estimates.

TOOLERN PSP - INTERSECTION PROJECTS	BY VPA TOTAL COST (2021)	BY VPA TOTAL COST (2024) *	BY WT TOTAL COST (2024)	WT TOTAL COST 2024 (UPDATED 26.08.2024)	DIFFERENCE	%
	A	B	C	D	(B - D)	
IT-01 - Secondary - Connector Intersection (Rees Road & East-West Arterial Road)	4,832,428.00	5,719,111.19	7,718,759.00	6,935,264.00	-1,216,152.81	-21%
IT-02 - Secondary - Secondary T-Intersection (Exford Road & East-West Arterial Road)	6,003,029.00	7,104,502.13	10,374,986.00	9,344,893.00	-2,240,390.87	-32%
IT-03 - Secondary - Secondary T-Intersection (Exford Road & Toolern Road)	8,928,408.00	10,566,647.33	15,945,680.00	14,651,177.00	-4,084,529.67	-39%
IT-04 - Secondary - Secondary Lane Upgrades (Exford Road & Greigs Road)	2,686,264.00	3,179,155.25	2,709,030.00	2,617,098.00	562,057.25	18%
IT-05 - Secondary - Secondary Intersection (Ferris Road & Toolern Road)	9,032,022.00	10,689,272.59	12,337,250.00	11,042,729.00	-353,456.41	-3%
IT-06 - Primary - Secondary Intersection (Mt Cottrell Road & Toolern Road)	11,738,409.00	13,892,245.28	17,259,526.00	15,945,923.00	-2,053,677.72	-15%
IT-10 - Primary - Primary Intersection (Mt Cottrell Road & Shogaki Drive)	7,109,635.00	8,414,153.87	9,732,523.00	9,293,241.00	-879,087.13	-10%
IT-12 - Primary - Connector T-Intersection (Shogaki Drive & Connector Road)	10,179,831.00	12,047,688.26	15,829,389.00	15,063,802.00	-3,016,113.74	-25%
IT-13 - Primary - Secondary Intersection (Ferris Road, Shogaki Drive & Abey Road)	11,062,998.00	13,092,905.33	15,747,929.00	15,031,268.00	-1,938,362.67	-15%
IT-16 - Secondary - Connector T-Intersection (Abey Road, Industry Collector Road)	5,190,822.00	6,143,265.19	7,640,201.00	7,223,160.00	-1,079,894.81	-18%
IT-17 - Secondary - Connector T-Intersection (Abey Road, Bundy Drive)	5,652,281.00	6,689,395.92	8,638,811.00	7,830,151.00	-1,140,755.08	-17%



<b>TOOLERN PSP - INTERSECTION PROJECTS</b>	<b>BY VPA TOTAL COST (2021)</b>	<b>BY VPA TOTAL COST (2024) *</b>	<b>BY WT TOTAL COST (2024)</b>	<b>WT TOTAL COST 2024 (UPDATED 26.08.2024)</b>	<b>DIFFERENCE</b>	<b>%</b>
IT-18 - Primary- Connector Intersection (Ferris Road, Shakamaker Drive)	7,973,390.00	9,436,397.03	12,216,977.00	11,290,641.00	-1,854,243.97	-20%
IT-20 - Primary- Connector Intersection (Mt Cottrell Road, South Connector Road)	9,393,854.00	11,117,496.53	10,645,402.00	9,901,985.00	1,215,511.53	11%
IT-21 - Primary- Connector Intersection (Toolern Road, Eastern North-South Connector Road)	6,512,388.00	7,707,320.11	8,684,005.00	8,182,879.00	-475,558.89	-6%
IT-22 - Secondary- Connector Intersection (Toolern Road, Central North-South Connector Road)	5,595,492.00	6,622,186.11	8,520,504.00	8,024,279.00	-1,402,092.89	-21%
IT-23 - Secondary- Connector T-Intersection (Toolern Road, Western North-South Connector Road)	4,802,624.00	5,683,838.35	7,349,336.00	6,914,817.00	-1,230,978.65	-22%
IT-25 - Primary- Connector T-Intersection (Mt Cottrell Road, Bridge Road)	983,157.00	1,163,551.34	3,596,615.00	3,359,117.00	-2,195,565.66	-189%
IT-29- Secondary- Connector Intersection (Ferris Road, South Connector Road)	4,598,543.00	5,442,311.32	6,585,762.34	6,247,041.00	-804,729.68	-15%
<b>ESTIMATED TOTAL COST - INTERSECTION PROJECTS</b>	<b>\$122,275,575</b>	<b>\$144,711,443</b>	<b>\$181,532,685</b>	<b>\$168,899,465</b>	<b>(\$24,188,022)</b>	<b>-17%</b>

The following amendments to WT's assumptions have been applied in WT's updated cost estimates for Intersections:

- Shared user paths and footpaths – deletion of surface paint finish to shared user paths, this assumption applies to on road bike lanes only.
- Drainage – sub soil drainage rate has been reduced (aligned to assumptions for rock excavation)
- Rock excavation – based upon geotechnical information of projects within the local Melton South area received post conclave, the assumption for extra over allowances for rock excavation to pavement areas has now reduced to 5% (from 20%)

Copies of WT's revised cost estimates for Intersections projects can be found in Appendix B.



# APPENDIX A

INDEPENDENT TRANSPORT INFRASTRUCTURE COST  
ESTIMATES - ROADS

**APPENDIX A**  
**PR-025803 - Toolern Creek PSP and DCP**

**Road Projects Costs Summary**

Civil Component No	Description	VPA Total Cost (\$ - 2021)	VPA Total Cost (\$ - 2024)	WT Total Cost (\$ - 2024)	Variance (\$ - 2024)
		A	B	C	B-C
RD-02	RD-02 - Secondary Divided Interim Arterial Road (E-W Arterial, 528m)	4,496,855.00	5,321,965.16	6,079,803.00	-757,837.84
RD-03	RD-03 - Secondary Divided Interim Arterial Road (Exford Road, 339m)	1,954,992.00	2,313,705.83	1,594,672.00	719,033.83
RD-04	RD-04 - Secondary Undivided Interim Arterial Road (Exford Road, 1857m)	13,092,554.00	15,494,857.81	25,035,533.00	-9,540,675.19
RD-05	RD-05 - Secondary Divided Interim Arterial Road (Toolern Road [Exford to Toolern Ck], 136m)	641,228.00	758,884.51	6,290,970.00	-5,532,085.49
RD-06	RD-06 - Secondary Divided Interim Arterial Road (Toolern Road [Toolern Ck to Ferris], 1011m)	6,751,787.00	7,990,645.61	9,228,951.00	-1,238,305.39
RD-07	RD-07 - Secondary Divided Interim Arterial Road (Toolern Road [Ferris to Mt Cottrell], 806m)	5,615,593.00	6,645,976.25	6,340,017.00	305,959.25
RD-08	RD-08 - Secondary Interim Arterial Road (Toolern Road [Mt Cottrell to Paynes], 927m)	7,114,863.00	8,420,341.10	9,458,598.00	-1,038,256.90
RD-11	RD-11 - Primary Interim Arterial Road (Mt Cottrell Road [UGB to Toolern Rd to Rail], 678m)	9,307,858.00	11,015,720.70	3,375,091.00	7,640,629.70
RD-14	RD-14 - Primary Interim Arterial Road (Shogaki Drive West [Mt Cottrell to Ferris], 438m)	5,071,142.00	5,760,883.99	9,656,246.00	-3,895,362.01
RD-15	RD-15 - Primary Ultimate Arterial Road (Ferris Road [Western Hwy to Shogaki], 350m)	4,731,581.00	5,599,759.63	7,087,881.00	-1,488,121.37
RD-16	RD-16 - Secondary Divided Interim Arterial Road (Ferris Road [Shogaki to Rail], 69m)	665,655.00	787,792.12	863,499.00	-75,706.88
RD-17	RD-17 - Secondary Divided Interim Arterial Road (Ferris Road [Rail to Toolern], 729m)		Excluded - Project under construction		
RD-19	RD-19 - Primary Interim Arterial Road (Shogaki Drive East [Mt Cottrell to Ferris], 438m)	4,832,621.00	5,820,858.34	7,360,832.00	-1,539,973.66
	<b>Total</b>	<b>64,276,729.00</b>	<b>75,931,391.04</b>	<b>92,372,093.00</b>	<b>-16,440,701.96</b>

Appendix A

Toolern PSP & DCP - Road Projects

RD-02 - Secondary Divided Interim Arterial Road (E-W Arterial, 528m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	17952	m2	3.68	66,063.36	4.96	89,041.92	114,864.08	17,918	m2	14.21	254,583.00	139,718.92
	Earthworks	6036	m3	34.07	205,646.52	40.52	244,578.72	315,506.55	6,024	m3	32.05	193,047.00	-122,459.55
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	N/A	m2	0.00	N/A	0.00
	Secondary Arterial Pavement	9504	m2	127.01	1,207,103.04	133.78	1,271,445.12	1,640,164.20	9,486	m2	194.46	1,844,645.00	204,480.80
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	N/A	m2	0.00	N/A	0.00
	Subgrade Preparation	1901	m2	14.22	27,032.22	16.16	30,720.16	39,629.01	9,486	m2	6.01	57,005.00	17,375.99
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	N/A	m2	0.00	N/A	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	N/A	m2	0.00	N/A	0.00
Concrete Works	Kerb and Channel	2112	m	54.81	115,758.72	60.90	128,620.80	165,920.83	1,054	m	82.42	86,871.00	-79,049.83
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	N/A	m2	0.00	N/A	0.00
	SUP/ Footpath	3168	m2	63.51	201,199.68	73.63	233,259.84	300,905.19	3,162	m2	133.74	422,873.00	121,967.81
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	N/A	m2	0.00	N/A	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	190	m	528.21	100,359.00	100,359.00
	Drainage Pipe 375mm CR Bfilled	524	m	259.10	135,768.40	282.96	148,271.04	191,269.64	0	m	0.00	0.00	-191,269.64
	Drainage Pipe 450mm CR Bfilled	264	m	299.43	79,049.52	334.33	88,263.12	113,859.42	1,054	m	560.00	590,240.00	476,380.58
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	30	No.	2,565.39	76,961.70	2,806.10	84,183.00	108,596.07	15	No.	4,362.80	65,442.00	-43,154.07
	Drainage - Sub-soil drainage	2112	m	33.88	71,554.56	43.40	91,660.80	118,242.43	1,054	m	94.99	100,122.00	-18,120.43
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	N/A	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	N/A	Item	0.00	N/A	0.00
Landscape	Tree Planting	35	No.	303.34	10,616.90	363.01	12,705.35	16,389.90	27	No.	1,000.00	27,000.00	10,610.10
	Landscaping	5280	m2	21.61	114,100.80	25.16	132,844.80	171,369.79	1,486	m2	30.00	44,586.00	-126,783.79
	Topsail Seeding	5280	m2	7.21	38,068.80	8.44	44,563.20	57,486.53	4,954	m2	25.00	123,850.00	66,363.47
Street Lighting	Street Lighting - Road	528	m	216.34	114,227.52	225.67	119,153.76	153,708.35	11	No.	18,000.00	198,000.00	44,291.65
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	N/A	Item	0.00	N/A	0.00
Misc.	Regulatory Signage	12	Item	338.43	4,061.16	380.39	4,564.68	5,888.44	1	Item	10,500.00	10,500.00	4,611.56
	Line marking	9504	m2 of Pavement	3.11	29,557.44	4.09	38,871.36	50,144.05	9,486	m2	5.00	47,430.00	-2,714.05
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	N/A	Item	0.00	N/A	0.00
	Landscape maintenance (roads)	5280	m2 of Landscape	2.90	15,312.00	2.96	15,628.80	20,161.15	65	weeks	1,500.00	97,500.00	77,338.85
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	N/A	Item	N/A	N/A	0.00
Other	Rock excavation	1208	m3	100.00	120,800.00	115.00	138,920.00	179,206.80	302	m2	100.00	30,200.00	-149,006.80
	Telecom/power relocation allowance	0	m	1,500.00	0.00	1,495.00	0.00	0.00	N/A	m	0.00	N/A	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	N/A	m	0.00	N/A	0.00
	Service proving fee	1	Item	3,000.00	3,000.00	3,450.00	3,450.00	4,450.50	1	Item	10,000.00	10,000.00	5,549.50
Delivery	Council Fees	1.00	%	3.25	85,666.18	3.25	94,924.26	122,452.30	1.00	%	3.25	139,890.00	17,437.70
	VicRoads Fees	1.00	%	1.00	26,358.82	1.00	29,207.46	37,677.63	1.00	%	1.00	43,050.00	5,372.37
	Traffic Management	1.00	%	5.00	131,794.12	5.00	146,037.32	188,388.15	1.00	%	5.00	215,220.00	26,831.85
	Environmental Management	1.00	%	0.50	13,179.41	0.50	14,603.73	18,838.81	1.00	%	0.50	21,530.00	2,691.19
	Surveying and Design	1.00	%	5.00	131,794.12	5.00	146,037.32	188,388.15	1.00	%	5.00	215,220.00	26,831.85
	Supervision and Project management	1.00	%	9.00	237,229.41	9.00	262,867.18	339,098.67	1.00	%	9.00	387,390.00	48,291.33
	Site Establishment	1.00	%	2.50	65,897.06	2.50	73,018.66	94,194.07	1.00	%	2.50	107,610.00	13,415.93
	Contingency	1.00	%	15.00	395,382.35	15.00	438,111.97	565,164.44	1.00	%	15.00	645,640.00	80,475.56
Total - (2018) rates	Excluding Delivery				2,635,882.00		2,920,746.00						
	Including Delivery				3,723,184.00		4,125,554.00						
Total - (2021) rates	Excluding Delivery				2,873,112.00		3,183,614.00						
	Including Delivery				4,058,271.00		4,496,855.00						

Appendix A

Toolern PSP & DCP - Road Projects

RD-02 - Secondary Divided Interim Arterial Road (E-W Arterial, 528m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2024) rates	Excluding Delivery							3,767,762.95				4,304,253.00	-536,490.05
	Including Delivery							5,321,965.16				6,079,803.00	-757,837.84

Appendix A

Toolern PSP & DCP - Road Projects

RD-03 - Secondary Divided Interim Arterial Road (Exford Road, 339m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	11526	m2	3.68	42,415.68	4.96	57,168.96	73,747.96	4,454	m2	14.21	63,284.00	-10,463.96
	Earthworks	862	m3	34.07	29,368.34	40.52	34,928.24	45,057.43	924	m3	32.05	29,611.00	-15,446.43
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	N/A	m2	0.00	N/A	0.00
	Secondary Arterial Pavement	1356	m2	127.01	172,225.56	133.78	181,405.68	234,013.33	1,454	m2	194.74	283,147.00	49,133.67
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	N/A	m2	0.00	N/A	0.00
	Subgrade Preparation	272	m2	14.22	3,867.84	16.16	4,395.52	5,670.22	1,454	m2	6.01	8,738.00	3,067.78
	Pavement Rehab	2373	m2	51.58	122,399.34	59.32	140,766.36	181,588.60	1,166	m2	75.00	87,450.00	-94,138.60
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	N/A	m2	0.00	N/A	0.00
Concrete Works	Kerb and Channel	1356	m	54.81	74,322.36	60.90	82,580.40	106,528.72	262	m	82.42	21,594.00	-84,934.72
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	N/A	m2	0.00	N/A	0.00
	SUP/ Footpath	1865	m2	63.51	118,446.15	73.63	137,319.95	177,142.74	721	m2	133.74	96,424.00	-80,718.74
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	N/A	m2	0.00	N/A	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	29	m	528.21	15,318.00	15,318.00
	Drainage Pipe 375mm CR Bfilled	326	m	259.10	84,466.60	282.96	92,244.96	118,996.00	0	m	0.00	0.00	-118,996.00
	Drainage Pipe 450mm CR Bfilled	170	m	299.43	50,903.10	334.33	56,836.10	73,318.57	131	m	560.00	73,360.00	41.43
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	18	No.	2,565.39	46,177.02	2,806.10	50,509.80	65,157.64	4	No.	4,359.50	17,438.00	-47,719.64
	Drainage - Sub-soil drainage	1356	m	33.88	45,941.28	43.40	58,850.40	75,917.02	262	m	94.99	24,888.00	-51,029.02
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	N/A	No.	0.00	N/A	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	N/A	Item	0.00	N/A	0.00
Landscape	Tree Planting	22	No.	303.34	6,673.48	363.01	7,986.22	10,302.22	7	No.	1,000.00	7,000.00	-3,302.22
	Landscaping	5933	m2	21.61	128,212.13	25.16	149,274.28	192,563.82	311	m2	29.95	9,315.00	-183,248.82
	Topsoil Seeding	5933	m2	7.21	42,776.93	8.44	50,074.52	64,596.13	1,035	m2	25.00	25,875.00	-38,721.13
Street Lighting	Street Lighting - Road	339	m	216.34	73,339.26	225.67	76,502.13	98,687.75	3	No.	18,000.00	54,000.00	-44,687.75
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	N/A	Item	0.00	N/A	0.00
Misc.	Regulatory Signage	8	Item	338.43	2,707.44	380.39	3,043.12	3,925.62	1	Item	3,500.00	3,500.00	-425.62
	Line marking	1356	m2 of Pavement	3.11	4,217.16	4.09	5,546.04	7,154.39	2,620	m2	5.00	13,100.00	5,945.61
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	N/A	Item	0.00	N/A	0.00
	Landscape maintenance (roads)	5933	m2 of l'scape	2.90	17,205.70	2.96	17,561.68	22,654.57	65	weeks	1,500.00	97,500.00	74,845.43
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	N/A	Item	0.00	N/A	0.00
Other	Rock excavation	173	m3	100.00	17,300.00	115.00	19,895.00	25,664.55	47	m2	100.00	4,700.00	-20,964.55
	Telecom/power relocation allowance	25	m	1,300.00	32,500.00	1,495.00	37,375.00	48,213.75	25	m	1,500.00	37,500.00	-10,713.75
	Water/gas relocation allowance	6	m	300.00	1,800.00	345.00	2,070.00	2,670.30	6	m	2,200.00	13,200.00	10,529.70
	Service proving fee	1	Item	3,000.00	3,000.00	3,450.00	3,450.00	4,450.50	1	Item	10,000.00	10,000.00	5,549.50

Appendix A

Toolern PSP & DCP - Road Projects

RD-03 - Secondary Divided Interim Arterial Road (Exford Road, 339m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
	Sawcut pavement tie ins, new kerb & channel, etc.	0	m	0.00	0.00	0.00	0.00	0.00	275	m	480.00	132,000.00	132,000.00
Delivery	Council Fees	1.00	%	3.25	36,408.62	3.25	41,267.99	53,235.71	1.00	%	3.25	36,700.00	-16,535.71
	VicRoads Fees	1.00	%	1.00	11,202.65	1.00	12,697.84	16,380.22	1.00	%	1.00	11,290.00	-5,090.22
	Traffic Management	1.00	%	5.00	56,013.27	5.00	63,489.22	81,901.09	1.00	%	5.00	56,450.00	-25,451.09
	Environmental Management	1.00	%	0.50	5,601.33	0.50	6,348.92	8,190.11	1.00	%	0.50	5,650.00	-2,540.11
	Surveying and Design	1.00	%	5.00	56,013.27	5.00	63,489.22	81,901.09	1.00	%	5.00	56,450.00	-25,451.09
	Supervision and Project management	1.00	%	9.00	100,823.88	9.00	114,280.59	147,421.96	1.00	%	9.00	101,610.00	-45,811.96
	Site Establishment	1.00	%	2.50	28,006.63	2.50	31,744.61	40,950.55	1.00	%	2.50	28,230.00	-12,720.55
	Contingency	1.00	%	15.00	168,039.81	15.00	190,467.65	245,703.27	1.00	%	15.00	169,350.00	-76,353.27
Total - (2018) rates	Excluding Delivery				1,120,265.00		1,269,784.00						
	Including Delivery				1,582,375.00		1,793,570.00						
Total - (2021) rates	Excluding Delivery				1,221,090.00		1,384,065.00						
	Including Delivery				1,724,790.00		1,954,992.00						
Total - (2024) rates	Excluding Delivery							1,638,021.82				1,128,942.00	509,079.82
	Including Delivery							2,313,705.83				1,594,672.00	719,033.83

