

Principal:
 Armstrong Creek Development Corporation
 Job No: 30041879E.00
 Date: 10 July 2015

Consulting Engineers:
 SMEC Australia
 Level 1, 47 Pakington St
 Geelong West, Victoria 3218

**PRELIMINARY DEVELOPMENT COST ESTIMATE
 BARWON HEADS ROAD / ENTRY ROAD SIGNALISED INTERSECTION
 DCP INFRASTRUCTURE COSTS**

Item	Description	Quantity	Unit	Rate	Amount	Subtotal
A	Project and Program Management					\$98,630.70
	Project Management		3.00%	3.00%	\$59,178.42	
	Project scoping, planning, scheduling, monitoring, reporting and commissioning					
	Management of preconstruction activities, development of tender documents and management of contracts.					
	Managing external interfaces, including community liaison, environmental issues, traffic issues etc.					
	Program Management		2.00%	2.00%	\$39,452.28	
B	Design and Investigation					\$262,809.12
	Traffic Investigations	1	Item	\$25,000.00	\$25,000.00	
	CHMP	1	Item	\$20,000.00	\$20,000.00	
	Flora & Fauna Assessments	1	Item	\$10,000.00	\$10,000.00	
	Cadastral and Engineering Survey	1	Item	\$10,000.00	\$10,000.00	
	Geotechnical investigations including pavement recommendation	1	Item	\$15,000.00	\$15,000.00	
	Native Vegetation Offsets	1	Item	\$25,000.00	\$25,000.00	
	Preliminary and Final Design		5.00%	5.00%	\$98,630.70	
	Construction Management		3.00%	3.00%	\$59,178.42	
C	Land Acquisition					

D	CONSTRUCTION					\$1,972,614.00
1	PRELIMINARIES					\$255,000.00
	Siteworks					
1.1	Site Establishment	1	Item	\$25,000.00	\$25,000.00	
1.2	Site management and supervision including QA	40	Weeks	\$2,500.00	\$100,000.00	
1.3	Provision for traffic	1	Item	\$100,000.00	\$100,000.00	
1.4	Tree Protection	1	Item	\$5,000.00	\$5,000.00	
1.5	Environmental Management and EMP Works	1	Item	\$25,000.00	\$25,000.00	
2	Demolition					\$38,820.00
2.1	Site preparation including disposal of all surface rock, dead trees, timber, fences, wire, rubbish and any other materials as specified on the drawings, disposed offsite to a tip to be arranged by the contractor.	1	Item	\$10,000.00	\$10,000.00	
2.2	Arborist Review	1	Item	\$10,000.00	\$10,000.00	
2.3	Vegetation Removal	1	Item	\$10,000.00	\$10,000.00	
2.4	Sawcut existing pavement	882	lin.m	\$10.00	\$8,820.00	
3	Earthworks					\$267,740.00
3.1	Excavation and removal	1	Item	\$109,305.00	\$109,305.00	
3.2	Load and respread topsoil to finished surface levels -includes table drains	10934	sq.m	\$6.00	\$65,604.00	
3.3	Disposal of excess material offsite	3016	cu.m	\$20.00	\$60,320.00	
3.4	Trim and Prepare Subgrade	4,518	sq.m	\$2.00	\$9,036.00	
3.5	Swale Drain	939	lin.m	\$25.00	\$23,475.00	
4	Pavement					\$500,429.00
4.1	Type 1 - Barwon Heads Road					
4.1.1	Type H asphalt , Class 2 FCR base	3719	sq.m	\$48.00	\$178,512.00	
4.1.2	Sub-bases - class 3, 4 and type A	3,799	sq.m	\$42.00	\$159,558.00	
4.1.3	Subgrade Improvement (20% pavement area allowance)	760	sq.m	\$25.00	\$18,995.00	
4.2	Collector Street Level 2 - Entry Road					
4.2.1	Type N asphalt , prime, Class 2 FCR base	657	sq.m	\$45.00	\$29,565.00	
4.2.2	Sub-bases - class 3 and type A	719	sq.m	\$36.00	\$25,884.00	
4.2.3	Subgrade Improvement (20% pavement area allowance)	144	sq.m	\$25.00	\$3,595.00	
4.3	Shoulder Construction					
4.3.1	Type H asphalt, Class 2 FCR base	1004	sq.m	\$55.00	\$55,220.00	
4.3.2	Subgrade Improvement (20% pavement area allowance)	200	sq.m	\$25.00	\$5,000.00	
4.4	Bus Bay Construction					
4.4.1	Type H asphalt, Class 2 FCR base	182	sq.m	\$55.00	\$10,010.00	
4.5	Asphalt Overlay - 40mm depth , 14mm type H	302	sq.m	\$25.00	\$7,550.00	
4.6	Rotomill existing pavement - transition 40mm overlay	218	sq.m	\$30.00	\$6,540.00	

