

Program ABDL  
Program Budget  
R. Wingrove  
Updated:

	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 1	Year 2	Year 2	Year 2	Year 2	Year 2	Year 2
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	
<b>Labour Hours</b>																			
Architecture	519	692	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865
Design	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Advanced Engineering	260	260	260	260	260	260	260	260	260	260	260	260	208	208	208	208	208	208	208
Product Development	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
Program Management	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216
Mechanical Engineering	1,038	1,038	1,038	1,038	1,038	1,038	1,038	986	986	986	986	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298
Process Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Procurement	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Quality Engineering	346	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
Test Engineering	346	346	346	519	519	519	519	519	519	519	519	519	346	346	346	346	346	346	346
Unit Cell Engineering	519	519	519	519	519	519	519	484	484	484	484	484	346	346	346	346	346	346	346
<b>Labour Hours Total</b>	<b>4,541</b>	<b>5,060</b>	<b>5,233</b>	<b>5,406</b>	<b>5,406</b>	<b>5,406</b>	<b>5,406</b>	<b>5,319</b>	<b>5,319</b>	<b>5,319</b>	<b>5,319</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>
<b>Labour Cost</b>																			
Architecture	25,950	34,600	43,250	43,250	43,250	44,115	44,115	44,115	44,115	44,115	44,115	44,115	44,997	44,997	44,997	44,997	44,997	44,997	44,997
Design	17,300	17,300	17,300	17,300	17,300	17,646	17,646	17,646	17,646	17,646	17,646	17,646	17,999	17,999	17,999	17,999	17,999	17,999	17,999
Advanced Engineering	12,975	12,975	12,975	12,975	12,975	13,235	13,235	13,235	13,235	13,235	13,235	13,235	10,588	10,799	10,799	10,799	10,799	10,799	10,799
Product Development	12,975	12,975	12,975	12,975	12,975	13,235	13,235	13,235	13,235	13,235	13,235	13,235	13,235	13,499	13,499	13,499	13,499	13,499	13,499
Program Management	10,813	10,813	10,813	10,813	10,813	11,029	11,029	11,029	11,029	11,029	11,029	11,029	11,249	11,249	11,249	11,249	11,249	11,249	11,249
Mechanical Engineering	51,900	51,900	51,900	51,900	51,900	52,938	52,938	50,261	50,261	50,261	50,261	50,261	66,173	67,496	67,496	67,496	67,496	67,496	67,496
Process Engineering	17,300	17,300	17,300	17,300	17,300	17,646	17,646	17,646	17,646	17,646	17,646	17,646	17,999	17,999	17,999	17,999	17,999	17,999	17,999
Procurement	17,300	17,300	17,300	17,300	17,300	17,646	17,646	17,646	17,646	17,646	17,646	17,646	17,999	17,999	17,999	17,999	17,999	17,999	17,999
Quality Engineering	17,300	34,600	34,600	34,600	34,600	35,292	35,292	35,292	35,292	35,292	35,292	35,292	35,292	35,998	35,998	35,998	35,998	35,998	35,998
Test Engineering	17,300	17,300	17,300	25,950	25,950	26,469	26,469	26,469	26,469	26,469	26,469	26,469	17,646	17,999	17,999	17,999	17,999	17,999	17,999
Unit Cell Engineering	25,950	25,950	25,950	25,950	25,950	26,469	26,469	24,684	24,684	24,684	24,684	24,684	17,646	17,999	17,999	17,999	17,999	17,999	17,999
<b>Labour Cost Total</b>	<b>227,063</b>	<b>253,013</b>	<b>261,663</b>	<b>270,313</b>	<b>270,313</b>	<b>275,719</b>	<b>275,719</b>	<b>271,256</b>	<b>271,256</b>	<b>271,256</b>	<b>271,256</b>	<b>268,660</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>
<b>Contractors</b>																			
Electrical Engineer	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Programmer	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250
Design		18,000	18,000	18,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000						9,000	18,000
Test Engineering									9,000	18,000	18,000	18,000	27,000	27,000	27,000	27,000	27,000	27,000	18,000
Failure Analysis		9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Project Assistant									9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Vehicle Project Leader	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417