Appendix A

Toolern PSP & DCP - Road Projects

RD-04 - Secondary Undivided Interim Arterial Road (Exford Road, 1857m)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings				WT Total Cost (2024)					
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	65138	m2	3.68	232,347.84	4.96	313,164.48	403,982.18	60,520	m2	14.21	859,883.00	455,900.82
	Earthworks	4717	m3	34.07	160,708.19	40.52	191,132.84	246,561.36	12,434	m3	32.05	398,463.00	151,901.64
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	7428	m2	127.01	943,430.28	133.78	993,717.84	1,281,896.01	19,580	m2	194.45	3,807,259.00	2,525,362.99
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1486	m2	14.22	21,130.92	16.16	24,013.76	30,977.75	19,580	m2	6.01	117,663.00	86,685.25
	Pavement Rehab	12999	m2	51.58	670,488.42	59.32	771,100.68	994,719.88	16,020	m2	75.00	1,201,500.00	206,780.12
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
Concrete Works	Kerb and Channel	7428	m	54.81	407,128.68	60.90	452,365.20	583,551.11	3,560	m	82.42	293,415.00	-290,136.11
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	11142	m2	65.51	707,628.42	73.63	820,385.46	1,058,297.24	10,680	m2	133.74	1,428,301.00	370,003.76
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	m2	0.00	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	392	m	528.20	207,056.00	207,056.00
	Drainage Pipe 375mm CR Bfilled	1669	m	259.10	432,437.90	282.96	472,260.24	609,215.71	0	m	0.00	0.00	-609,215.71
	Drainage Pipe 450mm CR Bfilled	929	m	299.43	278,170.47	334.33	310,592.57	400,664.42	1,780	m	560.00	996,800.00	596,135.58
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	111	No.	2,565.39	284,758.29	2,806.10	311,477.10	401,805.46	47	No.	4,356.45	204,753.00	-197,052.46
	Drainage - Sub-soil drainage	7428	m	33.88	251,660.64	43.40	322,375.20	415,864.01	3,560	m	94.99	338,172.00	-77,692.01
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	Item	0.00	0.00	0.00
Landscape	Tree Planting	123	No.	303.34	37,310.82	363.01	44,650.23	57,598.80	89	No.	1,000.00	89,000.00	31,401.20
	Landscaping	31569	m2	21.61	682,206.09	25.16	794,276.04	1,024,616.09	3,952	m2	30.00	118,548.00	-906,068.09
	Topsoil Seeding	31569	m2	7.21	227,612.49	8.44	266,442.36	343,710.64	13,172	m2	25.00	329,300.00	-14,410.64
Street Lighting	Street Lighting - Road	1857	m	216.34	401,743.38	225.67	419,069.19	540,599.26	36	No.	18,000.00	648,000.00	107,400.74
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	Item	0.00	0.00	0.00
Misc.	Regulatory Signage	42	Item	338.43	14,214.06	380.39	15,976.38	20,609.53	1	Item	29,000.00	29,000.00	8,390.47
	Line marking	7428	m2 of Pavement	3.11	23,101.08	4.09	30,380.52	39,190.87	35,600	m2	5.00	178,000.00	138,809.13
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	Item	0.00	0.00	0.00
	Landscape maintenance (roads)	31569	m2 of 'scape	2.90	91,550.10	2.96	93,444.24	120,543.07	65	weeks	1,500.00	97,500.00	-23,043.07
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	Item	0.00	0.00	0.00
Other	Rock excavation	944	m3	100.00	94,400.00	115.00	108,560.00	140,042.40	622	m2	100.00	62,200.00	-77,842.40
	Telecom/power relocation allowance	587	m	1,300.00	763,100.00	1,495.00	877,565.00	1,132,058.85	587	m	1,500.00	880,500.00	-251,558.85
	Water/gas relocation allowance	1924	m	300.00	577,200.00	345.00	663,780.00	856,276.20	1,924	m	2,200.00	4,232,800.00	3,376,523.80
	Service proving fee	1	Item	20,000.00	20,000.00	23,000.00	23,000.00	29,670.00	1	Item	10,000.00	10,000.00	-19,670.00
	Light pole relocation allowance	4	Item	10,000.00	40,000.00	11,500.00	46,000.00	59,340.00	4	Item	5,000.00	20,000.00	-39,340.00
	Power pole relocation allowance	3	Item	40,000.00	120,000.00	46,000.00	138,000.00	178,020.00	3	Item	5,000.00	15,000.00	-163,020.00
	Sawcut pavement tie ins, new kerb & channel, etc.	0	m	0.00	0.00	0.00	0.00	0.00	2,419	m	480.00	1,161,120.00	1,161,120.00
Delivery	Council Fees	1.00	%	3.25	243,175.66	3.25	276,371.20	356,518.85	1.00	%	3.25	576,040.00	219,521.15
	VicRoads Fees	1.00	%	1.00	74,823.28	1.00	85,037.29	109,698.11	1.00	%	1.00	177,250.00	67,551.89
	Traffic Management	1.00	%	5.00	374,116.40	5.00	425,186.47	548,490.54	1.00	%	5.00	886,220.00	337,729.46
	Environmental Management	1.00	%	0.50	37,411.64	0.50	42,518.65	54,849.05	1.00	%	0.50	88,630.00	33,780.95
	Surveying and Design	1.00	%	5.00	374,116.40	5.00	425,186.47	548,490.54	1.00	%	5.00	886,220.00	337,729.46
	Supervision and Project management	1.00	%	9.00	673,409.53	9.00	765,335.64	987,282.98	1.00	%	9.00	1,595,190.00	607,907.02
	Site Establishment	1.00	%	2.50	187,058.20	2.50	212,593.23	274,245.27	1.00	%	2.50	443,110.00	168,864.73
	Contingency	1.00	%	15.00	1,122,349.21	15.00	1,275,559.40	1,645,471.63	1.00	%	15.00	2,658,640.00	1,013,168.37
Total - (2018) rates	Excluding Delivery				7,482,328.00		8,503,729.00						
	Including Delivery				10,568,788.00		12,011,518.00						
Total - (2021) rates	Excluding Delivery				8,155,738.00		9,269,065.00						
	Including Delivery				11,519,980.00		13,092,554.00						
Total - (2024) rates	Excluding Delivery						10,969,810.84				17,724,233.00	-6,754,422.16	
	Including Delivery						15,494,857.81				25,035,533.00	-9,540,675.19	



Appendix A

Toolern PSP & DCP - Road Projects

RD-05 - Secondary Divided Interim Arterial Road (Toolern Road [Exford to Toolern Ck], 136m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	3230	m2	3.68	11,886.40	4.96	16,020.80	20,666.83	12,256	m2	30.19	370,039.00	349,372.17
	Earthworks	664	m3	34.07	22,622.48	40.52	26,905.28	34,707.81	5,351	m3	32.05	171,480.00	136,772.19
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	1045	m2	127.01	132,725.45	133.78	139,800.10	180,342.13	8,426	m2	194.50	1,638,835.00	1,458,492.87
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	209	m2	14.22	2,971.98	16.16	3,377.44	4,356.90	8,426	m2	6.01	50,635.00	46,278.10
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
Concrete Works	Kerb and Channel	380	m	54.81	20,827.80	60.90	23,142.00	29,853.18	1,532	m	82.42	126,267.00	96,413.82
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	570	m2	63.51	36,200.70	73.63	41,969.10	54,140.14	4,596	m2	133.74	614,651.00	560,510.86
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	m2	0.00	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	169	m	528.21	89,267.00	89,267.00
	Drainage Pipe 375mm CR Bfilled	74	m	259.10	19,173.40	282.96	20,939.04	27,011.36	0	m	0.00	0.00	-27,011.36
	Drainage Pipe 450mm CR Bfilled	48	m	299.43	14,372.64	334.33	16,047.84	20,701.71	766	m	560.00	428,960.00	408,258.29
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	3	No.	2,565.39	7,696.17	2,806.10	8,418.30	10,859.61	21	No.	4,357.24	91,502.00	80,642.39
	Drainage - Sub-soil drainage	380	m	33.88	12,874.40	43.40	16,492.00	21,274.68	1,532	m	94.99	145,528.00	124,253.32
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	Item	0.00	0.00	0.00
Landscape	Tree Planting	6	No.	303.34	1,820.04	363.01	2,178.06	2,809.70	154	No.	1,000.00	154,000.00	151,190.30
	Landscaping	1615	m2	21.61	34,900.15	25.16	40,633.40	52,417.09	919	m2	30.01	27,576.00	-24,841.09
	Topsoil Seeding	1615	m2	7.21	11,644.15	8.44	13,630.60	17,583.47	3,064	m2	25.00	76,600.00	59,016.53
Street Lighting	Street Lighting - Road	95	m	216.34	20,552.30	225.67	21,438.65	27,655.86	16	No.	18,000.00	288,000.00	260,344.14
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	Item	0.00	0.00	0.00
Misc.	Regulatory Signage	3	Item	338.43	1,015.29	380.39	1,141.17	1,472.11	1	Item	14,000.00	14,000.00	12,527.89
	Line marking	1045	m2 of Pavement	3.11	3,249.95	4.09	4,274.05	5,513.52	8,426	m2	5.00	42,130.00	36,616.48
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	Item	0.00	0.00	0.00
	Landscape maintenance (roads)	1615	m2 of l'scape	2.90	4,683.50	2.96	4,780.40	6,166.72	65	weeks	1,500.00	97,500.00	91,333.28
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	Item	0.00	0.00	0.00
Other	Rock excavation	133	m3	100.00	13,300.00	115.00	15,295.00	19,730.55	268	m2	100.00	26,800.00	7,069.45
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	m	0.00	0.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	m	0.00	0.00	0.00
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	Item	0.00	0.00	0.00
Delivery	Council Fees	1.00	%	3.25	12,106.80	3.25	13,535.70	17,461.06	1.00	%	3.25	144,750.00	127,288.94
	VicRoads Fees	1.00	%	1.00	3,725.17	1.00	4,164.83	5,372.63	1.00	%	1.00	44,540.00	39,167.37
	Traffic Management	1.00	%	5.00	18,625.84	5.00	20,824.16	26,863.17	1.00	%	5.00	222,690.00	195,826.83
	Environmental Management	1.00	%	0.50	1,862.58	0.50	2,082.42	2,686.32	1.00	%	0.50	22,270.00	19,583.68
	Surveying and Design	1.00	%	5.00	18,625.84	5.00	20,824.16	26,863.17	1.00	%	5.00	222,690.00	195,826.83
	Supervision and Project management	1.00	%	9.00	33,526.51	9.00	37,483.49	48,353.70	1.00	%	9.00	400,840.00	352,486.30
	Site Establishment	1.00	%	2.50	9,312.92	2.50	10,412.08	13,431.58	1.00	%	2.50	111,350.00	97,918.42
	Contingency	1.00	%	15.00	55,877.52	15.00	62,472.48	80,589.51	1.00	%	15.00	668,070.00	587,480.49
Total - (2018) rates	Excluding Delivery				372,517.00		416,483.00						
	Including Delivery				526,180.00		588,283.00						
Total - (2021)	Excluding Delivery				406,044.00		453,967.00						

Appendix A

Toolern PSP & DCP - Road Projects

RD-05 - Secondary Divided Interim Arterial Road (Toolern Road [Exford to Toolern Ck], 136m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
rates	Including Delivery				573,537.00		641,228.00						
Total - (2024) rates	Excluding Delivery							537,263.37				4,453,770.00	-3,916,506.63
	Including Delivery							758,884.51				6,290,970.00	-5,532,085.49

Appendix A

Toolern PSP & DCP - Road Projects

RD-06 - Secondary Divided Interim Arterial Road (Toolern Road [Toolern Ck to Ferris], 1011m)

Group	Sub Item	VPA Benchmark Costings							WT Total Cost (2024)				
		Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	32980	m2	3.68	121,366.40	4.96	163,580.80	211,019.23	38,862	m2	14.21	552,161.00	341,141.77
	Earthworks	6776	m3	34.07	230,858.32	40.52	274,563.52	354,186.94	7,984	m3	32.05	255,858.00	-98,328.94
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	10670	m2	127.01	1,355,196.70	133.78	1,427,432.60	1,841,388.05	12,573	m2	194.47	2,445,102.00	603,713.95
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	2134	m2	14.22	30,345.48	16.16	34,485.44	44,486.22	12,573	m2	6.01	75,556.00	31,069.78
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
	Kerb and Channel	3880	m	54.81	212,662.80	60.90	236,292.00	304,816.68	2,286	m	82.42	188,412.00	-116,404.68
Concrete Works	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	5820	m2	63.51	369,628.20	73.63	428,526.60	552,799.31	6,858	m2	133.74	917,162.00	364,362.69
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	m2	0.00	0.00	0.00
	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	252	m	528.21	133,108.00	133,108.00
Drainage	Drainage Pipe 375mm CR Bfilled	979	m	259.10	253,658.90	282.96	277,017.84	357,353.01	0	m	0.00	0.00	-357,353.01
	Drainage Pipe 450mm CR Bfilled	485	m	299.43	145,223.55	334.33	162,150.05	209,173.56	1,143	m	560.00	640,080.00	430,906.44
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	57	No.	2,565.39	146,227.23	2,806.10	159,947.70	206,332.53	30	No.	4,356.30	130,689.00	-75,643.53
	Drainage - Sub-soil drainage	3880	m	33.88	131,454.40	43.40	168,392.00	217,225.68	2,286	m	94.99	217,152.00	-73.68
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
	Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	Item	0.00	0.00
Landscape	Tree Planting	64	No.	303.34	19,413.76	363.01	23,232.64	29,970.11	58	No.	1,000.00	58,000.00	28,029.89
	Landscaping	16490	m2	21.61	356,348.90	25.16	414,888.40	535,206.04	2,538	m2	30.00	76,131.00	-459,075.04
	Topsoil Seeding	16490	m2	7.21	118,892.90	8.44	139,175.60	179,536.52	8,459	m2	25.00	211,475.00	31,938.48
Street Lighting	Street Lighting - Road	970	m	216.34	209,849.80	225.67	218,899.90	282,380.87	23	No.	18,000.00	414,000.00	131,619.13
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	Item	0.00	0.00	0.00
Misc.	Regulatory Signage	22	Item	338.43	7,445.46	380.39	8,368.58	10,795.47	1	Item	18,500.00	18,500.00	7,704.53
	Line marking	10670	m2 of Pavement	3.11	33,183.70	4.09	43,640.30	56,295.99	12,573	m2	5.00	62,865.00	6,569.01
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	Item	0.00	0.00	0.00
	Landscape maintenance (roads)	16490	m2 of l'scape	2.90	47,821.00	2.96	48,810.40	62,965.42	65	weeks	1,500.00	97,500.00	34,534.58
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	Item	0.00	0.00	0.00
Other	Rock excavation	1356	m3	100.00	135,600.00	115.00	155,940.00	201,162.60	400	m2	100.00	40,000.00	-161,162.60
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	m	0.00	0.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	m	0.00	0.00	0.00
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	Item	0.00	0.00	0.00
Delivery	Council Fees	1.00	%	3.25	127,568.27	3.25	142,523.69	183,855.56	1.00	%	3.25	212,350.00	28,494.44
	VicRoads Fees	1.00	%	1.00	39,251.78	1.00	43,853.44	56,570.94	1.00	%	1.00	65,340.00	8,769.06
	Traffic Management	1.00	%	5.00	196,258.88	5.00	219,267.22	282,854.71	1.00	%	5.00	326,690.00	43,835.29
	Environmental Management	1.00	%	0.50	19,625.89	0.50	21,926.72	28,285.47	1.00	%	0.50	32,670.00	4,384.53
	Surveying and Design	1.00	%	5.00	196,258.88	5.00	219,267.22	282,854.71	1.00	%	5.00	326,690.00	43,835.29
	Supervision and Project management	1.00	%	9.00	353,265.98	9.00	394,680.99	509,138.48	1.00	%	9.00	588,040.00	78,901.52
	Site Establishment	1.00	%	2.50	98,129.44	2.50	109,633.61	141,427.36	1.00	%	2.50	163,350.00	21,922.64
	Contingency	1.00	%	15.00	588,776.63	15.00	657,801.66	848,564.14	1.00	%	15.00	980,070.00	131,505.86

Appendix A

Toolern PSP & DCP - Road Projects

RD-06 - Secondary Divided Interim Arterial Road (Toolern Road [Toolern Ck to Ferris], 1011m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2018) rates	Excluding Delivery				3,925,178.00		4,385,344.00						
	Including Delivery				5,544,313.00		6,194,299.00						
Total - (2021) rates	Excluding Delivery				4,278,444.00		4,780,026.00						
	Including Delivery				6,043,302.00		6,751,787.00						
Total - (2024) rates	Excluding Delivery							5,657,094.24				6,533,751.00	-876,656.76
	Including Delivery							7,990,645.61				9,228,951.00	-1,238,305.39

Appendix A

Toolern PSP & DCP - Road Projects

RD-07 - Secondary Divided Interim Arterial Road (Toolern Road [Ferris to Mt Cottrell], 806m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	27404	m2	3.68	100,846.72	4.96	135,923.84	175,341.75	26,452	m2	14.21	375,836.00	200,494.25
	Earthworks	5630	m3	34.07	191,814.10	40.52	228,127.60	294,284.60	5,435	m3	32.05	174,172.00	-120,112.60
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	8866	m2	127.01	1,126,070.66	133.78	1,186,093.48	1,530,060.59	8,558	m2	194.48	1,664,402.00	134,341.41
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1774	m2	14.22	25,226.28	16.16	28,667.84	36,981.51	8,558	m2	6.01	51,428.00	14,446.49
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
Concrete Works	Kerb and Channel	3224	m	54.81	176,707.44	60.90	196,341.60	253,280.66	1,556	m	82.42	128,246.00	-125,034.66
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	4836	m2	65.51	307,134.36	73.63	356,074.68	459,336.34	4,668	m2	133.74	624,280.00	164,943.66
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	m2	0.00	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	172	m	528.20	90,851.00	90,851.00
	Drainage Pipe 375mm CR Bfilled	819	m	259.10	212,202.90	282.96	231,744.24	298,950.07	0	m	0.00	0.00	-298,950.07
	Drainage Pipe 450mm CR Bfilled	403	m	299.43	120,670.29	334.33	134,734.99	173,808.14	778	m	560.00	435,680.00	261,871.86
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	48	No.	2,565.39	123,138.72	2,806.10	134,692.80	173,753.71	21	No.	4,357.24	91,502.00	-82,251.71
	Drainage - Sub-soil drainage	3224	m	33.88	109,229.12	43.40	139,921.60	180,498.86	1,556	m	94.99	147,808.00	-32,690.86
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	Item	0.00	0.00	0.00
	Tree Planting	53	No.	303.34	16,077.02	363.01	19,239.53	24,818.99	39	No.	1,000.00	39,000.00	14,181.01
Landscape	Landscaping	13702	m2	21.61	296,100.22	25.16	344,742.32	444,717.59	1,727	m2	30.01	51,822.00	-392,895.59
	Topsoil Seeding	13702	m2	7.21	98,791.42	8.44	115,644.88	149,181.90	5,758	m2	25.00	143,950.00	-5,231.90
Street Lighting	Street Lighting - Road	806	m	216.34	174,370.04	225.67	181,890.02	234,638.13	16	No.	18,000.00	288,000.00	53,361.87
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	Item	0.00	0.00	0.00
Misc.	Regulatory Signage	19	Item	338.43	6,430.17	380.39	7,227.41	9,323.36	1	Item	14,000.00	14,000.00	4,676.64
	Line marking	8866	m2 of Pavement	3.11	27,573.26	4.09	36,261.94	46,777.90	8,558	m2	5.00	42,790.00	-3,987.90
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	Item	0.00	0.00	0.00
	Landscape maintenance (roads)	13702	m2 of l'scape	2.90	39,735.80	2.96	40,557.92	52,319.72	65	weeks	1,500.00	97,500.00	45,180.28
Other	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	Item	0.00	0.00	0.00
	Rock excavation	1126	m3	100.00	112,600.00	115.00	129,490.00	167,042.10	272	m2	100.00	27,200.00	-139,842.10
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	0.00	0.00	0.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	0.00	0.00	0.00	0.00
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	0.00	0.00	0.00	0.00
Delivery	Council Fees	1.00	%	3.25	106,103.35	3.25	118,539.74	152,916.27	1.00	%	3.25	145,880.00	-7,036.27
	VicRoads Fees	1.00	%	1.00	32,647.19	1.00	36,473.77	47,051.16	1.00	%	1.00	44,890.00	-2,161.16
	Traffic Management	1.00	%	5.00	163,235.93	5.00	182,368.83	235,255.80	1.00	%	5.00	224,430.00	-10,825.80
	Environmental Management	1.00	%	0.50	16,323.59	0.50	18,236.88	23,525.58	1.00	%	0.50	22,450.00	-1,075.58
	Surveying and Design	1.00	%	5.00	163,235.93	5.00	182,368.83	235,255.80	1.00	%	5.00	224,430.00	-10,825.80
	Supervision and Project management	1.00	%	9.00	293,824.67	9.00	328,263.90	423,460.43	1.00	%	9.00	403,970.00	-19,490.43
	Site Establishment	1.00	%	2.50	81,617.96	2.50	91,184.42	117,627.90	1.00	%	2.50	112,220.00	-5,407.90
	Contingency	1.00	%	15.00	489,707.78	15.00	547,106.50	705,767.39	1.00	%	15.00	673,280.00	-32,487.39
Total - (2018) rates	Excluding Delivery				3,264,719.00		3,647,377.00						
	Including Delivery				4,611,415.00		5,151,920.00						
Total - (2021) rates	Excluding Delivery				3,558,544.00		3,975,641.00						
	Including Delivery				5,026,443.00		5,615,593.00						
Total - (2024) rates	Excluding Delivery							4,705,115.93				4,488,467.00	216,648.93
	Including Delivery							6,645,976.25				6,340,017.00	305,959.25

