

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

REFERENCE NO: \_\_\_\_\_ DATE: 20-May-22  
 PROJECT: CEDAR COURT, BURNS WAY, MAYVIEW DRIVE, LOCH AVENUE AND HARVEST CLOSE, MONBULK  
**SCS IMPROVEMENT WORKS**

TOTAL SCHEME COSTS: **\$1,529,994.75**  
 COUNCIL COSTS: **\$69,300.00**  
 TOTAL PROJECT COST: **\$1,599,294.75**

Item	Description	Quantity	Unit	Rate	Amount
<b>1 SITE PREPARATION/PRELIMINARIES</b>					
1.1	Site establishment, set out and clean up, installation & maintaining sediment control, Environmental Management Plan, OH&S, Site Management Plan, Council permits, temporary fencing, setout, erection and maintenance of warning signs, lights and barriers.	1	item	\$ 10,000.00	\$ 10,000.00
1.2	Provide a traffic management plan and traffic management in accordance with the VicRoads Roadworks Signing Code of Practice (AS 1742-3).	1	item	\$ 30,000.00	\$ 30,000.00
1.3	Allowance for Contractor to expose and prove services on-site as required, prior to commencement of works.	1	Item	\$ 7,500.00	\$ 7,500.00
<b>2 REMOVAL WORKS</b>					
2.1	Sawcut existing asphalt pavement where adjoining new full depth pavement	58	lin.m.	\$ 20.00	\$ 1,160.00
2.2	Profile existing asphalt pavement in preparation for wearing course	272	sq.m	\$ 10.00	\$ 2,720.00
2.3	Remove and dispose of redundant pipes, culverts and associated structures.	267	lin.m.	\$ 50.00	\$ 13,350.00
<b>3 EARTHWORKS</b> Excavation including stripping and stockpiling of topsoil, shaping and trimming to design levels, compaction of subgrade and filling, (including all compaction tests) and disposal of excess spoil, reinstatement of all disturbed areas, as specified:					
3.1	Cut to Fill ( <b>Existing road base</b> ) - assumes all material suitable for re-use	130	Cub.m	\$ 50.00	\$ 6,500.00
3.2	Cut to Fill ( <b>Batters</b> ) - assumes all material suitable for re-use	85	Cub.m	\$ 50.00	\$ 4,250.00
3.3	Cut to Dispose ( <b>Earth</b> ) - from road side area to road batter	690	Cub.m	\$ 30.00	\$ 20,700.00
3.4	Import material for road fill batter.	0	Cub.m	\$ 50.00	\$ -
3.5	Topsoiling and seeding (including <b>100mm depth of topsoil</b> )	4650	sq.m	\$ 10.00	\$ 46,500.00
<b>4 ROAD PAVEMENT</b>					
4.1	Prepare existing subgrade (granular material) for road construction, including compaction to 95% standard MDD	6100	sq.m.	\$ 5.00	\$ 30,500.00
4.2	Base course- 130mm compacted depth of 20mm nominal size class 2 F.C.R	4630	sq.m.	\$ 23.00	\$ 106,490.00
4.3	Sub base course (pavement widening) - 150mm compacted depth of 3% cement treated crushed rock	2053	sq.m.	\$ 30.00	\$ 61,590.00
4.4	Asphalt wearing course - 30mm compacted depth of 10mm nominal size Type H Asphalt	4630	sq.m.	\$ 20.00	\$ 92,600.00

