

**SHIRE OF YARRA RANGES  
ENGINEER'S ESTIMATE**

REFERENCE NO:	DATE:	21-Jun-22
PROJECT:	<b>TAINTON STREET AND RAILWAY PARADE WANDIN NORTH IMPROVEMENT WORKS SCS</b>	
TOTAL COSTS:		<b>\$1,808,451.25</b>
AMOUNT CHARGEABLE:		
COUNCIL COSTS:		
AVAILABLE FUNDS:		
ACCOUNT No.		

Item	Description	Quantity	Unit	Rate	Amount
<b>1</b>	<b>RAILWAY PARADE</b>				
<b>1.1</b>	<b>SITE PREPARATION/PRELIMINARIES</b>				
1.1.1	Site establishment, set out and clean up, installation & maintaining sediment control, Environmental Management Plan, OH&S, Site Management Plan, Traffic Management Plan, Council permits, temporary fencing, setout, erection and maintenance of warning signs, lights and barriers.	1	Item	\$ 10,000.00	\$ 10,000.00
1.1.2	Provide a traffic management plan and traffic management in accordance with the VicRoads Roadworks Signing Code of Practice (AS 1742.3).	1	Item	\$ 15,000.00	\$ 15,000.00
<b>1.2</b>	<b>REMOVAL WORKS</b>				
1.2.1	Grubbing and clearing including sawcutting, taking up, removal and/or salvage of all existing redundant concrete, pipework, endwalls, guide posts, retaining walls, pits, trees, planting, etc. as specified.	1	Item	\$ 5,000.00	\$ 5,000.00
<b>1.3</b>	<b>EARTHWORKS</b>				
	Earthworks including excavation, forming, grading, boxing, filling, trimming, compaction of sub-grade, lowering of all private services, provision of access at existing driveway entrances, as directed and specified.				
1.3.1	Cut to Fill	200	m3	\$ 60.00	\$ 12,000.00
1.3.2	Cut to Dispose	143	m3	\$ 60.00	\$ 8,580.00
<b>1.4</b>	<b>DRAINAGE</b>				
1.4.1	300mm dia. <b>RCP Pipe RRJ Class 4</b> including fittings. Crushed Rock Backfill	226	lin.m.	\$ 300.00	\$ 67,800.00
1.4.2	300mm dia. <b>Twin-Walled Corrugated Polypropylene Pipe</b> including fittings. Earth backfill	75	lin.m.	\$ 280.00	\$ 21,000.00
1.4.3	525mm dia. <b>RCP Pipe RRJ Class 4</b> including fittings. Crushed Rock Backfill	5	lin.m.	\$ 525.00	\$ 2,625.00
1.4.4	525mm dia. <b>Twin-Walled Corrugated Polypropylene Pipe</b> including fittings. Earth backfill	20	lin.m.	\$ 475.00	\$ 9,500.00
1.4.5	Supply of all materials, plant and labor and install subsurface drainage as detail in plans.	1311	lin.m.	\$ 35.00	\$ 45,885.00
<b>1.5</b>	<b>DRAINAGE PITS</b>				
1.5.1	<b>750mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,	12	No.	\$ 2,500.00	\$ 30,000.00
1.5.2	<b>900mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,	2	No.	\$ 2,750.00	\$ 5,500.00

Item	Description	Quantity	Unit	Rate	Amount
1.5.3	750mm x 1000mm Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	1	No.	\$ 2,250.00	\$ 2,250.00

