

APPENDIX C

COST ESTIMATE DETAILS

Comox Forcemain Assessment

South Lazo Rd Option

Task	Unit	Unit Cost	Quantity	Extended Cost
Forcemain				
Excavation	m ³	\$2.20	5946	\$13,081.31
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	2335	\$10,833.97
Place Native Bedding Material	m ³	\$2.84	181	\$514.93
Compact Bedding Material	m ³	\$0.64	181	\$116.04
40" HDPE DR 32.5	m	\$303.53	780	\$236,749.74
40" HDPE DR 26	m	\$376.17	100	\$37,617.16
Pipe Weld Technician	m	\$40.00	880	\$35,200.00
Horizontal Drill	m	\$2,132.55	160	\$341,207.35
Drill Contingency (35%)	L.S.	\$119,422.57	1	\$119,422.57
Place Pipe	m	\$13.18	880	\$11,600.00
Backfill & Compact	m ³	\$2.84	3430	\$9,740.70
Forcemain Subtotal				\$816,083.78
Gravity				
Excavation	m ³	\$2.20	12642	\$27,812.49
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	5693	\$26,416.82
Place Native Bedding Material	m ³	\$2.84	371	\$1,052.91
Compact Bedding Material	m ³	\$0.64	371	\$237.27
42" Weholite Pipe	m	\$244.47	1246	\$304,609.62
Manholes	m	\$16.92	1246	\$21,087.48
Pipe Technician	m	\$38.05	1246	\$47,410.35
Place Pipe	m	\$11.06	1246	\$13,783.67
Backfill & Compact	m ³	\$2.84	6578	\$18,681.57
Gravity Subtotal				\$461,092.19
Inverted Siphon				
Excavation	m ³	\$2.20	9271	\$20,396.67
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	3506	\$16,267.29
Place Native Bedding Material	m ³	\$2.84	223	\$634.62
Compact Bedding Material	m ³	\$0.64	223	\$143.01
48" HDPE DR 32.5	m	\$437.40	751	\$328,487.36
Pipe Weld Technician	m	\$40.00	751	\$30,040.00
Place Pipe	m	\$13.26	751	\$9,959.79
Backfill & Compact	m ³	\$2.84	5542	\$15,738.93
Siphon Subtotal				\$421,667.67
Existing Extension				
Excavation	m ³	\$2.20	3209	\$7,060.27
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	1341	\$6,223.40
Shoring and Dewatering	L.S.	\$50,000.00	1	\$50,000.00
Place Native Bedding Material	m ³	\$2.84	94	\$268.19
Compact Bedding Material	m ³	\$0.64	94	\$60.44
42" HDPE DR 32.5	m	\$343.68	375	\$128,879.32
Pipe Weld Technician	m	\$40.00	375	\$15,000.00
Place Pipe	m	\$13.33	375	\$5,000.00
Backfill & Compact	m ³	\$2.84	1774	\$5,036.82
Extension Subtotal				\$217,528.44
Surface Restoration & Traffic Control				
Base Layer Asphalt	m	\$15.93	6504	\$103,611.67
Top Layer Asphalt	m	\$17.92	6504	\$116,536.64
Seeding	m	\$2.25	3252	\$7,310.03
Traffic Control	m	\$86,400.00	1	\$86,400.00
Restoration Subtotal				\$313,858.33
Subtotal				\$2,230,230.41
Location Factor (1.04)				\$89,209.22
Inflation				\$111,511.52
Tax (14%)				\$312,232.26
Total				\$2,743,183.40
Engineering				\$274,318.34
Contingency				\$548,636.68
2006 Budget Level Estimate				\$3,566,138.43

Comox Forcemain Assessment

Morland Rd Option

Task	Unit	Unit Cost	Quantity	Extended Cost
Forcemain				
Excavation	m ³	\$2.20	5946	\$13,081.31
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	2335	\$10,833.97
Place Native Bedding Material	m ³	\$2.84	181	\$514.93
Compact Bedding Material	m ³	\$0.64	181	\$116.04
40" HDPE DR 32.5	m	\$303.53	780	\$236,749.74
40" HDPE DR 26	m	\$376.17	100	\$37,617.16
Pipe Weld Technician	m	\$40.00	880	\$35,200.00
Horizontal Drill	m	\$2,132.55	160	\$341,207.35
Drill Contingency (35%)	L.S.	\$119,422.57	1	\$119,422.57
Place Pipe	m	\$13.18	880	\$11,600.00
Backfill & Compact	m ³	\$2.84	3430	\$9,740.70
Forcemain Subtotal				\$816,083.78
Gravity				
Excavation	m ³	\$2.20	11556	\$25,424.10
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	5204	\$24,148.28
Place Native Bedding Material	m ³	\$2.84	339	\$962.49
Compact Bedding Material	m ³	\$0.64	339	\$216.90
42" Weholite Pipe	m	\$244.47	1139	\$278,451.33
Manholes	m	\$16.92	1139	\$19,276.60
Pipe Technician	m	\$38.05	1139	\$43,339.00
Place Pipe	m	\$11.06	1139	\$12,600.00
Backfill & Compact	m ³	\$2.84	6013	\$17,077.30
Gravity Subtotal				\$421,495.99
Inverted Siphon				
Excavation	m ³	\$2.20	12464	\$27,420.32
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	4365	\$20,252.88
Place Native Bedding Material	m ³	\$2.84	278	\$790.10
Compact Bedding Material	m ³	\$0.64	278	\$178.05
48" HDPE DR 32.5	m	\$437.40	935	\$408,968.96
Pipe Weld Technician	m	\$40.00	935	\$37,400.00
Place Pipe	m	\$13.26	935	\$12,400.00
Backfill & Compact	m ³	\$2.84	7821	\$22,210.87
Siphon Subtotal				\$529,621.19
Existing Extension				
Excavation	m ³	\$2.20	3209	\$7,060.27
Haul Excess Material Off-Site for Disposal	m ³	\$4.64	1341	\$6,223.40
Shoring and Dewatering	L.S.	\$50,000.00	1	\$50,000.00
Place Native Bedding Material	m ³	\$2.84	94	\$268.19
Compact Bedding Material	m ³	\$0.64	94	\$60.44
42" HDPE DR 32.5	m	\$343.68	375	\$128,879.32
Pipe Weld Technician	m	\$40.00	375	\$15,000.00
Place Pipe	m	\$13.33	375	\$5,000.00
Backfill & Compact	m ³	\$2.84	1774	\$5,036.82
Extension Subtotal				\$217,528.44
Surface Restoration & Traffic Control				
Base Layer Asphalt	m	\$16.21	3329	\$53,947.06
Top Layer Asphalt	m	\$18.23	3329	\$60,676.66
Seeding	m	\$2.29	3329	\$7,612.16
Flagging	L.S.	\$43,200.00	1	\$43,200.00
Restoration Subtotal				\$165,435.88
Subtotal				\$2,150,165.28
Location Factor (1.04)				\$86,006.61
Inflation				\$107,508.26
Tax (14%)				\$301,023.14
Total				\$2,644,703.29
Engineering				\$264,470.33
Contingency				\$528,940.66
2006 Budget Level Estimate				\$3,438,114.28