Item	Description	Quantity	Unit	Rate	Amount
4.5	Asphalt wearing course - 40mm compacted depth of 14mm nominal size Type H Asphalt	4630	sq.m.	\$ 28.00	\$ 129,640.00
4.6	Crack seal joints between new and existing road pavement with SBS rubber modified cationic emulsion or approved equivalent.	1	item	\$ 1,200.00	\$ 1,200.00
<b>5</b>	<b>VEHICLE CROSSINGS</b>				
5.1	Reinstatement and regrading of gravel crossings, including allowance for 100mm crushed rock	1142	sq.m	\$ 20.00	\$ 22,840.00
5.2	Reinstatement and regrading of bitumen crossings, including allowance for 100mm crushed rock and 30mm asphalt seal	95	sq.m	\$ 50.00	\$ 4,750.00
<b>6</b>	<b>CONCRETE WORK</b>				
6.1	600mm rollover kerb and channel to Council standard SD/B1 including excavation of bedding and min. 50mm depth crushed rock bedding	1895	lin.m.	\$ 100.00	\$ 189,500.00
6.2	300mm fully mountable kerb to Council standard SD/B1 including excavation of bedding and min. 50mm depth crushed rock bedding	70	lin.m.	\$ 60.00	\$ 4,200.00
6.3	Supply all materials, plant and labour and construct Commercial vehicle crossing to Council standard SD/C3, including excavation and min. 50mm compacted depth of crushed rock bedding.	136	sq.m.	\$ 150.00	\$ 20,400.00
6.4	Supply all materials, plant and labour and construct pram crossing with TGSI's to Council standard SD/B4	4	No.	\$ 750.00	\$ 3,000.00
<b>7</b>	<b>DRAINAGE</b> <b>Excavation and construction of the following drainage Pits and Pipes including the supply of all materials, plant and labour, as specified:</b>				
7.1	300mm dia. <b>reinforced concrete drainage pipe</b> (class 4) rubber ring jointed. Crushed rock backfill (road crossing)	80	lin.m.	\$ 310.00	\$ 24,800.00
7.2	225mm dia. <b>Polypropylene Pipe RRJ</b> including fittings. Earth backfill (behind kerb)	20	lin.m.	\$ 225.00	\$ 4,500.00
7.3	300mm dia. <b>Polypropylene Pipe RRJ</b> including fittings. Earth backfill (behind kerb)	280	lin.m.	\$ 250.00	\$ 70,000.00
7.4	150mm <b>sewer quality PVC</b> pipe, including fittings to connect to nature strip trapped low-point grated pits or property connections. Earth backfill. Rate includes 350 x 350mm Grated Pits and Flushout risers as specified on plans.	100	lin.m.	\$ 100.00	\$ 10,000.00
7.7	<b>750mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,	27	No.	\$ 2,000.00	\$ 54,000.00
7.8	<b>750mm x 1500mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P2,	6	No.	\$ 2,750.00	\$ 16,500.00
7.9	<b>900mm x 1000mm</b> Side Entry Pit as shown on the plans to Council standard drawing SD/P1,		No.	\$ 2,250.00	\$ -
7.10	<b>750mm x 1000mm</b> Grated Side Entry Pit as shown on the plans to Council standard drawing SD/P3,		No.	\$ 2,500.00	\$ -

Item	Description	Quantity	Unit	Rate	Amount
7.11	900mm x 1000mm Grated Side Entry Pit as shown on the plans to Council standard drawing SD/P3,		No.	\$ 2,750.00	\$ -
7.12	600mm x 1000mm Table Drain Inlet Pit as shown on the plans to Council standard drawing SD/P5,		No.	\$ 1,750.00	\$ -
7.13	750mm x 1000mm Table Drain Inlet Pit as shown on the plans to Council standard drawing SD/P5,		No.	\$ 2,000.00	\$ -
7.14	750mm x 1000mm Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.	3	No.	\$ 2,000.00	\$ 6,000.00
7.15	750mm x 1000mm Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class D Heavy Duty Gatic type lid.	1	No.	\$ 2,000.00	\$ 2,000.00
7.16	900mm x 1000mm Junction Pit as shown on the plans to Council standard drawing SD/P4 with Class B terra firma type lid.		No.	\$ 2,250.00	\$ -
7.17	750mm x 1000mm Grated Pit as shown on the plans Council standard drawing SD/P6		No.	\$ 2,500.00	\$ -
7.18	900mm x 1000mm Grated Pit as shown on the plans Council standard drawing SD/P6		No.	\$ 2,750.00	\$ -
7.19	Construct Endwall to VicRoads standard SD/1921 to suit 375mm pipe		No.	\$ 2,500.00	\$ -
7.20	Driveable Endwall to VicRoads standard SD/1991 to suit 300mm pipe including rock beaching	2	No.	\$ 2,500.00	\$ 5,000.00
7.21	Break into existing pit and connect new drainage	10	No.	\$ 900.00	\$ 9,000.00
7.22	Convert existing pit into Junction Pit	3	No.	\$ 1,200.00	\$ 3,600.00
7.23	Modify existing side entry pit to suit proposed kerb	4	No.	\$ 1,200.00	\$ 4,800.00
7.24	Supply of all materials, plant and labor and install subsurface drainage as detail in plans. 100mm dia high strength (1000kN/m/m slotted pipe wrapped in geotextile filter fabric)	1895	lin.m.	\$ 45.00	\$ 85,275.00
7.25	Reconnection of existing property connections to new drainage as per Council standard. Price to allow for installation of 150 diameter collector drains, pit connections and direct pipe connections, including all fittings.	19	No.	\$ 900.00	\$ 17,100.00
7.26	Construct anchor blocks as shown on plans, to Council standard SD/D3		No.	\$ 500.00	\$ -
7.27	Clean and grade existing table drain into pipe at end of Harvest Close	1	Item	\$ 1,000.00	\$ 1,000.00
7.28	Clean, grade and install rock beaching in table drain south east of Rankins / Mayview intersection.	1	Item	\$ 1,000.00	\$ 1,000.00
7.29	Repair erosion at pipe culvert outlet at No.54 Rankins Road. Allowance for detailed excavation, placement of geotextile, and rubble.	1	Item	\$ 2,500.00	\$ 2,500.00
<b>8</b>	<b>LANDSCAPE</b>				
8.1	All disturbed areas including batters are to be dressed and seeded to establish grass cover to satisfaction of Council's supervising engineer	1400	Sq.m.	\$ 7.00	\$ 9,800.00
<b>9</b>	<b>ANCILLARY ITEMS</b>				
9.1	Installation of linemarking as indicated on plans to AS1742.2	1	Item	\$ 5,000.00	\$ 5,000.00