Item	Description	Quantity	Unit	Rate	Amount
1.5.4	<b>900mm x 1000mm</b> Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	1	No.	\$ 2,500.00	\$ 2,500.00
1.5.5	<b>900mm x 1000mm</b> Grated Pit as shown on the plans Council standard drawing SD/P6	1	No.	\$ 3,000.00	\$ 3,000.00
1.5.6	<b>600mm x 1000mm</b> Table Drain Inlet Pit as shown on the plans to Council standard drawing SD/P5	1	No.	\$ 2,250.00	\$ 2,250.00
<b>1.6</b>	<b>CONCRETE KERB AND CHANNEL</b>				
1.6.1	600mm rollover kerb and channel to Council standard SD/B1 including excavation of bedding and min. 50mm depth crushed rock bedding	1236	lin.m.	\$ 110.00	\$ 135,960.00
1.6.2	450mm B2 barrier kerb to Council standard SD/B2 including excavation of bedding and min. 50mm depth crushed rock bedding	55	lin.m.	\$ 110.00	\$ 6,050.00
1.6.3	300mm Edge strip to Council standard SD/B2 including excavation of bedding and min. 50mm depth crushed rock bedding	22	lin.m.	\$ 90.00	\$ 1,980.00
<b>1.7</b>	<b>ROAD PAVEMENT</b>				
1.7.1	Shape, trim, spread and compact existing subbase material to form road shape and levels..	1920	sq.m.	\$ 5.00	\$ 9,600.00
1.7.2	Sub-base Course - 150mm (minimum) depth of 3% cement treated crushed rock	1717	sq.m.	\$ 23.00	\$ 39,491.00
1.7.3	Base course - 130mm depth of 20mm nominal size class 2 fine crushed rock compacted to 98% Mod MDD	2562	sq.m.	\$ 30.00	\$ 76,860.00
1.7.4	Asphalt wearing course - 40mm compacted depth of 14mm nominal size type 'H' asphalt, class C170 binder	2562	sq.m.	\$ 35.00	\$ 89,670.00
1.7.5	Asphalt wearing course - 30mm compacted depth of 10mm nominal size Type 'H' asphalt class C170 binder	2562	sq.m.	\$ 30.00	\$ 76,860.00
<b>1.8</b>	<b>VEHICLE CROSSINGS</b>				
1.8.1	Reinstate existing gravel driveways to match finished surface levels.	286	m <sup>2</sup>	\$ 30.00	\$ 8,580.00
1.8.2	Reinstate existing asphalt driveways to match finished surface levels.	294	m <sup>2</sup>	\$ 100.00	\$ 29,400.00
<b>1.9</b>	<b>LANDSCAPING</b>				
1.9.1	Regrade and re-topsoil nature strip to an even depth of 50mm with imported local topsoil and grass seeds as specified.	1	item	\$ 25,000.00	\$ 25,000.00
<b>1.10</b>	<b>PAVEMENT MARKING</b>				
1.10.1	Supply and temporary linemarking as noted in the specification and on the drawings.	1	item	\$ 1,250.00	\$ 1,250.00
1.10.2	Supply and linemark with long life thermoplastic material as noted in the specification and on the drawings.	1	item	\$ 2,500.00	\$ 2,500.00
<b>1.11</b>	<b>ANCILLARY WORKS</b>				
1.11.1	Supply and install road signs as shown on plans, as directed by Council's Superintendent.	1	item	\$ 1,250.00	\$ 1,250.00
1.11.2	Supply all materials and construct concrete pram crossings as per council Std. Dwg. SD/B4.	2	No.	\$ 1,200.00	\$ 2,400.00
1.11.3	Supply all materials, plant and labour and construct concrete footpath to Council standard SD/B5, incl. pram crossings, as shown on the plans	5	sq.m.	\$ 90.00	\$ 450.00
1.11.4	Construct kerb outlet with rock beaching to Vicroads standard SD2051, as shown on plans	2	No.	\$ 500.00	\$ 1,000.00
<b>1.12</b>	<b>PROVISIONAL ITEMS</b>				

Item	Description	Quantity	Unit	Rate	Amount
1.12.1	Excavation of soft or unsuitable subgrade, backfill and compacted with 150mm compacted depth of size 20mm Class 2 crushed rock, as specified. This item includes pavement subbase for new pavement areas.	200	sq.m	\$ 60.00	\$ 12,000.00
1.12.2	Excavation of soft or unsuitable subgrade, backfill and compacted with 100mm compacted depth of 3% size 20mm Class 3 cement treated crushed rock, as specified. This item includes pavement subbase for new pavement areas.	100	sq.m	\$ 50.00	\$ 5,000.00
1.12.3	Supply all plant, materials and labour to remove rock or rock like substances from road boxing or drainage trenches.	50	cu.m	\$ 250.00	\$ 12,500.00
1.12.4	Provision of as constructed plans to Council.	1	Item	\$ 1,500.00	\$ 1,500.00
1.12.5	Allowance to top up and reseed areas where topsoil has settled 3-6 months after construction.	1	Item	\$ 12,500.00	\$ 12,500.00
<b>SUB-TOTAL (RAILWAY PARADE)</b>					<b>\$794,691.00</b>