Appendix A

Toolern PSP & DCP - Road Projects

RD-08 - Secondary Interim Arterial Road (Toolern Road [Mt Cottrell to Paynes], 883m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	31518	m2	3.68	115,986.24	4.96	156,329.28	201,664.77	39,735	m2	14.21	564,564.00	362,899.23
	Earthworks	6476	m3	34.07	220,637.32	40.52	262,407.52	338,505.70	6,168	m3	32.05	197,661.00	-140,844.70
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	9,713	m2	209.66	2,036,426.00	2,036,426.00
	Secondary Arterial Pavement	10197	m2	127.01	1,295,120.97	133.78	1,364,154.66	1,759,759.51	0	NA	NA	0.00	-1,759,759.51
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	NA	NA	0.00	0.00
	Subgrade Preparation	2040	m2	14.22	29,008.80	16.16	32,966.40	42,526.66	9,713	m2	6.01	58,369.00	15,842.34
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	NA	NA	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Concrete Works	Kerb and Channel	3708	m	54.81	203,235.48	60.90	225,817.20	291,304.19	1,766	m	82.42	145,554.00	-145,750.19
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	NA	NA	0.00	0.00
	SUP/ Footpath	5562	m2	63.51	353,242.62	73.63	409,530.06	528,293.78	5,298	m2	133.74	708,534.00	180,240.22
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	NA	NA	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	795	m	528.21	419,923.00	419,923.00
	Drainage Pipe 375mm CR Bfilled	981	m	259.10	254,177.10	282.96	277,585.76	358,083.05	0	NA	NA	0.00	-358,083.05
	Drainage Pipe 450mm CR Bfilled	927	m	299.43	277,571.61	334.33	309,923.91	399,801.84	883	m	560.00	494,480.00	94,678.16
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	148	No.	2,565.39	379,677.72	2,806.10	415,302.80	535,740.61	24	No	4,359.58	104,630.00	-431,110.61
	Drainage - Sub-soil drainage	3708	m	33.88	125,627.04	43.40	160,927.20	207,596.09	1,766	m	94.99	167,756.00	-39,840.09
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	NA	NA	0.00	0.00
Landscape	Tree Planting	61	No.	303.34	18,503.74	363.01	22,143.61	28,565.26	45	No	1,000.00	45,000.00	16,434.74
	Landscaping	15759	m2	21.61	340,551.99	25.16	396,496.44	511,480.41	7,417	m2	30.00	222,516.00	-288,964.41
	Topsoil Seeding	15759	m2	7.21	113,622.39	8.44	133,005.96	171,577.69	24,724	m2	25.00	618,100.00	446,522.31
Street Lighting	Street Lighting - Road	927	m	216.34	200,547.18	225.67	209,196.09	269,862.96	18	No	18,000.00	324,000.00	54,137.04
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	NA	NA	0.00	0.00
Misc.	Regulatory Signage	21	Item	338.43	7,107.03	380.39	7,988.19	10,304.77	1	item	14,500.00	14,500.00	4,195.23
	Line marking	10197	m2 of Pavement	3.11	31,712.67	4.09	41,705.73	53,800.39	9,713	m2	5.00	48,565.00	-5,235.39
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	NA	NA	0.00	0.00
	Landscape maintenance (roads)	15759	m2 of l'scape	2.90	45,701.10	2.96	46,646.64	60,174.17	65	weeks	1,500.00	97,500.00	37,325.83
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	NA	NA	0.00	0.00
Other	Rock excavation	1296	m3	100.00	129,600.00	115.00	149,040.00	192,261.60	309	m3	100.00	30,900.00	-161,361.60
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00					0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00					0.00
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00					0.00
	Tree Vegetation removal								39,735	m2	10.00	397,350.00	397,350.00
Delivery	Council Fees	1.00	%	3.25	134,603.01	3.25	150,187.88	193,742.36	1.00	%	3.25	217,640.00	23,897.64
	VicRoads Fees	1.00	%	1.00	41,416.31	1.00	46,211.65	59,613.03	1.00	%	1.00	66,970.00	7,356.97
	Traffic Management	1.00	%	5.00	207,081.55	5.00	231,058.27	298,065.17	1.00	%	5.00	334,820.00	36,754.83
	Environmental Management	1.00	%	0.50	20,708.16	0.50	23,105.83	29,806.52	1.00	%	0.50	33,490.00	3,683.48
	Surveying and Design	1.00	%	5.00	207,081.55	5.00	231,058.27	298,065.17	1.00	%	5.00	334,820.00	36,754.83
	Supervision and Project management	1.00	%	9.00	372,746.79	9.00	415,904.89	536,517.31	1.00	%	9.00	602,670.00	66,152.69
	Site Establishment	1.00	%	2.50	103,540.78	2.50	115,529.14	149,032.59	1.00	%	2.50	167,410.00	18,377.41
	Contingency	1.00	%	15.00	621,244.65	15.00	693,174.82	894,195.51	1.00	%	15.00	1,004,450.00	110,254.49

Appendix A

Toolern PSP & DCP - Road Projects

RD-08 - Secondary Interim Arterial Road (Toolern Road [Mt Cottrell to Paynes], 883m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2018) rates	Excluding Delivery				4,141,631.00		4,621,165.00						
	Including Delivery				5,850,054.00		6,527,396.00						
Total - (2021) rates	Excluding Delivery				4,514,378.00		5,037,071.00						
	Including Delivery				6,376,559.00		7,114,863.00						
Total - (2024) rates	Excluding Delivery							5,961,303.43				6,696,328.00	-735,024.57
	Including Delivery							8,420,341.10				9,458,598.00	-1,038,256.90

Appendix A

Toolern PSP & DCP - Road Projects

RD-11 - Primary Interim Arterial Road (Mt Cottrell Road [UGB to Toolern Rd to Rail], 678m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	35998	m2	3.68	132,472.64	4.96	178,550.08	230,329.60	8,815	m2	14.21	125,246.00	-105,083.60
	Earthworks	8789	m3	34.07	299,441.23	40.52	356,130.28	459,408.06	2,153	m3	32.05	68,996.00	-390,412.06
Road Pavement	Primary Arterial Pavement	12292	m2	169.62	2,084,969.04	186.26	2,289,507.92	2,953,465.22	3,010	m2	209.80	631,484.00	-2,321,981.22
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	NA	NA	0.00	0.00
	Subgrade Preparation	2459	m2	14.22	34,966.98	16.16	39,737.44	51,261.30	3,010	No	6.01	18,088.00	-33,173.30
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	NA	NA	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Concrete Works	Kerb and Channel	3512	m	54.81	192,492.72	60.90	213,880.80	275,906.23	860	m	82.42	70,881.00	-205,025.23
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	1,290	m2	133.74	172,519.00	172,519.00
	SUP/ Footpath	6585	m2	63.51	418,213.35	73.63	484,853.55	625,461.08	323	m2	133.74	43,197.00	-582,264.08
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	NA	NA	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	61	m	528.20	32,220.00	32,220.00
	Drainage Pipe 375mm CR Bfilled	929	m	259.10	240,703.90	282.96	262,869.84	339,102.09	0	NA	NA	0.00	-339,102.09
	Drainage Pipe 450mm CR Bfilled	878	m	299.43	262,899.54	334.33	293,541.74	378,668.84	430	m	560.00	240,800.00	-137,868.84
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	140	No.	2,565.39	359,154.60	2,806.10	392,854.00	506,781.66	12	No	4,359.58	52,315.00	-454,466.66
	Drainage - Sub-soil drainage	3512	m	33.88	118,986.56	43.40	152,420.80	196,622.83	860	m	94.99	81,693.00	-114,929.83
Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00	
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	NA	NA	0.00	0.00
Landscape	Tree Planting	58	No.	303.34	17,593.72	363.01	21,054.58	27,160.41	11	No	1,000.00	11,000.00	-16,160.41
	Landscaping	17121	m2	21.61	369,984.81	25.16	430,764.36	555,686.02	1,258	m2	30.00	37,737.00	-517,949.02
	Topsoil Seeding	17121	m2	7.21	123,442.41	8.44	144,501.24	186,406.60	4,193	m2	25.00	104,825.00	-81,581.60
Street Lighting	Street Lighting - Road	878	m	216.34	189,946.52	225.67	198,138.26	255,598.36	9	no	18,000.00	162,000.00	-93,598.36
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	NA	NA	0.00	0.00
Misc.	Regulatory Signage	20	Item	338.43	6,768.60	380.39	7,607.80	9,814.06	1	Item	4,000.00	4,000.00	-5,814.06
	Line marking	12292	m2 of Pavement	3.11	38,228.12	4.09	50,274.28	64,853.82	3,010	m2	5.00	15,050.00	-49,803.82
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	NA	NA	0.00	0.00
	Landscape maintenance (roads)	17121	m2 of l'scape	2.90	49,650.90	2.96	50,678.16	65,374.83	65	weeks	1,500.00	97,500.00	32,125.17
Other	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	NA	NA	0.00	0.00
	Rock excavation	1758	m3	100.00	175,800.00	115.00	202,170.00	260,799.30	108	m3	100.00	10,800.00	-249,999.30
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	NA	NA	0.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	NA	NA	0.00	0.00
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	NA	NA	0.00	0.00
	Power pole relocation allowance	6	Item	40,000.00	240,000.00	46,000.00	276,000.00	356,040.00	6	no	5,000.00	30,000.00	-326,040.00
	Dirt/Gravel Road removal								2,614	m2	25.00	65,350.00	65,350.00
	Electrical overhead relocation								215	m	1,210.00	260,150.00	260,150.00
Tree/vegetation removal								5,356	m2	10.00	53,560.00	53,560.00	
Delivery	Council Fees	1.00	%	3.25	174,060.76	3.25	196,479.89	253,459.06	1.00	%	3.25	77,660.00	-175,799.06
	VicRoads Fees	1.00	%	1.00	53,557.16	1.00	60,455.35	77,987.40	1.00	%	1.00	23,900.00	-54,087.40
	Traffic Management	1.00	%	5.00	267,785.78	5.00	302,276.76	389,937.02	1.00	%	5.00	119,480.00	-270,457.02
	Environmental Management	1.00	%	0.50	26,778.58	0.50	30,227.68	38,993.70	1.00	%	0.50	11,950.00	-27,043.70
	Surveying and Design	1.00	%	5.00	267,785.78	5.00	302,276.76	389,937.02	1.00	%	5.00	119,480.00	-270,457.02
	Supervision and Project management	1.00	%	9.00	482,014.41	9.00	544,098.16	701,886.63	1.00	%	9.00	215,050.00	-486,836.63
	Site Establishment	1.00	%	2.50	133,892.89	2.50	151,138.38	194,968.51	1.00	%	2.50	59,740.00	-135,228.51
	Contingency	1.00	%	15.00	803,357.35	15.00	906,830.27	1,169,811.05	1.00	%	15.00	358,420.00	-811,391.05
<b>Total - (2018)</b>	Excluding Delivery				<b>5,355,716.00</b>		<b>6,045,535.00</b>						



Appendix A

Toolern PSP & DCP - Road Projects

RD-11 - Primary Interim Arterial Road (Mt Cottrell Road [UGB to Toolern Rd to Rail], 678m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
rates	Including Delivery				7,564,948.00		8,539,318.00						
Total - (2021) rates	Excluding Delivery				5,837,731.00		6,589,634.00						
	Including Delivery				8,245,795.00		9,307,858.00						
Total - (2024) rates	Excluding Delivery							7,798,740.32				2,589,411.00	5,409,329.32
	Including Delivery							11,015,720.70				3,375,091.00	7,640,629.70

Appendix A

Toolern PSP & DCP - Road Projects

RD-14 - Primary Interim Arterial Road (Shogaki Drive West [Mt Cottrell to Ferris], 438m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	19710	m2	3.68	72,532.80	4.96	97,761.60	126,112.46	19,665	m2	14.21	279,405.00	153,292.54
	Earthworks	2193	m3	34.07	74,715.51	40.52	88,860.36	114,629.86	4,375	m3	32.05	140,202.00	25,572.14
Road Pavement	Primary Arterial Pavement	3066	m2	169.62	520,054.92	186.26	571,073.16	736,684.38	6,118	m2	209.73	1,283,146.00	546,461.62
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	NA	NA	0.00	0.00
	Subgrade Preparation	614	m2	14.22	8,731.08	16.16	9,922.24	12,799.69	6,118	m2	6.01	36,765.00	23,965.31
	Pavement Rehab	3066	m2	51.58	158,144.28	59.32	181,875.12	234,618.90	393	m2	75.00	29,475.00	-205,143.90
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
	Concrete Works	Kerb and Channel	1752	m	54.81	96,027.12	60.90	106,696.80	137,638.87	1,748	m	82.42	144,070.00
Cycle Path		0	m2	76.59	0.00	91.94	0.00	0.00	2,622	m2	133.74	350,656.00	350,656.00
SUP/ Footpath		3942	m2	63.51	250,356.42	73.63	290,249.46	374,421.80	2,185	m2	133.74	292,213.00	-82,208.80
Traffic Island		0	m2	77.60	0.00	84.07	0.00	0.00	0	NA	NA	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	123	m	528.20	64,969.00	64,969.00
	Drainage Pipe 375mm CR Bfilled	462	m	259.10	119,704.20	282.96	130,727.52	168,638.50	0	NA	NA	0.00	-168,638.50
	Drainage Pipe 450mm CR Bfilled	438	m	299.43	131,150.34	334.33	146,436.54	188,903.14	874	m	560.00	489,440.00	300,536.86
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	68	No.	2,565.39	174,446.52	2,806.10	190,814.80	246,151.09	24	No	4,359.58	104,630.00	-141,521.09
	Drainage - Sub-soil drainage	1752	m	33.88	59,357.76	43.40	76,036.80	98,087.47	1,748	m	94.99	166,046.00	67,958.53
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	NA	NA	0.00	0.00
Landscape	Tree Planting	29	No.	303.34	8,796.86	363.01	10,527.29	13,580.20	22	No	1,000.00	22,000.00	8,419.80
	Landscaping	9636	m2	21.61	208,233.96	25.16	242,441.76	312,749.87	2,360	m2	30.00	70,794.00	-241,955.87
	Topsoil Seeding	9636	m2	7.21	69,475.56	8.44	81,327.84	104,912.91	7,866	m2	25.00	196,650.00	91,737.09
Street Lighting	Street Lighting - Road	438	m	216.34	94,756.92	225.67	98,843.46	127,508.06	0	NA	NA	0.00	-127,508.06
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	NA	NA	0.00	0.00
Misc.	Regulatory Signage	10	Item	338.43	3,384.30	380.39	3,803.90	4,907.03	1	item	7,500.00	7,500.00	2,592.97
	Line marking	3066	m2 of Pavement	3.11	9,535.26	4.09	12,539.94	16,176.52	6,511	m2	5.00	32,555.00	16,378.48
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	NA	NA	0.00	0.00
	Landscape maintenance (roads)	9636	m2 of l'scape	2.90	27,944.40	2.96	28,522.56	36,794.10	65	weeks	1,500.00	97,500.00	60,705.90
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	NA	NA	0.00	0.00
Other	Rock excavation	439	m3	100.00	43,900.00	115.00	50,485.00	65,125.65	219	m3	100.00	21,900.00	-43,225.65
	Telecom/power relocation allowance	383	m	1,300.00	497,900.00	1,495.00	572,585.00	738,634.65	355	m	1,500.00	532,500.00	-206,134.65
	Water/gas relocation allowance	876	m	300.00	262,800.00	345.00	302,220.00	389,863.80	876	m	2,200.00	1,927,200.00	1,537,336.20
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	NA	NA	0.00	0.00
	Street Light Relocation								15	No	5,000.00	75,000.00	75,000.00
	Tree/vegetation removal								18,937	m2	10.00	189,370.00	189,370.00
	Concrete/footpath removal								335	m2	50.00	16,750.00	16,750.00
	Sawcut pavement tie ins, new kerb & channel, etc.								172	m	480.00	82,560.00	82,560.00
	Pavement removal								3,659	m2	50.00	182,950.00	182,950.00
Delivery	Council Fees	1.00	%	3.25	93,988.32	3.25	107,046.91	138,090.52	1.00	%	3.25	222,180.00	84,089.48
	VicRoads Fees	1.00	%	1.00	28,919.48	1.00	32,937.51	42,489.39	1.00	%	1.00	68,370.00	25,880.61
	Traffic Management	1.00	%	5.00	144,597.41	5.00	164,687.56	212,446.95	1.00	%	5.00	341,820.00	129,373.05
	Environmental Management	1.00	%	0.50	14,459.74	0.50	16,468.76	21,244.69	1.00	%	0.50	34,190.00	12,945.31
	Surveying and Design	1.00	%	5.00	144,597.41	5.00	164,687.56	212,446.95	1.00	%	5.00	341,820.00	129,373.05
	Supervision and Project management	1.00	%	1.00	260,275.34	9.00	296,437.60	382,404.51	1.00	%	9.00	615,270.00	232,865.49
	Site Establishment	1.00	%	1.00	72,298.71	2.50	82,343.78	106,223.47	1.00	%	2.50	170,910.00	64,686.53
	Contingency	1.00	%	1.00	433,792.23	15.00	494,062.67	637,340.85	1.00	%	15.00	1,025,440.00	388,099.15

Appendix A

Toolern PSP & DCP - Road Projects

RD-14 - Primary Interim Arterial Road (Shogaki Drive West [Mt Cottrell to Ferris], 438m)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2018) rates	Excluding Delivery				2,891,948.00		3,293,751.00						
	Including Delivery				4,084,877.00		4,652,423.00						
Total - (2021) rates	Excluding Delivery				3,152,224.00		3,590,189.00						
	Including Delivery				4,452,516.00		5,071,142.00						
Total - (2024) rates	Excluding Delivery							4,008,196.66				6,836,246.00	-2,828,049.34
	Including Delivery							5,760,883.99				9,656,246.00	-3,895,362.01