Program Interface								7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Configuration Management	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Manufacturing Technician			6,750	6,750	6,750	6,750	6,750	13,500	27,000	27,000	27,000	27,000	13,500	13,500	13,500	13,500	13,500	13,500	13,500
Procurement				8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250
Quality Technician				22,500	22,500	22,500	22,500	30,000	37,500	37,500	30,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
<b>Contractors Total</b>	<b>37,267</b>	<b>64,267</b>	<b>71,017</b>	<b>101,767</b>	<b>92,767</b>	<b>92,767</b>	<b>92,767</b>	<b>123,517</b>	<b>162,517</b>	<b>162,517</b>	<b>155,017</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>135,517</b>	<b>135,517</b>
<b>Services Total</b>	<b>3,380</b>	<b>0</b>	<b>0</b>	<b>1,690</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38,590</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Travel Total</b>	<b>10,700</b>	<b>22,100</b>	<b>50,300</b>	<b>9,700</b>	<b>7,900</b>	<b>0</b>	<b>7,900</b>	<b>5,400</b>	<b>18,600</b>	<b>0</b>	<b>0</b>	<b>2,500</b>	<b>7,000</b>	<b>2,700</b>	<b>5,200</b>	<b>0</b>	<b>16,100</b>	<b>32,602</b>	
<b>Materials Total</b>	<b>27,500</b>	<b>12,500</b>	<b>32,500</b>	<b>32,500</b>	<b>32,500</b>	<b>92,500</b>	<b>112,500</b>	<b>12,500</b>	<b>180,500</b>	<b>180,500</b>	<b>180,500</b>	<b>1,121,571</b>	<b>701,571</b>	<b>601,571</b>	<b>581,571</b>	<b>181,571</b>	<b>181,571</b>	<b>181,571</b>	<b>181,571</b>
<b>Functional Expenses Total</b>	<b>86,200</b>	<b>31,000</b>	<b>3,400</b>	<b>10,200</b>	<b>6,800</b>	<b>29,880</b>	<b>5,000</b>	<b>3,400</b>	<b>6,800</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>5,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>3,000</b>
<b>Training Total</b>	<b>0</b>	<b>50,000</b>	<b>25,000</b>	<b>0</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Development(CA\$) Total</b>	<b>0</b>	<b>470,000</b>	<b>500,000</b>	<b>0</b>	<b>270,000</b>	<b>590,000</b>	<b>150,000</b>	<b>480,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>540,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270,000</b>
<b>Fixed Assets Production Total</b>	<b>550,000</b>	<b>250,000</b>	<b>120,000</b>	<b>1,270,000</b>	<b>615,000</b>	<b>665,000</b>	<b>165,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>450,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Labour Total</b>	<b>227,063</b>	<b>253,013</b>	<b>261,663</b>	<b>270,313</b>	<b>270,313</b>	<b>275,719</b>	<b>275,719</b>	<b>271,256</b>	<b>271,256</b>	<b>271,256</b>	<b>271,256</b>	<b>268,660</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>
<b>Contractors Total</b>	<b>37,267</b>	<b>64,267</b>	<b>71,017</b>	<b>101,767</b>	<b>92,767</b>	<b>92,767</b>	<b>92,767</b>	<b>123,517</b>	<b>162,517</b>	<b>162,517</b>	<b>155,017</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>126,517</b>	<b>135,517</b>	<b>135,517</b>
<b>Expenses Total</b>	<b>127,780</b>	<b>115,600</b>	<b>111,200</b>	<b>54,090</b>	<b>72,200</b>	<b>122,380</b>	<b>125,400</b>	<b>21,300</b>	<b>205,900</b>	<b>219,090</b>	<b>185,500</b>	<b>1,124,071</b>	<b>713,571</b>	<b>606,271</b>	<b>588,771</b>	<b>183,571</b>	<b>199,671</b>	<b>217,173</b>	
<b>Fixed Assets Development(CA\$)</b>	<b>0</b>	<b>470,000</b>	<b>500,000</b>	<b>0</b>	<b>270,000</b>	<b>590,000</b>	<b>150,000</b>	<b>480,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>540,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270,000</b>
<b>Fixed Assets Production</b>	<b>550,000</b>	<b>250,000</b>	<b>120,000</b>	<b>1,270,000</b>	<b>615,000</b>	<b>665,000</b>	<b>165,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>450,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Contingency</b>																			
<b>Total</b>	<b>942,109</b>	<b>1,152,879</b>	<b>1,063,879</b>	<b>1,696,169</b>	<b>1,320,279</b>	<b>1,745,865</b>	<b>808,885</b>	<b>896,073</b>	<b>639,673</b>	<b>652,863</b>	<b>611,773</b>	<b>1,519,248</b>	<b>1,154,122</b>	<b>1,546,822</b>	<b>989,322</b>	<b>1,034,122</b>	<b>609,222</b>	<b>896,724</b>	

Program ABDL  
Program Budget  
R. Wingrove  
Updated:

	Year 2	Year 2	Year 2	Year 2	Year 2	Year 2	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3	Year 3