<b>2</b>	<b>TANTON STREET</b>				
<b>2.1</b>	<b>SITE PREPARATION/PRELIMINARIES</b>				
2.1.1	Site establishment, set out and clean up, installation & maintaining sediment control, Environmental Management Plan, OH&S, Site Management Plan, Traffic Management Plan, Council permits, temporary fencing, setout, erection and maintenance of warning signs, lights and barriers.	1	Item	\$ 10,000.00	\$ 10,000.00
2.1.2	Provide a traffic management plan and traffic management in accordance with the VicRoads Roadworks Signing Code of Practice (AS 1742.3).	1	Item	\$ 15,000.00	\$ 15,000.00
<b>2.2</b>	<b>REMOVAL WORKS</b>				
2.2.1	Grubbing and clearing including sawcutting, taking up, removal and/or salvage of all existing redundant concrete, pipework, endwalls, guide posts, retaining walls, pits, trees, planting, etc. as specified.	1	Item	\$ 10,000.00	\$ 10,000.00
<b>2.3</b>	<b>EARTHWORKS</b>				
	Earthworks including excavation, forming, grading, boxing, filling, trimming, compaction of sub-grade, lowering of all private services, provision of access at existing driveway entrances, as directed and specified.				
2.3.1	Cut to Fill	227	m3	\$ 60.00	\$ 13,620.00
2.3.2	Cut to Dispose	58	m3	\$ 60.00	\$ 3,480.00
<b>2.4</b>	<b>DRAINAGE</b>				
2.4.1	300mm dia. <b>reinforced concrete drainage pipe</b> (class 4) rubber ring jointed. Crushed rock backfill	51	lin.m.	\$ 300.00	\$ 15,300.00
2.4.2	300mm dia. <b>ribbed poly-propylene pipes</b> rubber ring jointed. Crushed rock backfill	132	lin.m.	\$ 300.00	\$ 39,600.00
2.4.3	300mm dia. <b>ribbed poly-propylene pipes</b> rubber ring jointed. Select fill backfill	95	lin.m.	\$ 250.00	\$ 23,750.00
2.4.4	600mm dia. <b>reinforced concrete drainage pipe</b> (class 4) rubber ring jointed. Crushed rock backfill	6	lin.m.	\$ 600.00	\$ 3,600.00
2.4.5	600mm dia. <b>ribbed poly-propylene pipes</b> rubber ring jointed. Select fill backfill	7	lin.m.	\$ 550.00	\$ 3,850.00
2.4.6	150mm dia. sewer grade <b>PVC pipes</b> SCJ. Select fill backfill	53	lin.m.	\$ 100.00	\$ 5,300.00