Appendix A

Toolern PSP & DCP - Road Projects

RD-15 - Primary Ultimate Arterial Road (Ferris Road [Western Hwy to Shogaki], 350m)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	14630	m2	3.68	53,838.40	4.96	72,564.80	93,608.59	14,484	m2	14.21	205,792.00	112,183.41
	Earthworks	3504	m3	34.07	119,381.28	40.52	141,982.08	183,156.88	3,088	m3	32.05	98,959.00	-84,197.88
Road Pavement	Primary Arterial Pavement	4900	m2	169.62	831,138.00	186.26	912,674.00	1,177,349.46	4,318	m2	209.76	905,743.00	-271,606.46
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	NA	NA	0.00	0.00
	Subgrade Preparation	980	m2	14.22	13,935.60	16.16	15,836.80	20,429.47	4,318	m2	6.01	25,948.00	5,518.53
	Pavement Rehab	2450	m2	51.58	126,371.00	59.32	145,334.00	187,480.86	5,521	m2	75.00	414,075.00	226,594.14
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
	Concrete Works	Kerb and Channel	1050	m	54.81	57,550.50	60.90	63,945.00	82,489.05	1,207	m	82.42	99,481.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	1,812	m2	133.74	242,330.00	242,330.00
	SUP/ Footpath	1050	m2	63.51	66,685.50	73.63	77,311.50	99,731.84	432	m2	133.74	57,774.00	-41,957.84
	Traffic Island	0	m2	77.60	0.00	84.07	0.00	0.00	0	NA	NA	0.00	0.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	85	m	528.20	44,897.00	44,897.00
	Drainage Pipe 375mm CR Bfilled	371	m	259.10	96,126.10	282.96	104,978.16	135,421.83	0	NA	NA	0.00	-135,421.83
	Drainage Pipe 450mm CR Bfilled	350	m	299.43	104,800.50	334.33	117,015.50	150,950.00	603	m	NA	337,680.00	186,730.01
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	56	No.	2,565.39	143,661.84	2,806.10	157,141.60	202,712.66	17	No	4,356.71	74,064.00	-128,648.66
	Drainage - Sub-soil drainage	1050	m	33.88	35,574.00	43.40	45,570.00	58,785.30	1,207	m	94.99	114,655.00	55,869.70
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	0	NA	NA	0.00	0.00
Landscape	Tree Planting	23	No.	303.34	6,976.82	363.01	8,349.23	10,770.51	16	No	1,000.00	16,000.00	5,229.49
	Landscaping	4130	m2	21.61	89,249.30	25.16	103,910.80	134,044.93	2,279	m2	30.00	68,373.00	-65,671.93
	Topsoil Seeding	4130	m2	7.21	29,777.30	8.44	34,857.20	44,965.79	7,597	m2	25.00	189,925.00	144,959.21
Street Lighting	Street Lighting - Road	350	m	216.34	75,719.00	225.67	78,984.50	101,890.01	13	No	18,000.00	234,000.00	132,110.00
	Street Lighting - Intersections	0	Item/ Per Leg	48,468.93	0.00	55,617.74	0.00	0.00	0	NA	NA	0.00	0.00
Misc.	Regulatory Signage	8	Item	338.43	2,707.44	380.39	3,043.12	3,925.62	1	Item	7,000.00	7,000.00	3,074.38
	Line marking	4900	m2 of Pavement	3.11	15,239.00	4.09	20,041.00	25,852.89	9,839	m2	5.00	49,195.00	23,342.11
	Landscape maintenance (intersections)	0	Item	71,344.66	0.00	88,131.43	0.00	0.00	0	NA	NA	0.00	0.00
	Landscape maintenance (roads)	4130	m2 of l'scape	2.90	11,977.00	2.96	12,224.80	15,769.99	65	weeks	1,500.00	97,500.00	81,730.01
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	NA	NA	0.00	0.00
Other	Rock excavation	701	m3	100.00	70,100.00	115.00	80,615.00	103,993.35	155	m3	100.00	15,500.00	-88,493.35
	Telecom/power relocation allowance	323	m	1,300.00	419,900.00	1,495.00	482,885.00	622,921.65	604	m	1,500.00	906,000.00	283,078.35
	Water/gas relocation allowance	85	m	300.00	25,500.00	345.00	29,325.00	37,829.25	85	m	2,200.00	187,000.00	149,170.75
	Service proving fee	0	Item	3,000.00	0.00	3,450.00	0.00	0.00	0	NA	NA	0.00	0.00
	Kerb Removal	323	m	60.00	19,380.00	69.00	22,287.00	28,750.23	593	m	10.00	5,930.00	-22,820.23
	Earthen mound removal	8320	m3	34.07	283,462.40	40.52	337,126.40	434,893.06	0	NA	NA	0.00	-434,893.06
	Sawcut pavement tie ins, new kerb & channel, etc.	323	m	14.00	4,522.00	16.10	5,200.30	6,708.39	1,082	m	480.00	519,360.00	512,651.61
	Tree/vegetation removal								7,582	m2	10.00	75,820.00	
	Concrete/footpath removal								499	m	50.00	24,950.00	
Delivery	Council Fees	1.00	%	3.25	87,866.12	3.25	99,879.09	128,844.03	1.00	%	3.25	163,090.00	34,245.97
	VicRoads Fees	1.00	%	1.00	27,035.73	1.00	30,732.03	39,644.32	1.00	%	1.00	50,180.00	10,535.68
	Traffic Management	1.00	%	5.00	135,178.65	5.00	153,660.14	198,221.58	1.00	%	5.00	250,900.00	52,678.42
	Environmental Management	1.00	%	0.50	13,517.86	0.50	15,366.01	19,822.16	1.00	%	0.50	25,090.00	5,267.84
	Surveying and Design	1.00	%	5.00	135,178.65	5.00	153,660.14	198,221.58	1.00	%	5.00	250,900.00	52,678.42
	Supervision and Project management	1.00	%	9.00	243,321.57	9.00	276,588.25	356,798.84	1.00	%	9.00	451,620.00	94,821.16
	Site Establishment	1.00	%	2.50	67,589.32	2.50	76,830.07	99,110.79	1.00	%	2.50	125,450.00	26,339.21
	Contingency	1.00	%	15.00	405,535.95	15.00	460,980.42	594,664.74	1.00	%	15.00	752,700.00	158,035.26



## APPENDIX B

INDEPENDENT TRANSPORT INFRASTRUCTURE COST  
ESTIMATES - INTERSECTIONS

PR-025803 - Toolern Creek PSP and DCP

Intersection Costs Summary

Civil Component No	Description	VPA Total Cost (\$ - 2021)	VPA Total Cost (\$ - 2024)	WT Total Cost (\$ - 2024)	Variance (\$ - 2024)
		A	B	C	B-C
IT-01	IT-01 - Secondary - Connector Intersection (Rees Road & East-West Arterial Road)	4,832,428.00	5,719,111.19	6,935,264.00	-1,216,152.81
IT-02	IT-02 - Secondary - Secondary T-Intersection (Exford Road & East-West Arterial Road)	6,003,028.94	7,104,502.13	9,344,893.00	-2,240,390.87
IT-03	IT-03 - Secondary - Secondary T-Intersection (Exford Road & Toolern Road)	8,928,408.00	10,566,647.33	14,651,177.00	-4,084,529.67
IT-04	IT-04 - Secondary - Secondary Lane Upgrades (Exford Road & Greigs Road)	2,686,264.00	3,179,155.25	2,617,098.00	562,057.25
IT-05	IT-05 - Secondary - Secondary Intersection (Ferris Road & Toolern Road)	9,032,022.00	10,689,272.59	11,042,729.00	-353,456.41
IT-06	IT-06 - Primary - Secondary Intersection (Mt Cottrell Road & Toolern Road)	11,738,409.00	13,892,245.28	15,945,923.00	-2,053,677.72
IT-10	IT-10 - Primary - Primary Intersection (Mt Cottrell Road & Shogaki Drive)	7,109,635.00	8,414,153.87	9,293,241.00	-879,087.13
IT-12	IT-12 - Primary - Connector T-Intersection (Shogaki Drive & Connector Road)	10,179,831.00	12,047,688.26	15,063,802.00	-3,016,113.74
IT-13	IT-13 - Primary - Secondary Intersection (Ferris Road, Shogaki Drive & Abey Road)	11,062,998.00	13,092,905.33	15,031,268.00	-1,938,362.67
IT-16	IT-16 - Secondary - Connector T-Intersection (Abey Road, Industry Collector Road)	5,190,822.00	6,143,265.19	7,223,160.00	-1,079,894.81
IT-17	IT-17 - Secondary - Connector T-Intersection (Abey Road, Bundy Drive)	5,652,281.00	6,689,395.92	7,830,151.00	-1,140,755.08
IT-18	IT-18 - Primary- Connector Intersection (Ferris Road, Shakamaker Drive)	7,973,390.00	9,436,397.03	11,290,641.00	-1,854,243.97
IT-20	IT-20 - Primary- Connector Intersection (Mt Cottrell Road, South Connector Road)	9,393,854.00	11,117,496.53	9,901,985.00	1,215,511.53
IT-21	IT-21 - Primary- Connector Intersection (Toolern Road, Eastern North-South Connector Road)	6,512,388.00	7,707,320.11	8,182,879.00	-475,558.89
IT-22	IT-22 - Secondary- Connector Intersection (Toolern Road, Central North-South Connector Road)	5,595,492.00	6,622,186.11	8,024,279.00	-1,402,092.89
IT-23	IT-23 - Secondary- Connector T-Intersection (Toolern Road, Western North-South Connector Road)	4,802,624.00	5,683,838.35	6,914,817.00	-1,230,978.65
IT-25	IT-25 - Primary- Connector T-Intersection (Mt Cottrell Road, Bridge Road)	983,157.00	1,163,551.34	3,359,117.00	-2,195,565.66
IT-29	IT-29- Secondary- Connector Intersection (Ferris Road, South Connector Road)	4,598,543.00	5,442,311.32	6,247,041.00	-804,729.68
	<b>TOTAL - INTERSECTIONS</b>	<b>122,275,574.94</b>	<b>144,711,443.15</b>	<b>168,899,465.00</b>	<b>-24,188,021.85</b>

Toolern PSP & DCP - Intersection Projects

IT-01 - Secondary - Connector Intersection (Rees Road & East-West Arterial Road)

Group	Sub Item	VPA Benchmark Costings							WT Total Cost (2024)				
		Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	17422	m2	3.68	64,112.96	4.96	86,413.12	111,472.92	16,407	m2	14.83	243,273.00	131,800.08
	Earthworks	4136	m3	34.07	140,913.52	40.52	167,590.72	216,192.03	3,924	m3	32.05	125,750.00	-90,442.03
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	6512	m2	127.01	827,089.12	133.78	871,175.36	1,123,816.21	6,178	m2	194.51	1,201,657.00	77,840.79
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1303	m2	14.22	18,528.66	16.16	21,056.48	27,162.86	6,178	m2	6.01	37,126.00	9,963.14
	Pavement Rehab	2106	m2	51.58	108,627.48	59.32	124,927.92	161,157.02	2,191	m2	75.00	164,325.00	3,167.98
	Pavement Removal	416	m2	140.00	58,240.00	161.00	66,976.00	86,399.04	384	m2	50.00	19,200.00	-67,199.04
Concrete Works	Kerb and Channel	1842	m	54.81	100,960.02	60.90	112,177.80	144,709.36	1,819	m	82.42	149,922.00	5,212.64
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	1,417	m2	73.50	104,150.00	104,150.00
	SUP/ Footpath	2488	m2	63.51	158,012.88	73.63	183,191.44	236,316.96	2,667	m2	133.74	356,674.00	120,357.04
	Traffic Island	293	m2	77.60	22,736.80	84.07	24,632.51	31,775.94	0	m2	0.00	0.00	-31,775.94
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	182	m	528.20	96,133.00	96,133.00
	Drainage Pipe 375mm CR Bfilled	400	m	259.10	103,640.00	282.96	113,184.00	146,007.36	0	m	0.00	0.00	-146,007.36
	Drainage Pipe 450mm CR Bfilled	269	m	299.43	80,546.67	334.33	89,934.77	116,015.85	948	m	560.00	530,880.00	414,864.15
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	14	No.	2,565.39	35,915.46	2,806.10	39,285.40	50,678.17	13	No.	4,355.77	56,625.00	5,946.83
	Drainage - Sub-soil drainage	759	m	33.88	25,714.92	43.40	32,940.60	42,493.37	1,819	m	94.99	172,790.00	130,296.63
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	460,000.00	460,000.00	-204,537.51
Landscape	Tree Planting	60	No.	303.34	18,200.40	363.01	21,780.60	28,096.97	27	No.	1,000.00	27,000.00	-1,096.97
	Landscaping	5709	m2	21.61	123,371.49	25.16	143,638.44	185,293.59	1,559	m2	30.00	46,764.00	-138,529.59
	Topsoil Seeding	5709	m2	7.21	41,161.89	8.44	48,183.96	62,157.31	5,196	m2	25.00	129,900.00	67,742.69
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	N/A	Item	0.00	N/A	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	21	No.	18,000.00	378,000.00	91,012.46
Misc.	Regulatory Signage	10	Item	338.43	3,384.30	380.39	3,803.90	4,907.03	1	Item	15,000.00	15,000.00	10,092.97
	Line marking	9040	m2 of Pavement	3.11	28,114.40	4.09	36,973.60	47,695.94	8,369	m2	5.00	41,845.00	-5,850.94
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	N/A	weeks	0.00	N/A	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7,018.32	319.78	7,674.72	9,900.39	0	Item	0.00	0.00	-9,900.39
Other	Rock excavation	159	m3	100.00	15,900.00	115.00	18,285.00	23,587.65	197	m3	100.00	19,700.00	-3,887.65
	Telecom/power relocation allowance	48	m	1,300.00	62,400.00	1,495.00	71,760.00	92,570.40	48	m	1,500.00	72,000.00	-20,570.40
	Water/gas relocation allowance	46	m	300.00	13,800.00	345.00	15,870.00	20,472.30	46	m	2,200.00	101,200.00	80,727.70
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
	Sawcut pavement tie ins, new kerb & channel, etc.	0	m	0.00	0.00	0.00	0.00	0.00	526	m	480.00	252,480.00	252,480.00
Delivery	Council Fees	1.00	%	3.25	90,107.25	3.25	102,007.88	131,590.17	1.00	%	3.25	159,580.00	27,989.83
	VicRoads Fees	1.00	%	1.00	27,725.31	1.00	31,387.04	40,489.28	1.00	%	1.00	49,100.00	8,610.72
	Traffic Management	1.00	%	5.00	138,626.54	5.00	156,935.20	202,446.41	1.00	%	5.00	245,500.00	43,053.59
	Environmental Management	1.00	%	0.50	13,862.65	0.50	15,693.52	20,244.64	1.00	%	0.50	24,550.00	4,305.36
	Surveying and Design	1.00	%	5.00	138,626.54	5.00	156,935.20	202,446.41	1.00	%	5.00	245,500.00	43,053.59
	Supervision and Project management	1.00	%	9.00	249,527.77	9.00	282,483.37	364,403.54	1.00	%	9.00	441,900.00	77,496.46
	Site Establishment	1.00	%	2.50	69,313.27	2.50	78,467.60	101,223.21	1.00	%	2.50	122,750.00	21,526.79

Toolern PSP & DCP - Intersection Projects

IT-01 - Secondary - Connector Intersection (Rees Road & East-West Arterial Road)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
	Contingency	1.00	%	15.00	415,879.62	15.00	470,805.61	607,339.24	1.00	%	15.00	736,490.00	129,150.76
Total - (2018) rates	Excluding Delivery				2,772,531.00		3,138,704.00						
	Including Delivery				3,916,200.00		4,433,420.00						
Total - (2021) rates	Excluding Delivery				3,022,059.00		3,421,188.00						
	Including Delivery				4,268,658.00		4,832,428.00						
Total - (2024) rates	Excluding Delivery							4,048,928.28				4,909,894.00	-860,965.72
	Including Delivery							5,719,111.19				6,935,264.00	-1,216,152.81



		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	20039	m2	3.68	73,743.52	4.96	99,393.44	128,217.54	18,133	m2	14.21	257,638.00	129,420.46
	Earthworks	4224	m3	34.07	143,911.68	40.52	171,156.48	220,791.86	4,084	m3	32.05	130,877.00	-89,914.86
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	6651	m2	127.01	844,743.51	133.78	889,770.78	1,147,804.31	6,430	m2	194.48	1,250,511.00	102,706.69
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1331	m2	14.22	18,926.82	16.16	21,508.96	27,746.56	6,430	m2	6.01	38,640.00	10,893.44
	Pavement Rehab	3891	m2	51.58	200,697.78	59.32	230,814.12	297,750.21	3,746	m2	75.00	280,950.00	-16,800.21
	Pavement Removal	490	m2	140.00	68,600.00	161.00	78,890.00	101,768.10	463	m2	50.00	23,150.00	-78,618.10
Concrete Works	Kerb and Channel	2036	m	54.81	111,593.16	60.90	123,992.40	159,950.20	2,153	m	82.42	177,450.00	17,499.80
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	2,312	m2	73.50	169,932.00	169,932.00
	SUP/ Footpath	2588	m2	63.51	164,363.88	73.63	190,554.44	245,815.23	2,482	m2	133.74	331,933.00	86,117.77
	Traffic Island	186	m2	77.60	14,433.60	84.07	15,637.02	20,171.76	0	m2	0.00	0.00	-20,171.76
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	245	m	528.20	129,410.00	129,410.00
	Drainage Pipe 375mm CR Bfilled	591	m	259.10	153,128.10	282.96	167,229.36	215,725.87	0	m	0.00	0.00	-215,725.87
	Drainage Pipe 450mm CR Bfilled	400	m	299.43	119,772.00	334.33	133,732.00	172,514.28	1,050	m	560.00	588,000.00	415,485.72
	Drainage Pipe 525mm CR Bfilled	84	m	403.86	33,924.24	448.03	37,634.52	48,548.53	0	m	0.00	0.00	-48,548.53
	Drainage - pits	23	No.	2,565.39	59,003.97	2,806.10	64,540.30	83,256.99	17	No.	4,356.71	74,064.00	-9,192.99
	Drainage - Sub-soil drainage	2036	m	33.88	68,979.68	43.40	88,362.40	113,987.50	2,153	m	94.99	204,518.00	90,530.50
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109,730.28	329,190.84	128,786.34	386,359.02	498,403.14	1	Item	460,000.00	460,000.00	-38,403.14
Landscape	Tree Planting	30	No.	303.34	9,100.20	363.01	10,890.30	14,048.49	32	No.	1,000.00	32,000.00	17,951.51
	Landscaping	6879	m2	21.61	148,655.19	25.16	173,075.64	223,267.58	1,643	m2	29.99	49,275.00	-173,992.58
	Topsoil Seeding	6879	m2	7.21	49,597.59	8.44	58,058.76	74,895.80	5,475	m2	25.00	136,875.00	61,979.20
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	N/A	Item	0.00	N/A	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48,468.93	145,406.79	55,617.74	166,853.22	215,240.65	21	No.	18,000.00	378,000.00	162,759.35
Misc	Regulatory Signage	5	Item	338.43	1,692.15	380.39	1,901.95	2,453.52	1	Item	21,500.00	21,500.00	19,046.48
	Line marking	6651	m2 of Pavement	3.11	20,684.61	4.09	27,202.59	35,091.34	10,176	m2	5.00	50,880.00	15,788.66
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	N/A	weeks	0.00	N/A	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5,263.74	319.78	5,756.04	7,425.29	1	Item	0.00	8,400.00	974.71
Other	Rock excavation	845	m3	100.00	84,500.00	115.00	97,175.00	125,355.75	205	m2	100.00	20,500.00	-104,855.75
	Telecom/power relocation allowance	295	m	1,300.00	383,500.00	1,495.00	441,025.00	568,922.25	295	m	1,500.00	442,500.00	-126,422.25
	Water/gas relocation allowance	365	m	300.00	109,500.00	345.00	125,925.00	162,443.25	365	m	2,200.00	803,000.00	640,556.75
	Service proving fee	1	Item	3,000.00	10,000.00	3,450.00	3,450.00	4,450.50	1	Item	10,000.00	10,000.00	5,549.50
	Sawcut pavement tie ins, new kerb & channel, etc.	0	m	0.00	0.00	0.00	0.00	0.00	934	m	480.00	448,320.00	448,320.00

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Delivery	Council Fees	1.00	%	3.25	111,938.38	3.25	126,718.16	163,466.42	1.00	%	3.25	215,020.00	51,553.58
	VicRoads Fees	1.00	%	1.00	34,442.58	1.00	38,990.20	50,297.36	1.00	%	1.00	66,160.00	15,862.64
	Traffic Management	1.00	%	5.00	172,212.89	5.00	194,951.01	251,486.80	1.00	%	5.00	330,800.00	79,313.20
	Environmental Management	1.00	%	0.50	17,221.29	0.50	19,495.10	25,148.68	1.00	%	0.50	33,080.00	7,931.32
	Surveying and Design	1.00	%	5.00	172,212.89	5.00	194,951.01	251,486.80	1.00	%	5.00	330,800.00	79,313.20
	Supervision and Project management	1.00	%	9.00	309,983.19	9.00	350,911.82	452,676.24	1.00	%	9.00	595,430.00	142,753.76
	Site Establishment	1.00	%	2.50	86,106.44	2.50	97,475.50	125,743.40	1.00	%	2.50	165,400.00	39,656.60
	Contingency	1.00	%	15.00	516,638.66	15.00	584,853.03	754,460.40	1.00	%	15.00	992,380.00	237,919.60
Total - (2018) rates	Excluding Delivery				3,444,258.00		3,899,020.00						0.00
	Including Delivery				4,865,014.00		5,507,366.00						0.00
Total - (2021) rates	Excluding Delivery				3,754,241.22		4,249,931.80						
	Including Delivery				5,302,865.26		6,003,028.94						
Total - (2024) rates	Excluding Delivery							5,029,736.02				6,615,823.00	-1,586,086.98
	Including Delivery							7,104,502.13				9,344,893.00	-2,240,390.87