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<b>Labour Hours</b>																		
Architecture	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865
Design	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Advanced Engineering	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
Product Development	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
Program Management	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216
Mechanical Engineering	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298
Process Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Procurement	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Quality Engineering	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
Test Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Unit Cell Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
<b>Labour Hours Total</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>
<b>Labour Cost</b>																		
Architecture	44,997	44,997	44,997	44,997	44,997	44,997	45,897	45,897	45,897	45,897	45,897	45,897	45,897	45,897	45,897	45,897	45,897	45,897
Design	17,999	17,999	17,999	17,999	17,999	17,999	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359
Advanced Engineering	10,799	10,799	10,799	10,799	10,799	10,799	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015	11,015
Product Development	13,499	13,499	13,499	13,499	13,499	13,499	13,769	13,769	13,769	13,769	13,769	13,769	13,769	13,769	13,769	13,769	13,769	13,769
Program Management	11,249	11,249	11,249	11,249	11,249	11,249	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474	11,474
Mechanical Engineering	67,496	67,496	67,496	67,496	67,496	67,496	68,846	68,846	68,846	68,846	68,846	68,846	68,846	68,846	68,846	68,846	68,846	68,846
Process Engineering	17,999	17,999	17,999	17,999	17,999	17,999	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359
Procurement	17,999	17,999	17,999	17,999	17,999	17,999	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359
Quality Engineering	35,998	35,998	35,998	35,998	35,998	35,998	36,718	36,718	36,718	36,718	36,718	36,718	36,718	36,718	36,718	36,718	36,718	36,718
Test Engineering	17,999	17,999	17,999	17,999	17,999	17,999	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359
Unit Cell Engineering	17,999	17,999	17,999	17,999	17,999	17,999	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359	18,359
<b>Labour Cost Total</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>
<b>Contractors</b>																		
Electrical Engineer	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600
Programmer	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250
Design	18,000	18,000	18,000	18,000	9,000													9,000
Test Engineering									18,000	18,000	18,000	18,000	9,000	9,000	9,000	9,000	9,000	9,000
Failure Analysis	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Project Assistant	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Vehicle Project Leader	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417
Program Interface	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Configuration Management	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Manufacturing Technician	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500	13,500
Procurement	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250
Quality Technician	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	30,000	30,000	15,000	15,000	15,000	15,000	15,000
<b>Contractors Total</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>108,517</b>	<b>99,517</b>	<b>99,517</b>	<b>99,517</b>	<b>117,517</b>	<b>131,017</b>	<b>131,017</b>	<b>137,017</b>	<b>137,017</b>	<b>108,517</b>	<b>108,517</b>	<b>108,517</b>	<b>108,517</b>	<b>117,517</b>
<b>Services Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,590</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>0</b>	<b>20,000</b>	<b>0</b>	<b>18,590</b>	<b>0</b>	<b>0</b>
<b>Travel Total</b>	<b>23,200</b>	<b>0</b>	<b>24,100</b>	<b>24,200</b>	<b>5,400</b>	<b>18,700</b>	<b>0</b>	<b>23,200</b>	<b>7,900</b>	<b>0</b>	<b>10,800</b>	<b>13,300</b>	<b>0</b>	<b>5,400</b>	<b>7,900</b>	<b>32,400</b>	<b>0</b>	<b>13,300</b>