Item	Description	Quantity	Unit	Rate	Amount
9.2	Supply of all materials, plant and labor and install new signage, as specified on plans	8	No.	\$ 200.00	\$ 1,600.00
9.3	Supply all plant, materials and labour to construct asphalt footpath as per Council standard SD/B5	10	sq.m.	\$ 60.00	\$ 600.00
9.4	Hydrant Marking - Supply all materials, plant and labour and install hydrant 'cats eye' and hydrant patch as per Yarra Valley Water requirements. Remove and reinstate or protect existing hydrant marker post.	7	No.	\$ 200.00	\$ 1,400.00
9.5	Supply as constructed drawings at the completion of the works in accordance with the A-SPEC digital data specification. Note this will be D-SPEC for drainage assets and R-SPEC for road assets.	1	item	\$ 2,500.00	\$ 2,500.00
9.6	Supply a CCTV inspection report for newly installed piped drainage in accordance with the WSAA 05-2020 ( <i>prior to laying the wearing course</i> ).	1	item	\$ 2,500.00	\$ 2,500.00
9.7	Compaction Test in accordance with AS1289.5.2.1 ( <u>Standard</u> Compactive Effort, 6 lot test).	5	No.	\$ 500.00	\$ 2,500.00
9.8	Compaction Test in accordance with AS1289.5.2.1 ( <u>Modified</u> Compactive Effort, 6 lot test).	5	No.	\$ 500.00	\$ 2,500.00
<b>10</b>	<b>PROVISIONAL ITEMS</b>				
10.1	Subgrade Improvement,40mm Class 4 Crushed Rock	0	cu.m	\$ 160.00	\$ -
10.2	Subgrade Improvement,40mm Class 3 Crushed Rock	0	cu.m	\$ 200.00	\$ -
10.3	Subgrade Improvement,3 % Cement Treated 20mm Class 3 Crushed Rock	400	cu.m	\$ 200.00	\$ 80,000.00
10.4	Excavation in Rock	100	cu.m	\$ 250.00	\$ 25,000.00
10.5	Modify existing sewer cover level to suit design pavement level and provide heavy duty driveable cover	1	No.	\$ 1,000.00	\$ 1,000.00
<b>TOTAL CONSTRUCTION COST</b>					\$1,260,865.00
Scheme preparation, supervision, administration etc. 5%					\$63,043.25
Engineer Consultants and other Costs					\$75,000.00
Tree Removal					\$5,000.00
Contingency sum 10%					\$126,086.50
<b>TOTAL SCHEME COST</b>					<b>\$1,529,994.75</b>
<b>Items not forming part of Scheme</b>					
A	Construct 1.5m width crushed rock footpath consisting of 50mm compacted depth of Coldstream toppings as per Council Standard SD/B5	550	sq.m.	\$ 100.00	\$ 55,000.00
B	Supply all materials, plant and labour to	4	No.	\$ 2,000.00	\$ 8,000.00
Contingency sum 10%					\$ 6,300.00
Total Items not forming part of Scheme					\$69,300.00
<b>TOTAL PROJECT COST</b>					<b>\$1,599,294.75</b>