Item	Description	Quantity	Unit	Rate	Amount
2.4.7	Supply of all materials, plant and labor and install subsurface drainage as detail in plans.	973	lin.m.	\$ 35.00	\$ 34,055.00
2.4.8	Reconnection of existing property connections to new drainage as per Council standard.	5	No.	\$ 900.00	\$ 4,500.00
<b>2.5</b>	<b>DRAINAGE PITS</b>				
2.5.1	<b>750mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,	15	No.	\$ 2,500.00	\$ 37,500.00
2.5.2	<b>900mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,	1	No.	\$ 2,750.00	\$ 2,750.00
2.5.3	<b>750mm x 1000mm</b> Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	1	No.	\$ 2,000.00	\$ 2,000.00
2.5.4	<b>750mm x 1000mm</b> Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	1	No.	\$ 2,250.00	\$ 2,250.00
2.5.5	<b>900mm x 1000mm</b> Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	2	No.	\$ 2,500.00	\$ 5,000.00
2.5.6	<b>300mm x 300mm</b> Property Inlet Pit as shown on the plans Council standard drawing SD/H3	2	No.	\$ 300.00	\$ 600.00
<b>2.6</b>	<b>CONCRETE KERB AND CHANNEL</b>				
2.6.1	600mm rollover kerb and channel to Council standard SD/B1 including excavation of bedding and min. 50mm depth crushed rock bedding	885	lin.m.	\$ 110.00	\$ 97,350.00
2.6.2	300mm Edge strip to Council standard SD/B2 including excavation of bedding and min. 50mm depth crushed rock bedding	88	lin.m.	\$ 90.00	\$ 7,920.00
<b>2.7</b>	<b>ROAD PAVEMENT</b>				
2.7.1	Shape, trim, spread and compact existing subbase material to form road shape and levels..	1491	sq.m.	\$ 5.00	\$ 7,455.00
2.7.2	Sub-base Course - 150mm (minimum) depth of 3% cement treated crushed rock	1230	sq.m.	\$ 23.00	\$ 28,290.00
2.7.3	Base course - 130mm depth of 20mm nominal size class 2 fine crushed rock compacted to 98% Mod MDD	2018	sq.m.	\$ 30.00	\$ 60,540.00
2.7.4	Asphalt wearing course - 40mm compacted depth of 14mm nominal size type 'H' asphalt, class C170 binder	2018	sq.m.	\$ 35.00	\$ 70,630.00
2.7.5	Asphalt wearing course - 30mm compacted depth of 10mm nominal size Type 'H' asphalt class C170 binder	2018	sq.m.	\$ 30.00	\$ 60,540.00
<b>2.8</b>	<b>VEHICLE CROSSINGS</b>				
2.8.1	Reinstate existing gravel driveways to match finished surface levels.	563	m <sup>2</sup>	\$ 30.00	\$ 16,890.00
2.8.2	Reinstate existing concrete driveways to match finished surface levels.	26	m <sup>2</sup>	\$ 150.00	\$ 3,900.00
<b>2.9</b>	<b>LANDSCAPING</b>				
2.9.1	Regrade and re-topsoil nature strip to an even depth of 50mm with imported local topsoil and grass seeds as specified.	1	item	\$ 20,000.00	\$ 20,000.00
<b>2.10</b>	<b>PAVEMENT MARKING</b>				
2.10.1	Supply and temporary linemarking as noted in the specification and on the drawings.	1	item	\$ 1,250.00	\$ 1,250.00
2.10.2	Supply and linemark with long life thermoplastic material as noted in the specification and on the drawings.	1	item	\$ 2,500.00	\$ 2,500.00
<b>2.11</b>	<b>ANCILLARY WORKS</b>				

Item	Description	Quantity	Unit	Rate	Amount
2.11.1	Supply and install road signs as shown on plans, as directed by Council's Superintendent.	1	item	\$ 1,250.00	\$ 1,250.00
2.11.2	Supply all materials and construct concrete pram crossings as per council Std. Dwg. SD/B4.	2	No.	\$ 1,200.00	\$ 2,400.00
2.11.3	Supply all materials, plant and labour and construct concrete footpath to Council standard SD/B5, incl. pram crossings, as shown on the plans	25	sq.m.	\$ 90.00	\$ 2,250.00
<b>2.12</b>	<b>PROVISIONAL ITEMS</b>				
2.12.1	Excavation of soft or unsuitable subgrade, backfill and compacted with 150mm compacted depth of size 20mm Class 2 crushed rock, as specified. This item includes pavement subbase for new pavement areas.	150	sq.m	\$ 60.00	\$ 9,000.00
2.12.2	Excavation of soft or unsuitable subgrade, backfill and compacted with 100mm compacted depth of 3% size 20mm Class 3 cement treated crushed rock, as specified. This item includes pavement subbase for new pavement areas.	75	sq.m	\$ 50.00	\$ 3,750.00
2.12.3	Supply all plant, materials and labour to remove rock or rock like substances from road boxing or drainage trenches.	50	cu.m	\$ 250.00	\$ 12,500.00
2.12.4	Provision of as constructed plans to Council.	1	Item	\$ 1,500.00	\$ 1,500.00
2.12.5	Allowance to top up and reseed areas where topsoil has settled 3-6 months after construction.	1	Item	\$ 10,000.00	\$ 10,000.00
	<b>SUB-TOTAL (TAINTON STREET)</b>				\$652,070.00
	<b>SUB-TOTAL (RAILWAY PARADE)</b>				\$794,691.00
	<b>SUB-TOTAL (TAINTON STREET)</b>				\$652,070.00
	<b>TOTAL</b>				<b>\$1,446,761.00</b>
	Scheme preparation, supervision, administration etc. 5%				\$ 72,338.05
	Engineer Consultants and other Costs 5%				\$ 72,338.05
	Tree Management (Arborist Assessment, Tree Offsets) 5%				\$ 72,338.05
	Contingency sum 10%				\$ 144,676.10
	<b>TOTAL SCHEME COST</b>				<b>\$1,808,451.25</b>