<b>Materials Total</b>	<b>201,182</b>	<b>201,182</b>	<b>201,182</b>	<b>201,182</b>	<b>168,182</b>	<b>278,182</b>	<b>378,182</b>	<b>308,182</b>	<b>248,182</b>	<b>498,182</b>	<b>598,182</b>	<b>515,000</b>	<b>865,000</b>	<b>245,000</b>	<b>299,286</b>	<b>299,286</b>	<b>299,286</b>	<b>304,286</b>
<b>Functional Expenses Total</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>3,000</b>	<b>2,000</b>	<b>2,000</b>	<b>5,000</b>	<b>2,000</b>	<b>2,000</b>	<b>3,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>3,000</b>	<b>2,000</b>	<b>8,000</b>
<b>Training Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Development(CA\$) Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Production Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Labour Total</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>274,034</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>	<b>279,514</b>
<b>Contractors Total</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>108,517</b>	<b>99,517</b>	<b>99,517</b>	<b>99,517</b>	<b>117,517</b>	<b>131,017</b>	<b>131,017</b>	<b>137,017</b>	<b>137,017</b>	<b>108,517</b>	<b>108,517</b>	<b>108,517</b>	<b>108,517</b>	<b>117,517</b>
<b>Expenses Total</b>	<b>226,382</b>	<b>203,182</b>	<b>227,282</b>	<b>245,972</b>	<b>176,582</b>	<b>298,882</b>	<b>380,182</b>	<b>336,382</b>	<b>258,082</b>	<b>500,182</b>	<b>611,982</b>	<b>560,300</b>	<b>867,000</b>	<b>272,400</b>	<b>309,186</b>	<b>353,276</b>	<b>301,286</b>	<b>325,586</b>
<b>Fixed Assets Development(CA\$)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Production</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Contingency</b>																		
<b>Total</b>	<b>617,932</b>	<b>594,732</b>	<b>618,832</b>	<b>637,522</b>	<b>559,132</b>	<b>672,432</b>	<b>759,213</b>	<b>715,413</b>	<b>655,113</b>	<b>910,713</b>	<b>1,022,513</b>	<b>976,831</b>	<b>1,283,531</b>	<b>660,431</b>	<b>697,217</b>	<b>741,307</b>	<b>689,317</b>	<b>722,617</b>

Program ABDL  
Program Budget  
R. Wingrove  
Updated:

	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 4	Year 5	Year 5	Year 5	Year 5
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	
<b>Labour Hours</b>																	
Architecture	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865	865
Design	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Advanced Engineering	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
Product Development	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
Program Management	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216
Mechanical Engineering	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298	1,298
Process Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Procurement	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Quality Engineering	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
Test Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
Unit Cell Engineering	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346	346
<b>Labour Hours Total</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>	<b>5,268</b>
<b>Labour Cost</b>																	
Architecture	46,815	46,815	46,815	46,815	46,815	46,815	46,815	46,815	46,815	46,815	46,815	46,815	47,751	47,751	47,751	47,751	47,751
Design	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	19,101	19,101	19,101	19,101	19,101
Advanced Engineering	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,236	11,460	11,460	11,460	11,460	11,460
Product Development	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,045	14,325	14,325	14,325	14,325	14,325
Program Management	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,704	11,938	11,938	11,938	11,938	11,938
Mechanical Engineering	70,223	70,223	70,223	70,223	70,223	70,223	70,223	70,223	70,223	70,223	70,223	70,223	71,627	71,627	71,627	71,627	71,627
Process Engineering	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	19,101	19,101	19,101	19,101	19,101
Procurement	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	19,101	19,101	19,101	19,101	19,101
