

APPENDIX B
Basis for Construction Cost Estimates

Appendix B1. Estimated construction cost (Item 8) Scenario 2 assuming all new rock and mitigation costs of \$800 per foot of bankline.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Site clearing and preparation	ac	20	\$750.00	\$15,000
Excavation of dike root with excavator	yd ³	15,700	\$3.00	\$47,100
Hauling of dike root material.	yd ³	15,700	\$3.60	\$56,500
Riprap delivered to site from Quarry	ton	54,200	\$25.50	\$1,382,100
Excavator for placement of rip rap	ton	54,200	\$6.00	\$325,200
Fill gravel for dike construction	ton	555	\$11.00	\$6,100
Site Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$1,960,000

Appendix B2. Estimated construction cost (Item 8) Scenario 3 assuming all new rock and mitigation costs of \$800 per foot of bankline.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Site clearing and preparation	ac	20	\$750.00	\$15,000
Excavation of dike root with excavator	yd ³	17,840	\$3.00	\$53,500
Hauling of dike root material.	yd ³	17,840	\$3.60	\$64,200
Riprap delivered to site from Quarry	ton	61,590	\$25.50	\$1,570,500
Excavator for placement of rip rap	ton	61,590	\$6.00	\$369,500
Fill gravel for dike construction	ton	635	\$11.00	\$7,000
Site Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$2,207,000

Appendix B3. Estimated construction cost (Item 8) Scenario 4 assuming all new rock and mitigation costs of \$800 per foot of bankline.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Bulldozer	ac	20	\$750.00	\$15,000
Drag-line	yd ³	71,900	\$3.00	\$215,700
Truck	yd ³	71,900	\$3.60	\$258,800
Riprap delivered to site	ton	140,510	\$25.53	\$3,587,200
Excavator	ton	140,510	\$6.00	\$843,100
Fill gravel for dike construction	ton	708	\$11.00	\$7,800
Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$5,055,000

Appendix B4. Estimated construction cost (Item 8) Scenario 2 assuming mitigation can be offset by removing rock from Golden State Island and using this rock at the M&T site.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Site clearing and preparation	ac	20	\$750.00	\$15,000
Excavation of dike root with excavator	yd ³	15,700	\$3.00	\$47,100
Hauling of dike root material.	yd ³	5,700	\$3.60	\$56,500
Riprap delivered to site from Quarry	ton	47,220	\$25.50	\$1,204,100
Riprap delivered to site from Golden Island	ton	6,975	\$10.50	\$73,200
Excavator for placement and removal of rip rap	ton	61,170	\$6.00	\$367,000
Fill gravel for dike construction	ton	555	\$11.00	\$6,100
Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$1,897,000

Appendix B5. Estimated construction cost (Item 8) Scenario 3 assuming mitigation can be offset by removing rock from Golden State Island and using this rock at the M&T site.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Bulldozer	ac	20	\$750.00	\$15,000
Drag-line	yd ³	17,840	\$3.00	\$53,500
Truck	yd ³	17,840	\$3.60	\$64,200
Riprap delivered to site from Quarry	ton	54,610	\$25.50	\$1,392,600
Riprap delivered to site from Golden Island	ton	6,975	\$10.50	\$73,200
Excavator	ton	68,560	\$6.00	\$411,400
Fill gravel for dike construction	ton	635	\$11.00	\$7,000
Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$2,145,000

Appendix B6. Estimated construction cost (Item 8) Scenario 4 assuming mitigation can be offset by removing rock from Golden State Island and using this rock at the M&T site.				
Item	Units	Estimated Quantity	Unit Cost	Subtotal
Mobilization	Lump Sum			\$ 100,000
Bulldozer	ac	20	\$750.00	\$15,000
Drag-line	yd ³	71,900	\$3.00	\$215,700
Truck	yd ³	71,900	\$3.60	\$258,800
Riprap delivered to site from Quarry	ton	133,530	\$25.50	\$3,405,000
Riprap delivered to site from Golden Island	ton	6,975	\$10.50	\$73,200
Excavator	ton	147,480	\$6.00	\$884,900
Fill gravel for dike construction	ton	710	\$11.00	\$7,800
Revegetation	ac	20	\$1,030.00	\$20,600
Site Clean up	ac	20	\$353.00	\$7,100
Total Cost				\$4,988,000