Group	Sub Item	VPA Benchmark Costings							WT Total Cost (2024)				
		Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	28152	m2	3.68	103,599.36	4.96	139,633.92	180,127.76	27,819	m2	14.21	395,259.00	215,131.24
	Earthworks	6715	m3	34.07	228,780.05	40.52	272,091.80	350,998.42	6,591	m3	32.05	211,217.00	-139,781.42
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	10574	m2	127.01	1,343,003.74	133.78	1,414,589.72	1,824,820.74	10,379	m2	194.46	2,018,271.00	193,450.26
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	2115	m2	14.22	30,075.30	16.16	34,178.40	44,090.14	10,379	m2	6.01	62,371.00	18,280.86
	Pavement Rehab	2344	m2	51.58	120,903.52	59.32	139,046.08	179,369.44	2,232	m2	75.00	167,400.00	-11,969.44
	Pavement Removal	2156	m2	140.00	301,840.00	161.00	347,116.00	447,779.64	2,394	m2	50.00	119,700.00	-528,079.64
Concrete Works	Kerb and Channel	2999	m	54.81	164,375.19	60.90	182,639.10	235,604.44	3,097	m	82.42	255,255.00	19,650.56
	Kerb Removal	105	m	60.00	6,300.00	69.00	7,245.00	9,346.05	1,060	m	10.00	10,600.00	1,253.95
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	2,812	m2	73.50	206,682.00	206,682.00
	SUP/ Footpath	3865	m2	63.51	245,466.15	73.63	284,579.95	367,108.14	4,439	m2	133.74	593,654.00	226,545.86
	Concrete Removal	342	m2	45.03	15,400.26	49.53	16,939.26	21,851.65	274	m2	50.00	13,700.00	-8,151.65
	Traffic Island	605	m2	77.60	46,948.00	84.07	50,862.35	65,612.43	291	m2	150.00	43,650.00	-21,962.43
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	307	m	528.21	162,159.00	162,159.00
	Drainage Pipe 375mm CR Bfilled	849	m	259.10	219,975.90	282.96	240,233.04	309,900.62	0	m	0.00	0.00	-309,900.62
	Drainage Pipe 450mm CR Bfilled	425	m	299.43	127,257.75	334.33	142,090.25	183,296.42	1,536	m	560.00	860,160.00	676,863.58
	Drainage Pipe 525mm CR Bfilled	142	m	403.86	57,348.12	448.03	63,620.26	82,070.14	0	m	0.00	0.00	-82,070.14
	Drainage - pits	27	No.	2,565.39	69,265.53	2,806.10	75,764.70	97,736.46	21	No.	4,357.24	91,502.00	-6,234.46
	Drainage - Sub-soil drainage	2999	m	33.88	101,606.12	43.40	130,156.60	167,902.01	3,097	No.	94.99	294,190.00	126,287.99
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109,730.28	329,190.84	128,786.34	386,359.02	498,403.14	1	Item	465,000.00	465,000.00	-33,403.14
Landscape	Tree Planting	131	No.	303.34	39,737.54	363.01	47,554.31	61,345.06	39	No.	1,000.00	39,000.00	-22,345.06
	Landscaping	10800	m2	21.61	233,388.00	25.16	271,728.00	350,529.12	3,143	m2	30.00	94,302.00	-256,227.12
	Topsoil Seeding	10800	m2	7.21	77,868.00	8.44	91,152.00	117,586.08	10,478	m2	25.00	261,950.00	144,363.92
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	N/A	Item	0.00	N/A	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48,468.93	145,406.79	55,617.74	166,853.22	215,240.65	31	Item	18,000.00	558,000.00	342,759.35
Misc.	Regulatory Signage	9	Item	338.43	3,045.87	380.39	3,423.51	4,416.33	1	Item	25,500.00	25,500.00	21,083.67
	Line marking	12918	m2 of Pavement	3.11	40,174.98	4.09	52,834.62	68,156.66	12,611	m2	5.00	63,055.00	-5,101.66
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	N/A	weeks	0.00	N/A	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5,263.74	319.78	5,756.04	7,425.29	1	Item	0.00	8,400.00	974.71
Other	Rock excavation	1343	m3	100.00	134,300.00	115.00	154,445.00	199,234.05	330	m3	100.00	33,000.00	-166,234.05
	Telecom/power relocation allowance	262	m	1,300.00	340,600.00	1,495.00	391,690.00	505,280.10	262	m	1,500.00	393,000.00	-112,280.10
	Water/gas relocation allowance	1006	m	300.00	301,800.00	345.00	347,070.00	447,720.30	1,006	m	2,200.00	2,213,200.00	1,765,479.70
	Service proving fee	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Light pole relocation allowance	2.00	Item	10,000.00	20,000.00	11,500.00	23,000.00	29,670.00	2.00	Item	10,000.00	20,000.00	-9,670.00
	Power pole relocation allowance	4.00	Item	40,000.00	160,000.00	46,000.00	184,000.00	237,360.00	4.00	Item	25,000.00	100,000.00	-137,360.00
	Sawcut pavement tie ins, new kerb & channel, etc.	2,037.00	m	14.00	28,518.00	16.10	32,795.70	42,306.45	1,010.00	m	480.00	484,800.00	442,493.55
Council Fees	1.00	%	3.25	166,490.46	3.25	188,470.08	243,126.40	1.00	%	3.25	337,110.00	93,983.60	

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Delivery	VicRoads Fees	1.00	%	1.00	51,227.83	1.00	57,990.79	74,808.12	1.00	%	1.00	103,730.00	28,921.88
	Traffic Management	1.00	%	5.00	256,139.17	5.00	289,953.96	374,040.61	1.00	%	5.00	518,630.00	144,589.39
	Environmental Management	1.00	%	0.50	25,613.92	0.50	28,995.40	37,404.06	1.00	%	0.50	51,870.00	14,465.94
	Surveying and Design	1.00	%	5.00	256,139.17	5.00	289,953.96	374,040.61	1.00	%	5.00	518,630.00	144,589.39
	Supervision and Project management	1.00	%	9.00	461,050.51	9.00	521,917.14	673,273.10	1.00	%	9.00	933,530.00	260,256.90
	Site Establishment	1.00	%	2.50	128,069.59	2.50	144,976.98	187,020.31	1.00	%	2.50	259,320.00	72,299.69
	Contingency	1.00	%	15.00	768,417.51	15.00	869,861.89	1,122,121.84	1.00	%	15.00	1,555,880.00	433,758.16
Total - (2018) rates	Excluding Delivery				5,122,783.00		5,799,079.00						
	Including Delivery				7,235,932.00		8,191,199.00						
Total - (2021) rates	Excluding Delivery				5,583,834.00		6,320,997.00						
	Including Delivery				7,887,166.00		8,928,408.00						
Total - (2024) rates	Excluding Delivery							7,480,812.27				10,372,477.00	-2,891,664.73
	Including Delivery							10,566,647.33				14,651,177.00	-4,084,529.67

Toolern PSP & DCP - Intersection Projects

IT-04 - Secondary - Secondary Lane Upgrades (Exford Road & Greigs Road)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	7451	m2	3.68	27,419.68	4.96	36,956.96	47,674.48	1,686	m2	14.21	23,955.00	-23,719.48
	Earthworks	1708	m3	34.07	58,191.56	40.52	69,208.16	89,278.53	268	m3	32.04	8,588.00	-80,690.53
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	2689	m2	127.01	341,529.89	133.78	359,734.42	464,057.40	421	m2	195.77	82,421.00	-381,656.40
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	538	m2	14.22	7,650.36	16.16	8,694.08	11,215.36	421	m2	6.01	2,530.00	-8,685.36
	Pavement Rehab	710	m2	51.58	36,621.80	59.32	42,117.20	54,331.19	346	m2	75.00	25,950.00	-28,381.19
	Pavement Removal	872	m2	140.00	122,080.00	161.00	140,392.00	181,105.68	169	m2	50.00	8,450.00	-172,655.68
Concrete Works	Kerb and Channel	777	m	54.81	42,587.37	60.90	47,319.30	61,041.90	379	m	82.42	31,237.00	-29,804.90
	Kerb Removal	58	m	60.00	3,480.00	69.00	4,002.00	5,162.58	126	m	10.00	1,260.00	-3,902.58
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	173	m2	73.50	12,716.00	12,716.00
	SUP/ Footpath	1043	m2	63.51	66,240.93	73.63	76,796.09	99,066.96	316	m2	133.74	42,261.00	-56,805.96
	Concrete Removal	35	m2	45.05	1,576.05	49.53	1,733.55	2,236.28	20	m2	50.00	1,000.00	-1,236.28
	Traffic Island	84	m2	77.60	6,518.40	84.07	7,061.88	9,109.85	0	m2	0.00	0.00	-9,109.85
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	43	m	528.21	22,713.00	22,713.00
	Drainage Pipe 375mm CR Bfilled	242	m	259.10	62,702.20	282.96	68,476.32	88,334.45	0	m	0.00	0.00	-88,334.45
	Drainage Pipe 450mm CR Bfilled	121	m	299.43	36,231.03	334.33	40,453.93	52,185.57	212	m	560.00	118,720.00	66,534.43
	Drainage Pipe 525mm CR Bfilled	41	m	403.86	16,558.26	448.03	18,369.23	23,696.31	0	m	0.00	0.00	-23,696.31
	Drainage - pits	9	No.	2,565.39	23,088.51	2,806.10	25,254.90	32,578.82	4	No.	4,359.50	17,438.00	-15,140.82
	Drainage - Sub-soil drainage	777	m	33.88	26,324.76	43.40	33,721.80	43,501.12	379	No.	94.99	36,002.00	-7,499.12
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	0	Item/ Per Leg	109,730.28	0.00	128,786.34	0.00	0.00	N/A	Item	0.00	N/A	0.00
Landscape	Tree Planting	42	No.	303.34	12,740.28	363.01	15,246.42	19,667.88	6	No.	1,000.00	6,000.00	-13,667.88
	Landscaping	2918	m2	21.61	63,057.98	25.16	73,416.88	94,707.78	181	m2	29.98	5,427.00	-89,280.78
	Topsoil Seeding	2918	m2	7.21	21,038.78	8.44	24,627.92	31,770.02	603	m2	25.00	15,075.00	-16,695.02
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	1	Item/ Per Leg	48,468.93	48,468.93	55,617.74	55,617.74	71,746.88	5	Item	18,000.00	90,000.00	18,253.12
Misc.	Regulatory Signage	4	Item	338.43	1,353.72	380.39	1,521.56	1,962.81	1	Item	4,000.00	4,000.00	2,037.19
	Line marking	3399	m2 of Pavement	3.11	10,570.89	4.09	13,901.91	17,933.46	767	m2	5.00	3,835.00	-14,098.46
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of Landscape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	6	Item	292.43	1,754.58	319.78	1,918.68	2,475.10	0	Item	0.00	0.00	-2,475.10
Other	Rock excavation	342	m3	100.00	34,200.00	115.00	39,330.00	50,735.70	14	m3	100.00	1,400.00	-49,335.70
	Telecom/power relocation allowance	162	m	1,300.00	210,600.00	1,495.00	242,190.00	312,425.10	162	m	1,500.00	243,000.00	-69,425.10
	Water/gas relocation allowance	369	m	300.00	110,700.00	345.00	127,305.00	164,223.45	369	m	2,200.00	811,800.00	647,576.55
	Service proving fee	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Light pole relocation allowance	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	5,000.00	5,000.00	-9,835.00
	Power pole relocation allowance	1.00	Item	40,000.00	40,000.00	46,000.00	46,000.00	59,340.00	1.00	Item	5,000.00	5,000.00	-54,340.00
	Sawcut pavement tie ins, new kerb & channel, etc.	761.00	m	14.00	10,654.00	16.10	12,252.10	15,805.21	249.00	m	480.00	119,520.00	103,714.79
Delivery	Council Fees	1.00	%	3.25	49,896.75	3.25	56,704.42	73,148.70	1.00	%	3.25	60,220.00	-12,928.70
	VicRoads Fees	1.00	%	1.00	15,352.85	1.00	17,447.51	22,507.29	1.00	%	1.00	18,530.00	-3,977.29
	Traffic Management	1.00	%	5.00	76,764.23	5.00	87,237.57	112,536.47	1.00	%	5.00	92,640.00	-19,896.47
	Environmental Management	1.00	%	0.50	7,676.42	0.50	8,723.76	11,253.65	1.00	%	0.50	9,270.00	-1,983.65
	Surveying and Design	1.00	%	5.00	76,764.23	5.00	87,237.57	112,536.47	1.00	%	5.00	92,640.00	-19,896.47
	Supervision and Project management	1.00	%	9.00	138,175.62	9.00	157,027.63	202,565.64	1.00	%	9.00	166,760.00	-35,805.64
	Site Establishment	1.00	%	2.50	38,382.12	2.50	43,618.79	56,268.23	1.00	%	2.50	46,320.00	-9,948.23
	Contingency	1.00	%	15.00	230,292.69	15.00	261,712.72	337,609.41	1.00	%	15.00	277,920.00	-59,689.41

Toolern PSP & DCP - Intersection Projects

IT-04 - Secondary - Secondary Lane Upgrades (Exford Road & Greigs Road)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2018) rates	Excluding Delivery				1,535,285.00		1,744,751.00						0.00
	Including Delivery				2,168,590.00		2,464,461.00						0.00
Total - (2021) rates	Excluding Delivery				1,673,461.00		1,901,780.00						0.00
	Including Delivery				2,363,764.00		2,686,264.00						0.00
Total - (2024) rates	Excluding Delivery							2,250,729.38				1,852,798.00	397,931.38
	Including Delivery							3,179,155.25				2,617,098.00	562,057.25

Appendix B

Toolern PSP & DCP - Intersection Projects

IT-05 - Secondary - Secondary Intersection (Ferris Road & Toolern Road)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings				WT Total Cost (2024)					
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	28076	m2	3.68	103,319.68	4.96	139,256.96	179,641.48	27,234	m2	14.21	386,947.00	207,305.52
	Earthworks	10010	m3	34.07	341,040.70	40.52	405,605.20	523,230.71	8,883	m3	32.05	284,667.00	-238,563.71
Road Pavement	Primary Arterial Pavement	14000	m2	169.62	2,374,680.00	186.26	2,607,640.00	3,363,855.60	0	m2	0.00	0.00	-3,363,855.60
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	13,988	m2	194.48	2,720,358.00	2,720,358.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	2800	m2	14.22	39,816.00	16.16	45,248.00	58,369.92	13,988	m2	6.01	84,059.00	25,689.08
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
Concrete Works	Kerb and Channel	2936	m	54.81	160,922.16	60.90	178,802.40	230,655.10	2,960	m	82.42	243,963.00	13,307.90
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	2,376	m2	73.50	174,636.00	174,636.00
	SUP/ Footpath	3940	m2	63.51	250,229.40	73.63	290,102.20	374,231.84	4,483	m2	133.74	599,539.00	225,307.16
	Traffic Island	467	m2	77.60	36,239.20	84.07	39,260.69	50,646.29	242	m2	150.00	36,300.00	-14,346.29
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	279	m	528.20	147,369.00	147,369.00
	Drainage Pipe 375mm CR Bfilled	831	m	259.10	215,312.10	282.96	235,139.76	303,330.29	0	m	0.00	0.00	-303,330.29
	Drainage Pipe 450mm CR Bfilled	416	m	299.43	124,562.88	334.33	139,081.28	179,414.85	1,458	m	560.00	816,480.00	637,065.15
	Drainage Pipe 525mm CR Bfilled	139	m	403.86	56,136.54	448.03	62,276.17	80,336.26	0	m	0.00	0.00	-80,336.26
	Drainage - pits	22	No.	2,565.39	56,438.58	2,806.10	61,734.20	79,637.12	20	No.	4,359.55	87,191.00	7,553.88
	Drainage - Sub-soil drainage	2936	m	33.88	99,471.68	43.40	127,422.40	164,374.90	2,960	m	94.99	281,176.00	116,801.10
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	730,000.00	730,000.00	65,462.49
Landscape	Tree Planting	149	No.	303.34	45,197.66	363.01	54,088.49	69,774.15	37	No.	1,000.00	37,000.00	-32,774.15
	Landscaping	9647	m2	21.61	208,471.67	25.16	242,718.52	313,106.89	2,556	m2	30.00	76,689.00	-236,417.89
	Topsoil Seeding	9647	m2	7.21	69,554.87	8.44	81,420.68	105,032.68	8,521	m2	25.00	213,025.00	107,992.32
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	30	No.	18,000.00	540,000.00	253,012.46
Misc.	Regulatory Signage	20	Item	338.43	6,768.60	380.39	7,607.80	9,814.06	1	Item	22,500.00	22,500.00	12,685.94
	Line marking	14000	m2 of Pavement	3.11	43,540.00	4.09	57,260.00	73,865.40	13,988	m2	5.00	69,940.00	-3,925.40
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7,018.32	319.78	7,674.72	9,900.39	1	Item	0.00	8,400.00	-1,500.39
Other	Rock excavation	2002	m3	100.00	200,200.00	115.00	230,230.00	296,996.70	445	m3	100.00	44,500.00	-252,496.70
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	m	0.00	0.00	0.00
	Water/gas relocation allowance	48	m	300.00	14,400.00	345.00	16,560.00	21,362.40	48	m	2,200.00	105,600.00	84,237.60
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
very	Council Fees	1	%	3.25	167,942.50	3.25	190,657.26	245,947.86	1	%	3.25	254,080.00	8,132.14
	VicRoads Fees	1.00	%	1.00	51,674.62	1.00	58,663.77	75,676.27	1.00	%	1.00	78,180.00	2,503.73
	Traffic Management	1.00	%	5.00	258,373.08	5.00	293,318.86	378,381.33	1.00	%	5.00	390,900.00	12,518.67
	Environmental Management	1.00	%	0.50	25,837.31	0.50	29,531.89	37,838.13	1.00	%	0.50	39,090.00	1,251.87

Toolern PSP & DCP - Intersection Projects

IT-05 - Secondary - Secondary Intersection (Ferris Road & Toolern Road)

Group	Sub Item	VPA Benchmark Costings							WT Total Cost (2024)				
		Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Del	Surveying and Design	1.00	%	5.00	258,373.08	5.00	293,318.86	378,381.33	1.00	%	5.00	390,900.00	12,518.67
	Supervision and Project management	1.00	%	9.00	465,071.54	9.00	527,973.95	681,086.40	1.00	%	9.00	703,610.00	22,523.60
	Site Establishment	1.00	%	2.50	129,186.54	2.50	146,659.43	189,190.67	1.00	%	2.50	195,450.00	6,259.33
	Contingency	1.00	%	15.00	775,119.23	15.00	879,956.58	1,135,143.99	1.00	%	15.00	1,172,680.00	37,536.01
Total - (2018) rates	Excluding Delivery				5,167,462.00		5,866,377.00						0.00
	Including Delivery				7,299,039.00		8,286,258.00						0.00
Total - (2021) rates	Excluding Delivery				5,632,534.00		6,394,352.00						0.00
	Including Delivery				7,955,954.00		9,032,022.00						0.00
Total - (2024) rates	Excluding Delivery							7,567,626.61				7,817,839.00	-250,212.39
	Including Delivery							10,689,272.59				11,042,729.00	-353,456.41



Appendix B

Toolern PSP & DCP - Intersection Projects

IT-06 - Primary - Secondary Intersection (Mt Cottrell Road & Toolern Road)

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	37888	m2	3.68	139,427.84	4.96	187,924.48	242,422.58	44,808	m2	14.21	636,643.00	394,220.42
	Earthworks	13272	m3	34.07	452,177.04	40.52	537,781.44	693,738.06	15,246	m3	32.05	488,578.00	-205,160.06
Road Pavement	Primary Arterial Pavement	15199	m2	169.62	2,578,054.38	186.26	2,830,965.74	3,651,945.80	14,849	m2	194.46	2,887,576.00	-764,369.80
	Secondary Arterial Pavement	3786	m2	127.01	480,859.86	133.78	506,491.08	653,373.49	7,289	m2	194.50	1,417,703.00	764,329.51
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	3797	m2	14.22	53,993.34	16.16	61,359.52	79,153.78	22,138	m2	6.01	133,035.00	53,881.22
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	m2	0.00	0.00	0.00
Concrete Works	Kerb and Channel	3556	m	54.81	194,904.36	60.90	216,560.40	279,362.92	4,319	m	82.42	355,972.00	76,609.08
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	789	m2	73.50	57,992.00	57,992.00
	SUP/ Footpath	5575	m2	63.51	354,068.25	73.63	410,487.25	529,528.55	7,584	m2	133.74	1,014,254.00	484,725.45
	Traffic Island	726	m2	77.60	56,337.60	84.07	61,034.82	78,734.92	479	m2	150.00	71,850.00	-6,884.92
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	297	m	528.21	156,877.00	156,877.00
	Drainage Pipe 375mm CR Bfilled	969	m	259.10	251,067.90	282.96	274,188.24	353,702.83	0	m	0.00	0.00	-353,702.83
	Drainage Pipe 450mm CR Bfilled	485	m	299.43	145,223.55	334.33	162,150.05	209,173.56	1,776	m	560.00	994,560.00	785,386.44
	Drainage Pipe 525mm CR Bfilled	162	m	403.86	65,425.32	448.03	72,580.86	93,629.31	0	m	0.00	0.00	-93,629.31
	Drainage - pits	28	No.	2,565.39	71,830.92	2,806.10	78,570.80	101,356.33	24	No.	4,359.58	104,630.00	3,273.67
	Drainage - Sub-soil drainage	3556	m	33.88	120,477.28	43.40	154,330.40	199,086.22	4,319	m	94.99	410,270.00	211,183.78
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	730,000.00	730,000.00	65,462.49
Landscape	Tree Planting	172	No.	303.34	52,174.48	363.01	62,437.72	80,544.66	45	No.	1,000.00	45,000.00	-35,544.66
	Landscaping	12587	m2	21.61	272,005.07	25.16	316,688.92	408,528.71	4,382	m2	30.00	131,463.00	-277,065.71
	Topsoil Seeding	12587	m2	7.21	90,752.27	8.44	106,234.28	137,042.22	14,607	m2	25.00	365,175.00	228,132.78
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	36	No.	18,000.00	648,000.00	361,012.46
Misc.	Regulatory Signage	20	Item	338.43	6,768.60	380.39	7,607.80	9,814.06	1	Item	15,000.00	15,000.00	5,185.94
	Line marking	18985	m2 of Pavement	3.11	59,043.35	4.09	77,648.65	100,166.76	7,289	m2	5.00	36,445.00	-63,721.76
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7,018.32	319.78	7,674.72	9,900.39	1	Item	8,400.00	8,400.00	-1,500.39
Other	Rock excavation	2655	m3	100.00	265,500.00	115.00	305,325.00	393,869.25	763	m3	100.00	76,300.00	-317,569.25
	Telecom/power relocation allowance	31	m	1,300.00	40,300.00	1,495.00	46,345.00	59,785.05	31	m	1,500.00	46,500.00	-13,285.05
	Water/gas relocation allowance	77	m	300.00	23,100.00	345.00	26,565.00	34,268.85	77	m	2,200.00	169,400.00	135,131.15
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
	Power pole relocation allowance	6	Item	40,000.00	240,000.00	46,000.00	276,000.00	356,040.00	6	Item	30,000.00	180,000.00	-176,040.00
very	Council Fees	1.00	%	3.25	218,876.16	3.25	247,786.50	319,644.58	1.00	%	3.25	366,900.00	47,255.42
	VicRoads Fees	1.00	%	1.00	67,346.51	1.00	76,242.00	98,352.18	1.00	%	1.00	112,900.00	14,547.82
	Traffic Management	1.00	%	5.00	336,732.56	5.00	381,210.00	491,760.89	1.00	%	5.00	564,460.00	72,699.11
	Environmental Management	1.00	%	0.50	33,673.26	0.50	38,121.00	49,176.09	1.00	%	0.50	56,450.00	7,273.91