Quality Engineering	37,452	37,452	37,452	37,452	37,452	37,452	37,452	37,452	37,452	37,452	37,452	37,452	38,201	38,201	38,201	38,201	38,201
Test Engineering	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	19,101	19,101	19,101	19,101	19,101
Unit Cell Engineering	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	18,726	19,101	19,101	19,101	19,101	19,101
<b>Labour Cost Total</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>
<b>Contractors</b>																	
Electrical Engineer	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600				
Programmer	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250				
Design	18,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000				
Test Engineering	9,000	9,000	9,000	9,000	9,000	9,000	9,000	18,000	18,000	18,000	18,000	18,000	18,000				
Failure Analysis	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000				
Project Assistant	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000				
Vehicle Project Leader	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417			
Program Interface	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500			
Configuration Management	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Manufacturing Technician	13,500	13,500	13,500	13,500	13,500	13,500	13,500	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750
Procurement	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250	8,250
Quality Technician	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
<b>Contractors Total</b>	<b>126,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>119,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>92,767</b>	<b>56,917</b>	<b>39,000</b>	<b>39,000</b>	<b>39,000</b>
<b>Services Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,590</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Travel Total</b>	<b>10,800</b>	<b>7,000</b>	<b>13,300</b>	<b>29,600</b>	<b>28,600</b>	<b>18,700</b>	<b>23,200</b>	<b>5,400</b>	<b>7,900</b>	<b>10,800</b>	<b>5,400</b>	<b>2,500</b>	<b>5,400</b>	<b>5,400</b>	<b>13,300</b>	<b>5,400</b>	<b>5,400</b>
<b>Materials Total</b>	<b>304,286</b>	<b>304,286</b>	<b>294,286</b>	<b>173,000</b>	<b>173,000</b>	<b>173,000</b>	<b>173,000</b>	<b>173,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>
<b>Functional Expenses Total</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>	<b>9,000</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>	<b>8,000</b>	<b>9,000</b>	<b>8,000</b>	<b>8,000</b>	<b>11,000</b>	<b>2,000</b>	<b>8,000</b>	<b>3,000</b>	<b>8,000</b>	<b>8,000</b>
<b>Training Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Development(CA\$) Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Production Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Labour Total</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>285,105</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>	<b>290,807</b>
<b>Contractors Total</b>	<b>126,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>117,517</b>	<b>119,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>110,767</b>	<b>92,767</b>	<b>56,917</b>	<b>39,000</b>	<b>39,000</b>	<b>39,000</b>
<b>Expenses Total</b>	<b>323,086</b>	<b>319,286</b>	<b>315,586</b>	<b>211,600</b>	<b>239,600</b>	<b>199,700</b>	<b>204,200</b>	<b>186,400</b>	<b>21,900</b>	<b>42,390</b>	<b>18,400</b>	<b>18,500</b>	<b>12,400</b>	<b>18,400</b>	<b>21,300</b>	<b>18,400</b>	<b>18,400</b>
<b>Fixed Assets Development(CA\$)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fixed Assets Production</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Contingency</b>																	
<b>Total</b>	<b>734,707</b>	<b>721,907</b>	<b>718,207</b>	<b>614,221</b>	<b>642,221</b>	<b>602,321</b>	<b>609,071</b>	<b>582,271</b>	<b>417,771</b>	<b>438,261</b>	<b>414,271</b>	<b>402,073</b>	<b>360,123</b>	<b>348,207</b>	<b>351,107</b>	<b>348,207</b>	<b>348,207</b>

Program ABDL  
Program Budget  
R. Wingrove  
Updated:

	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Program Total
<b>Labour Hours</b>						
Architecture	9,861	10,380	10,380	10,380	3,460	44,461
