

Jeffrey C. Schuh Jeffrey C. Schuh jschuh@patrickco.com 2024.06.26 10:56:51-04'00'



6/26/24

License **Expires** 11/30/2025

ENGINEER'S OPINION OF PROBABLE RECLAMATION COST

Page 1 of 2

Project: Maple Valley Materials Marengo

Project No.: 22353.043 Owner: Maple Valley Materials

Engineer: Patrick Engineering Inc.

Reference:

Prepared:

Heavybid with equipment and crew costs

JCS

PEI Past Project Cost File Checked

RED

Date: June 25, 2024

Item	Unit	Quantity	Unit Cost (\$)	Total (\$)
General				
Mobilization/Demobilization	LS	1	\$15,000.00	\$15,000.00
subtotal				\$15,000.00
Demolition/Abandonment			*	
Equipment and Conveyor systems	LS	1	\$10,000.00	\$10,000.00
Monitoring Well Removal	EA	3	\$1,500.00	\$4,500.00
Water well abandonment	LS	1	\$2,500.00	\$2,500.00
Septic Field and Tank removal / abandonment	LS	1	\$6,000.00	\$6,000.00
subtotal				\$23,000.00
Earthwork				
Mass Grading Operation Area (8H:1V)	Acres	10	\$2,500.00	\$25,000.00
Mass Grade Mine area slopes (8H:1V)	Acres	3	\$2,500.00	\$7,500.00
Grade Slopes at Water Use Ponds	Acres	1	\$2,500.00	\$2,500.00
Topsoil Respread (6 inches assumed)	CY	12,000	\$4.50	\$54,000.00
Fine Grading and seeding preparation	Acres	14	\$1,500.00	\$21,000.00
subtotal			.,,	\$110,000.00
Erosion and Sediment Control				
	1-	4.000	ΦΕ ΩΕ	Φ.Γ. Ω.Γ.Ω. Ω.Ω.
Silt Fence (temporary erosion control)	LF	1,000	\$5.25	\$5,250.00
subtotal				\$5,250.00
Vegetation				
Seeding	Acres	14	\$2,800.00	\$39,200.00
Maintenance until healthy stand established	LS	1	\$10,000.00	\$10,000.00
subtotal				\$49,200.00
Construction Staking and As-built				
Survey (staking and as-built)	LS	1	\$10,000.00	\$10,000.00
subtotal		'	ψ10,000.00	\$10,000.00
Estimated Declaration Co. 1				*****
Estimated Reclamation Cost				\$212,450.00

MINE RECLAMATION COST ESTIMATE ASSUMPTIONS

- 1. Mine is fully operational at time of closure.
- 2. Existing conveyors and any other equipment left at the site will have salvage value to offset cost to demolish/remove/dispose.
- 3. Existing aggregate in stockpiles has value and can be removed or used to offset costs.
- 4. The septic field will need to be properly abandoned.
- 5. The well will need to be properly abandoned.
- 6. Monitoring wells will need to be properly abandoned.
- 7. The lake is formed and cells are presumed to be reclaimed as new cells are opened. For this estimate, the cost is for when one cell is just opened while the prior 2 cell slopes are being reclaimed. (The lake is progressively enlarged with the slopes above water graded to 8H:1V or flatter.)
- 8. Topsoil is in temporary stockpiles with an average haul distance less than 1,000 feet. No import of topsoil is needed. No screening of topsoil is required.
- 9. Grades will be provided by dozing soils down slope to provide 8H:1V maximum slope. Cut to equals fill. It is assumed the area requiring shaping is 3 acres.
- 10. The processing area will require minor grading and placement of topsoil. Processing district area is approximately 10 acres.
- 11. Grade slopes at Settling and Clean Water Ponds to provide 8H:1V maximum slopes. Area requiring grading estimated at approximately 1 acre.
- 12. Spread topsoil and seed with native vegetation. Maintain until healthy stand of vegetation is achieved.
- 13. Silt fence is only needed to prevent off-site migration of silt. Assume 1,000 lf of silt fence is adequate.
- 14. Surveying and layout / topographic survey to demonstrate compliance.