Toolern PSP & DCP - Intersection Projects

IT-06 - Primary - Secondary Intersection (Mt Cottrell Road & Toolern Road)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Del	Surveying and Design	1.00	%	5.00	336,732.56	5.00	381,210.00	491,760.89	1.00	%	5.00	564,460.00	72,699.11
	Supervision and Project management	1.00	%	9.00	606,118.61	9.00	686,177.99	885,169.61	1.00	%	9.00	1,016,030.00	130,860.39
	Site Establishment	1.00	%	2.50	168,366.28	2.50	190,605.00	245,880.45	1.00	%	2.50	282,230.00	36,349.55
	Contingency	1.00	%	15.00	1,010,197.68	15.00	1,143,629.99	1,475,282.68	1.00	%	15.00	1,693,370.00	218,087.32
Total - (2018) rates	Excluding Delivery				6,734,651.00		7,624,200.00						
	Including Delivery				9,512,695.00		10,769,182.00						
Total - (2021) rates	Excluding Delivery				7,340,770.00		8,310,378.00						
	Including Delivery				10,368,838.00		11,738,409.00						
Total - (2024) rates	Excluding Delivery							9,835,217.90				11,289,123.00	-1,453,905.10
	Including Delivery							13,892,245.28				15,945,923.00	-2,053,677.72

Appendix B

Toolern PSP & DCP - Intersection Projects

IT-10 - Primary - Primary Intersection (Mt Cottrell Road & Shogaki Drive)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	31773	m2	3.68	116,924.64	4.96	157,594.08	203,296.36	21,297	m2	14.21	302,593.00	99,296.64
	Earthworks	4789	m3	34.07	163,161.23	40.52	194,050.28	250,324.86	4,594	m3	32.05	147,221.00	-103,103.86
Road Pavement	Primary Arterial Pavement	6697	m2	169.62	1,135,945.14	186.26	1,247,383.22	1,609,124.35	6,425	m2	194.45	1,249,365.00	-359,759.35
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	m2	0.00	0.00	0.00
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1340	m2	14.22	19,054.80	16.16	21,654.40	27,934.18	6,425	m2	6.01	38,610.00	10,675.82
	Pavement Rehab	3590	m2	51.58	185,172.20	59.32	212,958.80	274,716.85	2,989	m2	75.00	224,175.00	-50,541.85
	Pavement Removal	804	m2	140.00	112,560.00	161.00	129,444.00	166,982.76	400	m2	50.00	20,000.00	-146,982.76
Concrete Works	Kerb and Channel	1651	m	54.81	90,491.31	60.90	100,545.90	129,704.21	2,278	m	82.42	187,753.00	58,048.79
	Kerb Removal	105	m	60.00	6,300.00	69.00	7,245.00	9,346.05	569	m	0.00	0.00	-9,346.05
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	2085	m2	63.51	132,418.35	73.63	153,518.55	198,038.93	2,238	m2	133.74	299,301.00	101,262.07
	Concrete Removal	342	m2	45.03	15,400.26	49.53	16,939.26	21,851.65	281	m2	50.00	14,050.00	-7,801.65
	Traffic Island	390	m2	77.60	30,264.00	84.07	32,787.30	42,295.62	347	m2	150.00	52,050.00	9,754.38
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	141	m	528.21	74,477.00	74,477.00
	Drainage Pipe 375mm CR Bfilled	396	m	259.10	102,603.60	282.96	112,052.16	144,547.29	0	m	0.00	0.00	-144,547.29
	Drainage Pipe 450mm CR Bfilled	198	m	299.43	59,287.14	334.33	66,197.34	85,394.57	1,006	m	560.00	563,360.00	477,965.43
	Drainage Pipe 525mm CR Bfilled	66	m	403.86	26,654.76	448.03	29,569.98	38,145.27	0	m	0.00	0.00	-38,145.27
	Drainage - pits	16	No.	2,565.39	41,046.24	2,806.10	44,897.60	57,917.90	15	No.	4,362.80	65,442.00	7,524.10
	Drainage - Sub-soil drainage	1651	m	33.88	55,935.88	43.40	71,653.40	92,432.89	2,278	No.	94.99	216,392.00	123,959.11
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109,730.28	329,190.84	128,786.34	386,359.02	498,403.14	1	Item	595,000.00	595,000.00	96,596.86
Landscape	Tree Planting	82	No.	303.34	24,873.88	363.01	29,766.82	38,399.20	26	No.	1,000.00	26,000.00	-12,399.20
	Landscaping	11725	m2	21.61	253,377.25	25.16	295,001.00	380,551.29	2,789	m2	30.00	83,682.00	-296,869.29
	Topsoil Seeding	11725	m2	7.21	84,537.25	8.44	98,959.00	127,657.11	9,298	m2	25.00	232,450.00	104,792.89
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48,468.93	145,406.79	55,617.74	166,853.22	215,240.65	21	Item	18,000.00	378,000.00	162,759.35
Misc.	Regulatory Signage	9	Item	338.43	3,045.87	380.39	3,423.51	4,416.33	1	Item	18,000.00	18,000.00	13,583.67
	Line marking	10287	m2 of Pavement	3.11	31,992.57	4.09	42,073.83	54,275.24	9,414	m2	5.00	47,070.00	-7,205.24
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
Other	Tactile Pavers (Hazard only)	18	Item	292.43	5,263.74	319.78	5,756.04	7,425.29	1	Item	0.00	8,400.00	974.71
	Rock excavation	958	m3	100.00	95,800.00	115.00	110,170.00	142,119.30	230	m3	100.00	23,000.00	-119,119.30
	Telecom/power relocation allowance	362	m	1,300.00	470,600.00	1,495.00	541,190.00	698,135.10	362	m	1,500.00	543,000.00	-155,135.10
	Water/gas relocation allowance	276	m	300.00	82,800.00	345.00	95,220.00	122,833.80	276	m	2,200.00	607,200.00	484,366.20
	Service proving fee	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Light pole relocation allowance	0.00	Item	10,000.00	0.00	11,500.00	0.00	0.00	0.00	Item	0.00	0.00	0.00
	Power pole relocation allowance	3.00	Item	40,000.00	120,000.00	46,000.00	138,000.00	178,020.00	3.00	Item	5,000.00	15,000.00	-163,020.00
Sawcut pavement tie ins, new kerb & channel, etc.	427.00	m	14.00	5,978.00	16.10	6,874.70	8,868.36	917.00	m	480.00	440,160.00	431,291.64	
Delivery	Council Fees	1.00	%	3.25	130,891.49	3.25	150,077.52	193,600.00	1.00	%	3.25	213,830.00	20,230.00
	VicRoads Fees	1.00	%	1.00	40,274.30	1.00	46,177.70	59,569.23	1.00	%	1.00	65,800.00	6,230.77
	Traffic Management	1.00	%	5.00	201,371.52	5.00	230,888.49	297,846.15	1.00	%	5.00	328,970.00	31,123.85
	Environmental Management	1.00	%	0.50	20,137.15	0.50	23,088.85	29,784.62	1.00	%	0.50	32,900.00	3,115.38
	Surveying and Design	1.00	%	5.00	201,371.52	5.00	230,888.49	297,846.15	1.00	%	5.00	328,970.00	31,123.85
	Supervision and Project management	1.00	%	9.00	362,468.74	9.00	415,599.29	536,123.08	1.00	%	9.00	592,140.00	56,016.92
	Site Establishment	1.00	%	2.50	100,685.76	2.50	115,444.25	148,923.08	1.00	%	2.50	164,490.00	15,566.92
	Contingency	1.00	%	15.00	604,114.56	15.00	692,665.48	893,538.46	1.00	%	15.00	986,890.00	93,351.54
Total - (2018) rates	Excluding Delivery				4,027,430.00		4,617,770.00						
	Including Delivery				5,688,745.00		6,522,600.00						

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Total - (2021) rates	Excluding Delivery				4,389,900.00		5,033,370.00						
	Including Delivery				6,200,734.00		7,109,635.00						
Total - (2024) rates	Excluding Delivery							5,956,923.09				6,579,251.00	-622,327.91
	Including Delivery							8,414,153.87				9,293,241.00	-879,087.13

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	30768	m2	3.68	113,226.24	4.96	152,609.28	196,865.97	30,339	m2	14.21	431,064.00	234,198.03
	Earthworks	9788	m3	34.07	333,477.16	40.52	396,609.76	511,626.59	9,908	m3	32.05	317,515.00	-194,111.59
Road Pavement	Primary Arterial Pavement	11285	m2	169.62	1,914,161.70	186.26	2,101,944.10	2,711,507.89	11,406	m2	194.50	2,218,435.00	-493,072.89
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	m2	0.00	0.00	0.00
	Collector Arterial Pavement	3212	m2	105.15	337,741.80	112.44	361,157.28	465,892.89	3,276	m2	172.66	565,647.00	99,754.11
	Subgrade Preparation	2900	m2	14.22	41,238.00	16.16	46,864.00	60,454.56	14,682	m2	6.01	88,229.00	27,774.44
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	m2	0.00	0.00	0.00
	Pavement Removal	0	m2	140.00	0.00	161.00	0.00	0.00	0	m2	0.00	0.00	0.00
	Concrete Works	Kerb and Channel	2770	m	54.81	151,823.70	60.90	168,693.00	217,613.97	2,823	m	82.42	232,672.00
Cycle Path		0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
SUP/ Footpath		5686	m2	63.51	361,117.86	73.63	418,660.18	540,071.63	5,331	m2	133.74	712,947.00	172,875.37
Traffic Island		534	m2	77.60	41,438.40	84.07	44,893.38	57,912.46	324	m2	150.00	48,600.00	-9,312.46
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	255	m	528.20	134,692.00	134,692.00
	Drainage Pipe 375mm CR Bfilled	775	m	259.10	200,802.50	282.96	219,294.00	282,889.26	0	m	0.00	0.00	-282,889.26
	Drainage Pipe 450mm CR Bfilled	388	m	299.43	116,178.84	334.33	129,720.04	167,338.85	1,006	m	560.00	563,360.00	396,021.15
	Drainage Pipe 525mm CR Bfilled	130	m	403.86	52,501.80	448.03	58,243.90	75,134.63	0	m	0.00	0.00	-75,134.63
	Drainage - pits	22	No.	2,565.39	56,438.58	2,806.10	61,734.20	79,637.12	19	No.	4,362.16	82,881.00	3,243.88
	Drainage - Sub-soil drainage	2770	m	33.88	93,847.60	43.40	120,218.00	155,081.22	2,823	m	94.99	268,162.00	113,080.78
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	730,000.00	730,000.00	65,462.49
Landscape	Tree Planting	125	No.	303.34	37,917.50	363.01	45,376.25	58,535.36	35	No.	1,000.00	35,000.00	-23,535.36
	Landscaping	9982	m2	21.61	215,711.02	25.16	251,147.12	323,979.78	3,001	m2	30.00	90,018.00	-233,961.78
	Topsoil Seeding	9982	m2	7.21	71,970.22	8.44	84,248.08	108,680.02	10,002	m2	25.00	250,050.00	141,369.98
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	0.00	0.00	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	19	No.	18,000.00	342,000.00	55,012.46
Misc.	Regulatory Signage	16	Item	338.43	5,414.88	380.39	6,086.24	7,851.25	1	Item	21,500.00	21,500.00	13,648.75
	Line marking	14497	m2 of Pavement	3.11	45,085.67	4.09	59,292.73	76,487.62	11,406	m2	5.00	57,030.00	-19,457.62
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	24	Item	292.43	7,018.32	319.78	7,674.72	9,900.39	1	Item	0.00	8,400.00	-1,500.39
Other	Rock excavation	1958	m3	100.00	195,800.00	115.00	225,170.00	290,469.30	496	m2	100.00	49,600.00	-240,869.30
	Telecom/power relocation allowance	235	m	1,300.00	305,500.00	1,495.00	351,325.00	453,209.25	235	m	1,500.00	352,500.00	-100,709.25
	Water/gas relocation allowance	1344	m	300.00	403,200.00	345.00	463,680.00	598,147.20	1,344	m	2,200.00	2,956,800.00	2,358,652.80
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
Delivery	Council Fees	1	%	3.25	189,011.98	3.25	214,886.39	277,203.45	1	%	3.25	346,600.00	69,396.55
	VicRoads Fees	1.00	%	1.00	58,157.53	1.00	66,118.89	85,293.37	1.00	%	1.00	106,650.00	21,356.63
	Traffic Management	1.00	%	5.00	290,787.66	5.00	330,594.45	426,466.84	1.00	%	5.00	533,240.00	106,773.16
	Environmental Management	1.00	%	0.50	29,078.77	0.50	33,059.45	42,646.68	1.00	%	0.50	53,330.00	10,683.32
	Surveying and Design	1.00	%	5.00	290,787.66	5.00	330,594.45	426,466.84	1.00	%	5.00	533,240.00	106,773.16
	Supervision and Project management	1.00	%	9.00	523,417.80	9.00	595,070.01	767,640.31	1.00	%	9.00	959,820.00	192,179.69

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
	Site Establishment	1.00	%	2.50	145,393.83	2.50	165,297.23	213,233.42	1.00	%	2.50	266,620.00	53,386.58
	Contingency	1.00	%	15.00	872,362.99	15.00	991,783.35	1,279,400.52	1.00	%	15.00	1,599,700.00	320,299.48
<b>Total - (2018) rates</b>	Excluding Delivery				5,815,753.00		6,611,889.00						
	Including Delivery				8,214,752.00		9,339,293.00						
<b>Total - (2021) rates</b>	Excluding Delivery				6,339,172.00		7,206,960.00						
	Including Delivery				8,954,080.00		10,179,831.00						
<b>Total - (2024) rates</b>	Excluding Delivery							8,529,336.82				10,664,602.00	-2,135,265.18
	Including Delivery							12,047,688.26				15,065,802.00	-3,016,113.74

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preperation	29,964	m2	3.68	110,267.52	4.96	148,621.44	191,721.66	29,494	m2	14.21	419,058.00	227,336.34
	Earthworks	5,198	m3	34.07	177,095.86	40.52	210,622.96	271,703.62	4,858	m3	32.05	155,681.00	-116,022.62
Road Pavement	Primary Arterial Pavement	1,576	m2	169.62	267,321.12	186.26	293,545.76	378,674.03	1,657	m2	194.86	322,876.00	-55,798.03
	Secondary Arterial Pavement	6,410	m2	127.01	814,134.10	133.78	857,529.80	1,106,213.44	5,446	m2	194.54	1,059,446.00	-46,767.44
	Collector Arterial Pavement	0	m2	105.15	0.00	112.44	0.00	0.00	0	m2	0.00	0.00	0.00
	Subgrade Preparation	1,598	m2	14.22	22,723.56	16.16	25,823.68	33,312.55	7,102	m2	6.01	42,678.00	9,365.45
	Pavement Rehab	4,823	m2	51.58	248,770.34	59.32	286,100.36	369,069.46	5,177	m2	75.00	388,275.00	19,205.54
	Pavement Removal	4,017	m2	140.00	562,380.00	161.00	646,737.00	854,290.73	5,092	m2	50.00	254,600.00	-579,690.73
Concrete Works	Kerb and Channel	2,781	m	54.81	152,426.61	60.90	169,362.90	218,478.14	2,966	m	82.42	244,458.00	25,979.86
	Kerb Removal	1,204	m	60.00	72,240.00	69.00	83,076.00	107,168.04	2,052	m	10.00	20,520.00	-86,648.04
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	4,551	m2	63.51	289,034.01	73.63	335,090.13	432,266.27	4,505	m2	133.74	602,481.00	170,214.73
	Traffic Island	1,474	m2	77.60	114,382.40	84.07	123,919.18	159,855.74	0	m2	0.00	0.00	-159,855.74
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	224	m2	528.21	118,318.00	118,318.00
	Drainage Pipe 375mm CR Bfilled	750	m	259.10	194,325.00	282.96	212,220.00	273,763.80	0	m	0.00	0.00	-273,763.80
	Drainage Pipe 450mm CR Bfilled	252	m	299.43	75,456.36	334.33	84,251.16	108,684.00	1,290	m	560.00	722,400.00	613,716.00
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	m	0.00	0.00	0.00
	Drainage - pits	29	No.	2,565.39	74,396.31	2,806.10	81,376.90	104,976.20	17	m	4,356.71	74,064.00	-30,912.20
	Drainage - Sub-soil drainage	2,781	m	33.88	94,220.28	43.40	120,695.40	155,697.07	2,966	No.	94.99	281,746.00	126,048.93
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	No.	685,000.00	685,000.00	20,462.49
Landscape	Tree Planting	128	No.	303.34	38,827.52	363.01	46,465.28	59,940.21	33	Item	1,000.00	33,000.00	-26,940.21
	Landscaping	11,063	m2	21.61	239,071.43	25.16	278,345.08	359,065.15	3,605	No.	30.00	108,162.00	-250,903.15
	Topsoil Seeding	11,063	m2	7.21	79,764.23	8.44	93,371.72	120,449.52	12,018	m2	25.00	300,450.00	180,000.48
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	26	Item	18,000.00	468,000.00	181,012.46
Misc.	Regulatory Signage	16	Item	338.43	5,414.88	380.39	6,086.24	7,851.25	1	Item	21,500.00	21,500.00	13,648.75
	Line marking	12,809	m2 of Pavement	3.11	39,835.99	4.09	52,388.81	67,581.56	1,657	m2	5.00	8,285.00	-59,296.56
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	0	Item	292.43	0.00	319.78	0.00	0.00	0	Item	0.00	0.00	0.00
Other	Rock excavation	1,040	m3	100.00	104,000.00	115.00	119,600.00	154,284.00	243	m3	100.00	24,300.00	-129,984.00
	Telecom/power relocation allowance	947	m	1,300.00	1,231,100.00	1,495.00	1,415,765.00	1,826,336.85	947	m	1,500.00	1,420,500.00	-405,836.85
	Water/gas relocation allowance	743	m	300.00	222,900.00	345.00	256,335.00	330,672.15	743	m	2,200.00	1,634,600.00	1,303,927.85
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
	Earthen mound removal	2,090	m3	34.07	71,206.30	40.52	84,686.80	109,245.97	2,090	Item	50.00	104,500.00	-4,745.97
	Light pole relocation allowance	8	Item	10,000.00	80,000.00	11,500.00	92,000.00	118,680.00	8	Item	5,000.00	40,000.00	-78,680.00
	Power pole relocation allowance	4	Item	40,000.00	160,000.00	46,000.00	184,000.00	237,360.00	4	m	5,000.00	20,000.00	-217,360.00
	Sawcut pavement tie ins, new kerb & channe	2,500	m	14.00	35,000.00	16.10	40,250.00	51,922.50	1,933	m	480.00	927,840.00	875,917.50
	Rounabout removal	0	m2	0.00	0.00	0.00	0.00	0.00	627	m2	50.00	31,350.00	31,350.00
	Council Fees	1.00	%	3.25	204,439.15	3.25	233,529.22	301,252.69	1.00	%	3.25	345,860.00	44,607.31
	VicRoads Fees	1.00	%	1.00	62,904.35	1.00	71,855.14	92,693.14	1.00	%	1.00	106,420.00	13,726.86
	Traffic Management	1.00	%	5.00	314,521.77	5.00	359,275.72	463,465.68	1.00	%	5.00	532,080.00	68,614.32