Design	4,152	4,152	4,152	4,152	1,384	17,992
Advanced Engineering	3,062	2,491	2,491	2,491	830	11,366
Product Development	3,114	3,114	3,114	3,114	1,038	13,494
Program Management	2,595	2,595	2,595	2,595	865	11,245
Mechanical Engineering	12,506	15,570	15,570	15,570	5,190	64,406
Process Engineering	4,152	4,152	4,152	4,152	1,384	17,992
Procurement	4,152	4,152	4,152	4,152	1,384	17,992
Quality Engineering	7,958	8,304	8,304	8,304	2,768	35,638
Test Engineering	5,536	4,152	4,152	4,152	1,384	19,376
Unit Cell Engineering	5,915	4,152	4,152	4,152	1,384	19,755
<b>Labour Hours Total</b>	<b>63,003</b>	<b>63,214</b>	<b>63,214</b>	<b>63,214</b>	<b>21,071</b>	<b>273,717</b>
<b>Labour Cost</b>						
Architecture	499,105	539,968	550,767	562,719	191,006	2,343,564
Design	210,022	215,987	220,307	225,087	76,402	947,806
Advanced Engineering	154,870	129,592	132,184	135,052	45,841	597,540
Product Development	157,517	161,990	165,230	168,816	57,302	710,854
Program Management	131,264	134,992	137,692	140,680	47,751	592,379
Mechanical Engineering	632,591	809,951	826,150	844,078	286,509	3,399,279
Process Engineering	210,022	215,987	220,307	225,087	76,402	947,806
Procurement	210,022	215,987	220,307	225,087	76,402	947,806
Quality Engineering	402,744	431,974	440,614	450,175	152,805	1,878,311
Test Engineering	280,260	215,987	220,307	225,087	76,402	1,018,044
Unit Cell Engineering	299,070	215,987	220,307	225,087	76,402	1,036,854
<b>Labour Cost Total</b>	<b>3,187,485</b>	<b>3,288,403</b>	<b>3,354,171</b>	<b>3,426,956</b>	<b>1,163,226</b>	<b>14,420,241</b>
<b>Contractors</b>						
Electrical Engineer	115,200	115,200	115,200	115,200	0	460,800
Programmer	99,000	99,000	99,000	99,000	0	396,000
Design	117,000	108,000	9,000	72,000	0	306,000
Test Engineering	90,000	153,000	117,000	144,000	0	504,000
Failure Analysis	99,000	108,000	108,000	108,000	0	423,000
Project Assistant	36,000	108,000	108,000	108,000	0	360,000
Vehicle Project Leader	125,000	125,000	125,000	125,000	10,417	510,417
Program Interface	37,500	90,000	90,000	90,000	7,500	315,000
Configuration Management	108,000	108,000	108,000	108,000	36,000	468,000
Manufacturing Technician	141,750	162,000	216,000	121,500	27,000	668,250
Procurement	74,250	99,000	99,000	99,000	33,000	404,250
Quality Technician	240,000	180,000	210,000	180,000	60,000	870,000
<b>Contractors Total</b>	<b>1,282,700</b>	<b>1,455,200</b>	<b>1,404,200</b>	<b>1,369,700</b>	<b>173,917</b>	<b>5,685,717</b>
<b>Services Total</b>	<b>43,660</b>	<b>18,590</b>	<b>68,590</b>	<b>48,590</b>	<b>0</b>	<b>179,430</b>
<b>Travel Total</b>	<b>135,100</b>	<b>159,202</b>	<b>114,200</b>	<b>163,200</b>	<b>29,500</b>	<b>601,202</b>
<b>Materials Total</b>	<b>2,018,071</b>	<b>3,680,519</b>	<b>4,858,052</b>	<b>1,787,857</b>	<b>20,000</b>	<b>12,364,500</b>
<b>Functional Expenses Total</b>	<b>187,680</b>	<b>29,000</b>	<b>35,000</b>	<b>101,000</b>	<b>21,000</b>	<b>373,680</b>
<b>Training Total</b>	<b>100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100,000</b>
<b>Fixed Assets Development(CA\$) Total</b>	<b>2,460,000</b>	<b>810,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,270,000</b>
<b>Fixed Assets Production Total</b>	<b>3,635,000</b>	<b>490,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,125,000</b>
<b>Labour Total</b>	<b>3,187,485</b>	<b>3,288,403</b>	<b>3,354,171</b>	<b>3,426,956</b>	<b>1,163,226</b>	<b>14,420,241</b>
<b>Contractors Total</b>	<b>1,282,700</b>	<b>1,455,200</b>	<b>1,404,200</b>	<b>1,369,700</b>	<b>173,917</b>	<b>5,685,717</b>
<b>Expenses Total</b>	<b>2,484,511</b>	<b>3,887,311</b>	<b>5,075,842</b>	<b>2,100,647</b>	<b>70,500</b>	<b>13,618,812</b>
<b>Fixed Assets Development(CA\$)</b>	<b>2,460,000</b>	<b>810,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,270,000</b>
<b>Fixed Assets Production</b>	<b>3,635,000</b>	<b>490,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,125,000</b>
<b>Contingency</b>	<b>1,479,332</b>	<b>996,377</b>	<b>648,004</b>	<b>347,035</b>	<b>24,442</b>	<b>2,970,768</b>
<b>Total</b>	<b>14,529,028</b>	<b>10,927,291</b>	<b>10,482,217</b>	<b>7,244,338</b>	<b>1,432,085</b>	<b>44,090,538</b>