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Delivery	Environmental Management	1.00	%	0.50	31,452.18	0.50	35,927.57	46,346.57	1.00	%	0.50	53,210.00	6,863.43
	Surveying and Design	1.00	%	5.00	314,521.77	5.00	359,275.72	463,465.68	1.00	%	5.00	532,080.00	68,614.32
	Supervision and Project management	1.00	%	9.00	566,139.18	9.00	646,696.29	834,238.22	1.00	%	9.00	957,750.00	123,511.78
	Site Establishment	1.00	%	2.50	157,260.88	2.50	179,637.86	231,732.84	1.00	%	2.50	266,040.00	34,307.16
	Contingency	1.00	%	15.00	943,565.30	15.00	1,077,827.15	1,390,397.05	1.00	%	15.00	1,596,240.00	205,842.97
Total - (2018) rates	Excluding Delivery				6,290,435.00		7,185,514.00						
	Including Delivery				8,885,240.00		10,149,539.00						
Total - (2021) rates	Excluding Delivery				6,856,575.00		7,832,211.00						
	Including Delivery				9,684,912.00		11,062,998.00						
Total - (2024) rates	Excluding Delivery							9,269,313.51				10,641,588.00	-1,372,274.49
	Including Delivery							13,092,905.33				15,031,268.00	-1,938,362.67



Appendix B

Toolern PSP & DCP - Intersection Projects

IT-16 - Secondary - Connector T-Intersection (Abey Road, Industry Collector Road)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	16,107	m2	3.68	59,273.76	4.96	79,890.72	103,059.03	15,828	m2	14.21	224,888.00	121,828.97
	Earthworks	2,845	m3	34.07	96,929.15	40.52	115,279.40	148,710.43	3,201	m3	32.05	102,580.00	-46,130.43
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	3,805	m2	127.01	483,273.05	133.78	509,032.90	656,652.44	4,448	m2	194.57	865,439.00	208,786.56
	Collector Arterial Pavement	801	m2	105.15	84,225.15	112.44	90,064.44	116,183.13	703	m2	173.61	122,050.00	5,866.87
	Subgrade Preparation	922	m2	14.22	13,110.84	16.16	14,899.52	19,220.38	5,151	m2	6.01	30,954.00	11,733.62
	Pavement Rehab	3,459	m2	51.58	178,415.22	59.32	205,187.88	264,692.37	2,848	m2	75.00	213,600.00	-51,092.37
	Pavement Removal	0	m2	140.00	0.00	161.00	0.00	0.00	101	m2	50.00	5,050.00	5,050.00
Concrete Works	Kerb and Channel	1,599	m	54.81	87,641.19	60.90	97,379.10	125,619.04	1,644	m	82.42	135,498.00	9,878.96
	Kerb Removal	413	m	60.00	24,780.00	69.00	28,497.00	36,761.13	826	m	10.00	8,260.00	-28,501.13
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	0	m2	0.00	0.00	0.00
	SUP/ Footpath	2,404	m2	63.51	152,678.04	73.63	177,006.52	228,338.41	2,831	m2	133.74	378,607.00	150,268.59
	Concrete Removal	0	m3	45.03	0.00	49.53	0.00	0.00	0	m2	0.00	0.00	0.00
	Traffic Island	227	m2	77.60	17,615.20	84.07	19,083.89	24,618.22	0	m2	0.00	0.00	-24,618.22
	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	179	m	528.21	94,549.00	94,549.00
	Drainage Pipe 375mm CR Bfilled	236	m	259.10	61,147.60	282.96	66,778.56	86,144.34	0	m	0.00	0.00	-86,144.34
	Drainage Pipe 450mm CR Bfilled	118	m	299.43	35,332.74	334.33	39,450.94	50,891.71	894	m	560.00	500,640.00	449,748.29
	Drainage Pipe 525mm CR Bfilled	40	m	403.86	16,154.40	448.03	17,921.20	23,118.35	0	m	0.00	0.00	-23,118.35
	Drainage - pits	10	No.	2,565.39	25,653.90	2,806.10	28,061.00	36,198.69	13	No.	4,355.77	56,625.00	20,426.31
	Drainage - Sub-soil drainage	1,599	m	33.88	54,174.12	43.40	69,396.60	89,521.61	1,644	No.	94.99	156,167.00	66,645.39
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109,730.28	329,190.84	128,786.34	386,359.02	498,403.14	1	Item	460,000.00	460,000.00	-38,403.14
Landscape	Tree Planting	87	No.	303.34	26,390.58	363.01	31,581.87	40,740.61	25	No.	1,000.00	25,000.00	-15,740.61
	Landscaping	5,371	m2	21.61	116,067.31	25.16	135,134.36	174,323.32	1,514	m2	30.00	45,423.00	-128,900.32
	Topsoil Seeding	5,371	m2	7.21	38,724.91	8.44	45,331.24	58,477.30	5,047	m2	25.00	126,175.00	67,697.70
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48,468.93	145,406.79	55,617.74	166,853.22	215,240.65	18	Item	18,000.00	324,000.00	108,759.35
Misc.	Regulatory Signage	5	Item	338.43	1,692.15	380.39	1,901.95	2,453.52	1	Item	15,000.00	15,000.00	12,546.48
	Line marking	8,065	m2 of Pavement	3.11	25,082.15	4.09	32,985.85	42,551.75	7,999	m2	5.00	39,995.00	-2,556.75
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of L'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5,263.74	319.78	5,756.04	7,425.29	0	Item	0.00	0.00	-7,425.29
Other	Rock excavation	569	m3	100.00	56,900.00	115.00	65,435.00	84,411.15	161	m3	100.00	16,100.00	-68,311.15
	Telecom/power relocation allowance	413	m	1,300.00	536,900.00	1,495.00	617,435.00	796,491.15	413	m	1,500.00	619,500.00	-176,991.15
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	m	0.00	0.00	0.00
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Light pole relocation allowance	3	Item	10,000.00	30,000.00	11,500.00	34,500.00	44,505.00	3.00	Item	5,000.00	15,000.00	-29,505.00
	Power pole relocation allowance	4	Item	40,000.00	160,000.00	46,000.00	184,000.00	237,360.00	4.00	Item	5,000.00	20,000.00	-217,360.00
	Sawcut pavement tie ins, new kerb & channel, etc.	413	m	14.00	5,782.00	16.10	6,649.30	8,577.60	844.00	m	480.00	405,120.00	396,542.40
VERY	Council Fees	1.00	%	3.25	95,847.36	3.25	109,573.23	141,349.46	1.00	%	3.25	166,200.00	24,850.54
	VicRoads Fees	1.00	%	1.00	29,491.49	1.00	33,714.84	43,492.14	1.00	%	1.00	51,140.00	7,647.86
	Traffic Management	1.00	%	5.00	147,457.47	5.00	168,574.20	217,460.71	1.00	%	5.00	255,690.00	38,229.29
	Environmental Management	1.00	%	0.50	14,745.75	0.50	16,857.42	21,746.07	1.00	%	0.50	25,570.00	3,823.93

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Detail	Surveying and Design	1.00	%	5.00	147,457.47	5.00	168,574.20	217,460.71	1.00	%	5.00	255,690.00	38,229.29
	Supervision and Project management	1.00	%	9.00	265,423.45	9.00	303,433.56	391,429.29	1.00	%	9.00	460,240.00	68,810.71
	Site Establishment	1.00	%	2.50	73,728.74	2.50	84,287.10	108,730.36	1.00	%	2.50	127,850.00	19,119.64
	Contingency	1.00	%	15.00	442,372.42	15.00	505,722.59	652,382.14	1.00	%	15.00	767,060.00	114,677.86
Total - (2018) rates	Excluding Delivery				2,949,149.00		3,371,484.00						
	Including Delivery				4,165,674.00		4,762,221.00						
Total - (2021) rates	Excluding Delivery				3,214,573.00		3,674,918.00						
	Including Delivery				4,540,584.00		5,190,822.00						
Total - (2024) rates	Excluding Delivery							4,349,214.30				5,113,720.00	-764,505.70
	Including Delivery							6,143,265.19				7,223,160.00	-1,079,894.81

Toolern PSP & DCP - Intersection Projects

IT-17 - Secondary - Connector T-Intersection (Abey Road, Bundy Drive)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	16463	m2	3.68	60,583.84	4.96	81,656.48	105,336.86	16,126	m2	14.21	229,122.00	123,785.14
	Earthworks	2855	m3	34.07	97,269.85	40.52	115,684.60	149,233.13	2,854	m3	32.05	91,460.00	-57,773.13
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	m2	0.00	0.00	0.00
	Secondary Arterial Pavement	3883	m2	127.01	493,179.83	133.78	519,467.74	670,113.38	3,815	m2	194.52	742,090.00	71,976.62
	Collector Arterial Pavement	727	m2	105.15	76,444.05	112.44	81,743.88	105,449.61	805	m2	173.23	139,452.00	34,002.39
	Subgrade Preparation	922	m2	14.22	13,110.84	16.16	14,899.52	19,220.38	4,620	m2	6.01	27,765.00	8,542.62
	Pavement Rehab	3731	m2	51.58	192,444.98	59.32	221,322.92	285,506.57	3,462	m2	75.00	259,650.00	-25,856.57
	Pavement Removal	385	m2	140.00	53,900.00	161.00	61,985.00	79,960.65	395	m2	50.00	19,750.00	-60,210.65
Concrete Works	Kerb and Channel	1714	m	54.81	93,944.34	60.90	104,382.60	134,653.55	1,752	m	82.42	144,400.00	9,746.45
	Kerb Removal	1031	m	60.00	61,860.00	69.00	71,139.00	91,769.31	972	m	10.00	9,720.00	-82,049.31
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	1,508	m2	73.50	110,838.00	110,838.00
	SUP/ Footpath	2339	m2	63.51	148,549.89	73.63	172,220.57	222,164.54	2,688	m2	133.74	359,482.00	137,317.46
	Concrete Removal	1286	m3	45.03	57,908.58	49.53	63,695.58	82,167.30	1,000	m2	50.00	50,000.00	-32,167.30
	Traffic Island	342	m2	77.60	26,539.20	84.07	28,751.94	37,090.00	205	m2	150.00	30,750.00	-6,340.00
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	179	m	528.21	94,549.00	94,549.00
	Drainage Pipe 375mm CR Bfilled	242	m	259.10	62,702.20	282.96	68,476.32	88,334.45	0	m	0.00	0.00	-88,334.45
	Drainage Pipe 450mm CR Bfilled	121	m	299.43	36,231.03	334.33	40,453.93	52,185.57	882	m	560.00	493,920.00	441,734.43
	Drainage Pipe 525mm CR Bfilled	41	m	403.86	16,558.26	448.03	18,369.23	23,696.31	0	m	0.00	0.00	-23,696.31
	Drainage - pits	10	No.	2,565.39	25,653.90	2,806.10	28,061.00	36,198.69	13	No.	4,355.77	56,625.00	20,426.31
	Drainage - Sub-soil drainage	1714	m	33.88	58,070.32	43.40	74,387.60	95,960.00	1,752	No.	94.99	166,426.00	70,466.00
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	No.	0.00	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	3	Item/ Per Leg	109,730.28	329,190.84	128,786.34	386,359.02	498,403.14	1	Item	505,000.00	505,000.00	6,596.86
Landscape	Tree Planting	87	No.	303.34	26,390.58	363.01	31,581.87	40,740.61	24	No.	1,000.00	24,000.00	-16,740.61
	Landscaping	5493	m2	21.61	118,703.73	25.16	138,203.88	178,283.01	1,545	m2	30.01	46,359.00	-131,924.01
	Topsoil Seeding	5493	m2	7.21	39,604.53	8.44	46,360.92	59,805.59	5,151	m2	25.00	128,775.00	68,969.41
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	Item	0.00	0.00	0.00
	Street Lighting - Intersections	3	Item/ Per Leg	48,468.93	145,406.79	55,617.74	166,853.22	215,240.65	18	Item	18,000.00	324,000.00	108,759.35
Misc.	Regulatory Signage	5	Item	338.43	1,692.15	380.39	1,901.95	2,453.52	1	Item	15,000.00	15,000.00	12,546.48
	Line marking	8341	m2 of Pavement	3.11	25,940.51	4.09	34,114.69	44,007.95	8,082	m2	5.00	40,410.00	-3,597.95
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of l'scape	2.90	0.00	2.96	0.00	0.00	0	weeks	0.00	0.00	0.00
	Tactile Pavers (Hazard only)	18	Item	292.43	5,263.74	319.78	5,756.04	7,425.29	1	Item	0.00	10,000.00	2,574.71
Other	Rock excavation	571	m3	100.00	57,100.00	115.00	65,665.00	84,707.85	143	m3	100.00	14,300.00	-70,407.85
	Telecom/power relocation allowance	453	m	1,300.00	588,900.00	1,495.00	677,235.00	873,633.15	453	m	1,500.00	679,500.00	-194,133.15
	Water/gas relocation allowance	39	m	300.00	11,700.00	345.00	13,455.00	17,356.95	39	m	2,200.00	85,800.00	68,443.05
	Service proving fee	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Light pole relocation allowance	4.00	Item	10,000.00	40,000.00	11,500.00	46,000.00	59,340.00	4.00	Item	5,000.00	20,000.00	-39,340.00
	Power pole relocation allowance	4.00	Item	40,000.00	160,000.00	46,000.00	184,000.00	237,360.00	4.00	Item	5,000.00	20,000.00	-217,360.00
	Sawcut pavement tie ins, new kerb & channel, etc.	459.00	m	14.00	6,426.00	16.10	7,389.90	9,532.97	1,035.00	m	480.00	496,800.00	487,267.03
Delivery	Council Fees	1.00	%	3.25	104,409.98	3.25	119,314.19	153,915.30	1.00	%	3.25	180,170.00	26,254.70
	VicRoads Fees	1.00	%	1.00	32,126.15	1.00	36,712.06	47,358.56	1.00	%	1.00	55,440.00	8,081.44
	Traffic Management	1.00	%	5.00	160,630.73	5.00	183,560.29	236,792.78	1.00	%	5.00	277,180.00	40,387.22
	Environmental Management	1.00	%	0.50	16,063.07	0.50	18,356.03	23,679.28	1.00	%	0.50	27,720.00	4,040.72
	Surveying and Design	1.00	%	5.00	160,630.73	5.00	183,560.29	236,792.78	1.00	%	5.00	277,180.00	40,387.22
	Supervision and Project management	1.00	%	9.00	289,135.32	9.00	330,408.52	426,227.00	1.00	%	9.00	498,910.00	72,683.00
	Site Establishment	1.00	%	2.50	80,315.37	2.50	91,780.15	118,396.39	1.00	%	2.50	138,590.00	20,193.61
	Contingency	1.00	%	15.00	481,892.20	15.00	550,680.87	710,378.33	1.00	%	15.00	831,520.00	121,141.67
Total - (2018) rates	Excluding Delivery				3,212,615.00		3,671,206.00						
	Including Delivery				4,537,818.00		5,185,578.00						
Total - (2021)	Excluding Delivery				3,501,750.00		4,001,615.00						

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
rates	Including Delivery				4,946,222.00		5,652,281.00						
Total - (2024) rates	Excluding Delivery							4,735,855.52				5,543,441.00	-807,585.48
	Including Delivery							6,689,395.92				7,830,151.00	-1,140,755.08

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Siteworks/ Earthworks	Site Preparation	24432	m2	3.68	89,909.76	4.96	121,182.72	156,325.71	24,476	m2	14.21	347,761.00	191,435.29
	Earthworks	2513	m3	34.07	85,617.91	40.52	101,826.76	131,356.52	2,768	m3	32.05	88,704.00	-42,652.52
Road Pavement	Primary Arterial Pavement	2717	m2	169.62	460,857.54	186.26	506,068.42	652,828.26	3,206	m2	209.77	672,533.00	19,704.74
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	1066	m2	105.15	112,089.90	112.44	119,861.04	154,620.74	888	m2	172.98	153,605.00	-1,015.74
	Subgrade Preparation	757	m2	14.22	10,764.54	16.16	12,233.12	15,780.72	4,094	m2	6.01	24,602.00	8,821.28
	Pavement Rehab	5809	m2	51.58	299,628.22	59.32	344,589.88	444,520.95	9,411	m2	75.00	705,825.00	261,304.05
	Pavement Removal	1243	m2	140.00	174,020.00	161.00	200,123.00	258,158.67	598	m2	50.00	29,900.00	-228,258.67
Concrete Works	Kerb and Channel	2244	m	54.81	122,993.64	60.90	136,659.60	176,290.88	1,970	m	82.42	162,367.00	-13,923.88
	Kerb Removal	1500	m	60.00	90,000.00	69.00	103,500.00	133,515.00	1,368	m	10.00	13,680.00	-119,835.00
	Cycle Path	0	m2	76.59	0.00	91.94	0.00	0.00	2,464	m2	133.74	329,526.00	329,526.00
	SUP/ Footpath	4561	m2	63.51	289,669.11	73.63	335,826.43	433,216.09	2,046	m2	133.74	273,624.00	-159,592.09
	Concrete Removal	14	m3	45.03	630.42	49.53	693.42	894.51	374	m2	50.00	18,700.00	17,805.49
	Traffic Island	510	m2	77.60	39,576.00	84.07	42,875.70	55,309.65	102	m2	150.00	15,300.00	-40,009.65
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	451	m	528.20	238,220.00	238,220.00
	Drainage Pipe 375mm CR Bfilled	750	m	259.10	194,325.00	282.96	212,220.00	273,763.80	0	NA	NA	0.00	-273,763.80
	Drainage Pipe 450mm CR Bfilled	282	m	299.43	84,459.26	334.33	94,281.06	121,622.57	1,028	m	560.00	575,680.00	454,057.43
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	24	No.	2,565.39	61,569.36	2,806.10	67,346.40	86,876.86	28	No	4,359.57	122,068.00	35,191.14
	Drainage - Sub-soil drainage	2244	m	33.88	76,026.72	43.40	97,389.60	125,632.58	1,970	m	94.99	187,134.00	61,501.42
Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00	
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	640,000.00	640,000.00	-24,537.51
Landscape	Tree Planting	113	No.	303.34	34,277.42	363.01	41,020.13	52,915.97	30	No	1,000.00	30,000.00	-22,915.97
	Landscaping	9046	m2	21.61	195,484.06	25.16	227,597.36	293,600.59	1,069	m2	30.00	32,067.00	-261,533.59
	Topsoil Seeding	9046	m2	7.21	65,221.66	8.44	76,348.24	98,489.23	3,565	m2	25.00	89,075.00	-9,414.23
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	NA	NA	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	21	No	18,000.00	378,000.00	91,012.46
Misc.	Regulatory Signage	16	Item	338.43	5,414.88	380.39	6,086.24	7,851.25	1	Item	18,000.00	18,000.00	10,148.75
	Line marking	9592	m2 of Pavement	3.11	29,831.12	4.09	39,231.28	50,608.35	4,094	m2	5.00	20,470.00	-30,138.35
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of 'scape	2.90	0.00	2.96	0.00	0.00	0	NA	NA	0.00	0.00
Other	Tactile Pavers (Hazard only)	24	Item	292.43	7,018.32	319.78	7,674.72	9,900.39	0	NA	NA	0.00	-9,900.39
	Rock excavation	503	m3	100.00	50,300.00	115.00	57,845.00	74,620.05	139	m3	100.00	13,900.00	-60,720.05
	Telecom/power relocation allowance	542	m	1,300.00	704,600.00	1,495.00	810,290.00	1,045,274.10	542	m	1,500.00	813,000.00	-232,274.10
	Water/gas relocation allowance	157	m	300.00	47,100.00	345.00	54,165.00	69,872.85	157	m	2,200.00	345,400.00	275,527.15
	Service proving fee	1.00	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1.00	Item	10,000.00	10,000.00	-4,835.00
	Earthen mound removal	6,480.00	m3	34.07	220,773.60	40.52	262,569.60	338,714.78	6,480.00	m3	50.00	324,000.00	-14,714.78
	Light pole relocation allowance	3.00	Item	10,000.00	30,000.00	11,500.00	34,500.00	44,505.00	3.00	Item	5,000.00	15,000.00	-29,505.00
	Power pole relocation allowance	4.00	Item	40,000.00	160,000.00	46,000.00	184,000.00	237,360.00	4.00	Item	5,000.00	20,000.00	-217,360.00
	Sawcut pavement tie ins, new kerb & channel, etc.	2,704.00	m	14.00	37,856.00	16.10	43,534.40	56,159.38	2,290.00	m	480.00	1,099,200.00	1,043,040.62
	Tree/vegetation removal								7,745.00	m2	10.00	77,450.00	77,450.00
	Dirt road Removal								98.00	m2	75.00	7,350.00	7,350.00
Traffic Island Removal								74.00	m2	50.00	3,700.00	3,700.00	
Delivery	Council Fees	1.00	%	3.25	146,059.42	3.25	168,310.57	217,120.64	1.00	%	3.25	259,790.00	42,669.36
	VicRoads Fees	1.00	%	1.00	44,941.36	1.00	51,787.87	66,806.35	1.00	%	1.00	79,940.00	13,133.65
	Traffic Management	1.00	%	5.00	224,706.80	5.00	258,939.34	334,031.75	1.00	%	5.00	399,670.00	65,638.25
	Environmental Management	1.00	%	0.50	22,470.68	0.50	25,893.93	33,403.18	1.00	%	0.50	39,970.00	6,566.82
	Surveying and Design	1.00	%	5.00	224,706.80	5.00	258,939.34	334,031.75	1.00	%	5.00	399,670.00	65,638.25
	Supervision and Project management	1.00	%	9.00	404,472.23	9.00	466,090.82	601,257.16	1.00	%	9.00	719,410.00	118,152.84
	Site Establishment	1.00	%	2.50	112,353.40	2.50	129,469.67	167,015.88	1.00	%	2.50	199,840.00	32,824.12
	Contingency	1.00	%	15.00	674,120.39	15.00	776,818.03	1,002,095.26	1.00	%	15.00	1,199,010.00	196,914.74
Total - (2018) rates	Excluding Delivery				4,494,136.00		5,178,787.00						
	Including Delivery				6,347,967.00		7,315,036.00						
Total - (2021) rates	Excluding Delivery				4,898,609.00		5,644,878.00						
	Including Delivery				6,919,285.00		7,973,390.00						
Total - (2024) rates	Excluding Delivery							6,680,635.06				7,993,341.00	-1,312,705.94
	Including Delivery							9,436,397.03				11,290,641.00	-1,854,243.97

		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	25670	m2	3.68	94,465.60	4.96	127,323.20	164,246.93	18,779	m2	14.21	266,817.00	102,570.07
	Earthworks	9003	m3	34.07	306,732.21	40.52	364,801.56	470,594.01	6,278	m3	32.05	201,187.00	-269,407.01
Road Pavement	Primary Arterial Pavement	11412	m2	169.62	1,935,703.44	186.26	2,125,599.12	2,742,022.86	7,338	m2	209.69	1,538,690.00	-1,203,332.86
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	1576	m2	105.15	165,716.40	112.44	177,205.44	228,595.02	1,927	m2	172.64	332,683.00	104,087.98
	Subgrade Preparation	2598	m2	14.22	36,943.56	16.16	41,983.68	54,158.95	9,265	m2	6.01	55,677.00	1,518.05
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	NA	NA	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Concrete Works	Kerb and Channel	2394	m	54.81	131,215.14	60.90	145,794.60	188,075.03	1,630	m	82.42	134,345.00	-53,730.03
	Cycle Path	3505	m2	76.59	268,447.95	91.94	322,249.70	415,702.11	2,516	m2	133.74	336,480.00	-79,222.11
	SUP/ Footpath	1103	m2	63.51	70,051.53	73.63	81,213.89	104,765.92	906	m2	133.74	121,165.00	16,399.08
	Traffic Island	145	m2	77.60	11,252.00	84.07	12,190.15	15,725.29	89	m2	150.00	13,350.00	-2,375.29
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	387	m	528.20	204,415.00	204,415.00
	Drainage Pipe 375mm CR Bfilled	1000	m	259.10	259,100.00	282.96	282,960.00	365,018.40	0	NA	NA	0.00	-365,018.40
	Drainage Pipe 450mm CR Bfilled	194	m	299.43	58,089.42	334.33	64,860.02	83,669.43	856	m	560.00	479,360.00	395,690.57
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	32	No.	2,565.39	82,092.48	2,806.10	89,795.20	115,835.81	24	No	4,359.58	104,630.00	-11,205.81
	Drainage - Sub-soil drainage	2394	m	33.88	81,108.72	43.40	103,899.60	134,030.48	1,630	m	94.99	154,837.00	20,806.52
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	640,000.00	640,000.00	-24,537.51
Landscape	Tree Planting	115	No.	303.34	34,884.10	363.01	41,746.15	53,852.53	25	No	1,000.00	25,000.00	-28,852.53
	Landscaping	7920	m2	21.61	171,151.20	25.16	199,267.20	257,054.69	2,142	m2	30.00	64,269.00	-192,785.69
	Topsoil Seeding	7920	m2	7.21	57,103.20	8.44	66,844.80	86,229.79	7,141	m2	25.00	178,525.00	92,295.21
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	NA	NA	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	18	No	18,000.00	324,000.00	37,012.46
Misc.	Regulatory Signage	16	Item	338.43	5,414.88	380.39	6,086.24	7,851.25	1	Item	14,500.00	14,500.00	6,648.75
	Line marking	12988	m2 of Pavement	3.11	40,392.68	4.09	53,120.92	68,525.99	9,265	m2	5.00	46,325.00	-22,200.99
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of Landscape	2.90	0.00	2.96	0.00	0.00	0	NA	NA	0.00	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4,678.88	319.78	5,116.48	6,600.26	0	NA	NA	0.00	-6,600.26
Other	Rock excavation	1801	m3	100.00	180,100.00	115.00	207,115.00	267,178.35	314	m3	100.00	31,400.00	-235,778.35
	Telecom/power relocation allowance	270	m	1,300.00	351,000.00	1,495.00	403,650.00	520,708.50	270	m	1,500.00	405,000.00	-115,708.50
	Water/gas relocation allowance	56	m	300.00	16,800.00	345.00	19,320.00	24,922.80	56	m	2,200.00	123,200.00	98,277.20
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
	Power pole removal	7	Item	40,000.00	280,000.00	46,000.00	322,000.00	415,380.00	7	Item	5,000.00	35,000.00	-380,380.00
	Electrical overhead relocation								372	m	1,210.00	450,120.00	450,120.00
	Tree/vegetation removal								11,698	m2	10.00	116,980.00	116,980.00
	Dirt/Gravel Road Removal								6,604	m2	75.00	495,300.00	495,300.00
	Kerb Removal								946	m	10.00	9,460.00	9,460.00
Delivery	Council Fees	1.00	%	3.25	174,089.01	3.25	198,295.20	255,800.81	1.00	%	3.25	227,840.00	-27,960.81
	VicRoads Fees	1.00	%	1.00	53,565.85	1.00	61,013.91	78,707.94	1.00	%	1.00	70,110.00	-8,597.94
	Traffic Management	1.00	%	5.00	267,829.24	5.00	305,069.54	393,539.70	1.00	%	5.00	350,520.00	-43,019.70
	Environmental Management	1.00	%	0.50	26,782.92	0.50	30,506.95	39,353.97	1.00	%	0.50	35,060.00	-4,293.97
	Surveying and Design	1.00	%	5.00	267,829.24	5.00	305,069.54	393,539.70	1.00	%	5.00	350,520.00	-43,019.70
	Supervision and Project management	1.00	%	9.00	482,092.64	9.00	549,125.16	708,371.46	1.00	%	9.00	630,920.00	-77,451.46
	Site Establishment	1.00	%	2.50	133,914.62	2.50	152,534.77	196,769.85	1.00	%	2.50	175,260.00	-21,509.85
	Contingency	1.00	%	15.00	803,487.73	15.00	915,208.61	1,180,619.10	1.00	%	15.00	1,051,540.00	-129,079.10

Toolern PSP & DCP - Intersection Projects

IT-20 - Primary- Connector Intersection (Mt Cottrell Road, South Connector Road)

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
<b>Total - (2018) rates</b>	Excluding Delivery				5,356,585.00		6,101,391.00						
	Including Delivery				7,566,176.00		8,618,214.00						
<b>Total - (2021) rates</b>	Excluding Delivery				5,838,678.00		6,650,516.00						
	Including Delivery				8,247,133.00		9,393,854.00						
<b>Total - (2024) rates</b>	Excluding Delivery							7,870,794.00				7,010,215.00	860,579.00
	Including Delivery							11,117,496.53				9,901,985.00	1,215,511.53

Toolern PSP & DCP - Intersection Projects

IT-21 - Primary- Connector Intersection (Toolern Road, Eastern North-South Connector Road)

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preparation	18525	m2	3.68	68,172.00	4.96	91,884.00	118,530.36	18,519	m2	14.21	263,122.00	144,591.64
	Earthworks	6457	m3	34.07	219,989.99	40.52	261,637.64	337,512.56	5,768	m3	32.05	184,843.00	-152,669.56
Road Pavement	Primary Arterial Pavement	7682	m2	169.62	1,303,020.84	186.26	1,430,849.32	1,845,795.62	7,032	m2	209.69	1,474,563.00	-371,232.62
	Secondary Arterial Pavement	0	m2	127.01	0.00	133.78	0.00	0.00	0	NA	NA	0.00	0.00
	Collector Arterial Pavement	1801	m2	105.15	189,375.15	112.44	202,504.44	261,230.73	1,383	m2	172.82	239,009.00	-22,221.73
	Subgrade Preparation	1897	m2	14.22	26,975.34	16.16	30,655.52	39,545.62	8,415	m2	6.01	50,569.00	11,023.38
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	1,154	m2	75.00	86,550.00	86,550.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Concrete Works	Kerb and Channel	1916	m	54.81	105,015.96	60.90	116,684.40	150,522.88	1,748	m	82.42	144,070.00	-6,452.88
	Cycle Path	2444	m2	76.59	187,185.96	91.94	224,701.36	289,864.75	360	m2	133.74	48,145.00	-241,719.75
	SUP/ Footpath	377	m2	63.51	23,943.27	73.63	27,758.51	35,808.48	2,822	m2	133.74	377,403.00	341,594.52
	Traffic Island	117	m2	77.60	9,079.20	84.07	9,836.19	12,688.69	75	m2	150.00	11,250.00	-1,438.69
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	377	m	528.20	199,133.00	199,133.00
	Drainage Pipe 375mm CR Bfilled	943	m	259.10	244,331.30	282.96	266,831.28	344,212.35	0	NA	NA	0.00	-344,212.35
	Drainage Pipe 450mm CR Bfilled	0	m	299.43	0.00	334.33	0.00	0.00	966	m	560.00	540,960.00	540,960.00
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	25	No.	2,565.39	64,134.75	2,806.10	70,152.50	90,496.73	26	No	4,355.81	113,251.00	22,754.28
	Drainage - Sub-soil drainage	1916	m	33.88	64,914.08	43.40	83,154.40	107,269.18	1,748	m	94.99	166,046.00	58,776.82
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	640,000.00	640,000.00	-24,537.51
Landscape	Tree Planting	87	No.	303.34	26,390.58	363.01	31,581.87	40,740.61	28	No	1,000.00	28,000.00	-12,740.61
	Landscaping	6082	m2	21.61	131,432.02	25.16	153,023.12	197,399.82	1,721	m2	29.99	51,615.00	-145,784.82
	Topsoil Seeding	6082	m2	7.21	43,851.22	8.44	51,332.08	66,218.38	5,735	m2	25.00	143,375.00	77,156.62
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	NA	NA	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	20	No	18,000.00	360,000.00	73,012.46
Misc.	Regulatory Signage	16	Item	338.43	5,414.88	380.39	6,086.24	7,851.25	1	Item	15,000.00	15,000.00	7,148.75
	Line marking	9483	m2 of Pavement	3.11	29,492.13	4.09	38,785.47	50,033.26	9,569	m2	5.00	47,845.00	-2,188.26
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of Landscape	2.90	0.00	2.96	0.00	0.00	0	NA	NA	0.00	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4,678.88	319.78	5,116.48	6,600.26	0	NA	NA	0.00	-6,600.26
Other	Rock excavation	1292	m3	100.00	129,200.00	115.00	148,580.00	191,668.20	289	m3	100.00	28,900.00	-162,768.20
	Telecom/power relocation allowance	60	m	1,300.00	78,000.00	1,495.00	89,700.00	115,713.00	60	m	1,500.00	90,000.00	-25,713.00
	Water/gas relocation allowance	50	m	300.00	15,000.00	345.00	17,250.00	22,252.50	50	m	2,200.00	110,000.00	87,747.50
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
	Power pole removal	1	Item	30,000.00	30,000.00	34,500.00	34,500.00	44,505.00	1	item	5,000.00	5,000.00	-39,505.00
	Sawcut pavement tie ins, new kerb & channel, etc.								200	m	480.00	96,000.00	96,000.00
	Tree/vegetation removal								17,102	m2	10.00	171,020.00	171,020.00
	Council Fees	1.00	%	3.25	120,696.52	3.25	137,470.21	177,336.57	1.00	%	3.25	188,280.00	10,943.43
	VicRoads Fees	1.00	%	1.00	37,137.39	1.00	42,298.53	54,565.10	1.00	%	1.00	57,940.00	3,374.90



		VPA Benchmark Costings							WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Delivery	Traffic Management	1.00	%	5.00	185,686.95	5.00	211,492.63	272,825.49	1.00	%	5.00	289,660.00	16,834.51
	Environmental Management	1.00	%	0.50	18,568.70	0.50	21,149.26	27,282.55	1.00	%	0.50	28,970.00	1,687.45
	Surveying and Design	1.00	%	5.00	185,686.95	5.00	211,492.63	272,825.49	1.00	%	5.00	289,660.00	16,834.51
	Supervision and Project management	1.00	%	9.00	334,236.51	9.00	380,686.73	491,085.88	1.00	%	9.00	521,390.00	30,304.12
	Site Establishment	1.00	%	2.50	92,843.48	2.50	105,746.31	136,412.75	1.00	%	2.50	144,830.00	8,417.25
	Contingency	1.00	%	15.00	557,060.86	15.00	634,477.89	818,476.47	1.00	%	15.00	868,980.00	50,503.53
Total - (2018) rates	Excluding Delivery				3,713,739.00		4,229,853.00						
	Including Delivery				5,245,656.00		5,974,667.00						
Total - (2021) rates	Excluding Delivery				4,047,976.00		4,610,540.00						
	Including Delivery				5,717,766.00		6,512,388.00						
Total - (2024) rates	Excluding Delivery							5,456,509.82				5,793,169.00	-336,659.18
	Including Delivery							7,707,320.11				8,182,879.00	-475,558.89

Group	Sub Item	Qty	Unit	VPA Benchmark Costings					WT Total Cost (2024)				
				Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
Sitemworks/ Earthworks	Site Preperation	18549	m2	3.68	68,260.32	4.96	92,003.04	118,683.92	18,504	m2	14.21	262,909.00	144,225.08
	Earthworks	5862	m3	34.07	199,718.34	40.52	237,528.24	306,411.43	6,687	m3	32.05	214,293.00	-92,118.43
Road Pavement	Primary Arterial Pavement	0	m2	169.62	0.00	186.26	0.00	0.00	0	NA	NA	0.00	0.00
	Secondary Arterial Pavement	7713	m2	127.01	979,628.13	133.78	1,031,845.14	1,331,080.23	9,318	m2	185.48	1,728,300.00	397,219.77
	Collector Arterial Pavement	1801	m2	105.15	189,375.15	112.44	202,504.44	261,230.73	1,438	m2	172.79	248,469.00	-12,761.73
	Subgrade Preparation	1903	m2	14.22	27,060.66	16.16	30,752.48	39,670.70	10,756	m2	6.01	64,637.00	24,966.30
	Pavement Rehab	0	m2	51.58	0.00	59.32	0.00	0.00	0	NA	NA	0.00	0.00
	Pavement Other	0	m2	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Concrete Works	Kerb and Channel	1867	m	54.81	102,350.27	60.90	113,700.30	146,673.39	1,749	m	82.42	144,153.00	-2,520.39
	Cycle Path	2452	m2	76.59	187,798.68	91.94	225,436.88	290,813.58	387	m2	133.74	51,756.00	-239,057.58
	SUP/ Footpath	377	m2	63.51	23,943.27	73.63	27,758.51	35,808.48	2,781	m2	133.74	371,920.00	336,111.52
	Traffic Island	183	m2	77.60	14,200.80	84.07	15,384.81	19,846.40	75	m2	150.00	11,250.00	-8,596.40
Drainage	Drainage Pipe 300mm CR Bfilled	0	m	179.85	0.00	197.96	0.00	0.00	420	m	528.20	221,846.00	221,846.00
	Drainage Pipe 375mm CR Bfilled	922	m	259.10	238,890.20	282.96	260,889.12	336,546.96	0	NA	NA	0.00	-336,546.96
	Drainage Pipe 450mm CR Bfilled	0	m	299.43	0.00	334.33	0.00	0.00	1,066	m	560.00	596,960.00	596,960.00
	Drainage Pipe 525mm CR Bfilled	0	m	403.86	0.00	448.03	0.00	0.00	0	NA	NA	0.00	0.00
	Drainage - pits	22	No.	2,565.39	56,438.58	2,806.10	61,734.20	79,637.12	29	No	4,357.90	126,379.00	46,741.88
	Drainage - Sub-soil drainage	1867	m	33.88	63,253.96	43.40	81,027.80	104,525.86	1,749	m	94.99	166,141.00	61,615.14
	Drainage Culvert	0	No.	0.00	0.00	0.00	0.00	0.00	0	NA	NA	0.00	0.00
Traffic signals	Traffic Signals (all inclusive)	4	Item/ Per Leg	109,730.28	438,921.12	128,786.34	515,145.36	664,537.51	1	Item	640,000.00	640,000.00	-24,537.51
Landscape	Tree Planting	88	No.	303.34	26,693.92	363.01	31,944.88	41,208.90	30	No	1,000.00	30,000.00	-11,208.90
	Landscaping	6007	m2	21.61	129,811.27	25.16	151,136.12	194,965.59	1,704	m2	29.99	51,111.00	-143,854.59
	Topsoil Seeding	6007	m2	7.21	43,310.47	8.44	50,699.08	65,401.81	5,679	m2	25.00	141,975.00	76,573.19
Street Lighting	Street Lighting - Road	0	m	216.34	0.00	225.67	0.00	0.00	0	NA	NA	0.00	0.00
	Street Lighting - Intersections	4	Item/ Per Leg	48,468.93	193,875.72	55,617.74	222,470.96	286,987.54	22	No	18,000.00	396,000.00	109,012.46
Misc.	Regulatory Signage	10	Item	338.43	3,384.30	380.39	3,803.90	4,907.03	1	Item	18,000.00	18,000.00	13,092.97
	Line marking	9514	m2 of Pavement	3.11	29,588.54	4.09	38,912.26	50,196.82	10,756	m2	5.00	53,780.00	3,583.18
	Landscape maintenance (intersections)	1	Item	71,344.66	71,344.66	88,131.43	88,131.43	113,689.54	65	weeks	1,500.00	97,500.00	-16,189.54
	Landscape maintenance (roads)	0	m2 of Landscape	2.90	0.00	2.96	0.00	0.00	0	NA	NA	0.00	0.00
	Tactile Pavers (Hazard only)	16	Item	292.43	4,678.88	319.78	5,116.48	6,600.26	0	NA	NA	0.00	-6,600.26
Other	Rock excavation	1173	m3	100.00	117,300.00	115.00	134,895.00	174,014.55	335	m3	100.00	33,500.00	-140,514.55
	Telecom/power relocation allowance	0	m	1,300.00	0.00	1,495.00	0.00	0.00	0	NA	NA	0.00	0.00
	Water/gas relocation allowance	0	m	300.00	0.00	345.00	0.00	0.00	0	NA	NA	0.00	0.00
	Service proving fee	1	Item	10,000.00	10,000.00	11,500.00	11,500.00	14,835.00	1	Item	10,000.00	10,000.00	-4,835.00
Delivery	Council Fees	1	%	3.25	104,643.74	3.25	118,115.41	152,368.88	1	%	3.25	184,630.00	32,261.12
	VicRoads Fees	1.00	%	1.00	32,198.07	1.00	36,343.20	46,882.73	1.00	%	1.00	56,810.00	9,927.27
	Traffic Management	1.00	%	5.00	160,990.36	5.00	181,716.02	234,413.67	1.00	%	5.00	284,050.00	49,636.33
	Environmental Management	1.00	%	0.50	16,099.04	0.50	18,171.60	23,441.37	1.00	%	0.50	28,410.00	4,968.63
	Surveying and Design	1.00	%	5.00	160,990.36	5.00	181,716.02	234,413.67	1.00	%	5.00	284,050.00	49,636.33
	Supervision and Project management	1.00	%	9.00	289,782.65	9.00	327,088.84	421,944.60	1.00	%	9.00	511,280.00	89,335.40
	Site Establishment	1.00	%	2.50	80,495.18	2.50	90,858.01	117,206.83	1.00	%	2.50	142,030.00	24,823.17
	Contingency	1.00	%	15.00	482,971.09	15.00	545,148.06	703,241.00	1.00	%	15.00	852,140.00	148,899.00
<b>Total - (2018)</b>	Excluding Delivery				<b>3,219,807.00</b>		<b>3,634,320.00</b>						

VPA Benchmark Costings									WT Total Cost (2024)				
Group	Sub Item	Qty	Unit	Rate (P50)	Amount (P50)	Rate (P90)	Amount (P90)	VPA Amount (2024)	Qty	Unit	Rate	Total	Variance
rates	Including Delivery				4,547,978.00		5,133,478.00						
Total - (2021) rates	Excluding Delivery				3,509,590.00		3,961,410.00						
	Including Delivery				4,957,296.00		5,595,492.00						
Total - (2024) rates	Excluding Delivery							4,688,273.35				5,680,879.00	-992,605.65
	Including Delivery							6,622,186.11				8,024,279.00	-1,402,092.89