

Owner: The City of Marquette

Job Description: Lakeshore Shoreline Restoration

Item	Description	2022 Unit Price	2024 Quantity	Units	2022 Total w/ 2024 Quantity	2024 Unit Price	2024 Total
1	Mobilization	\$ 410,000.00	1	LS	\$ 410,000.00	\$ 502,750.00	\$ 502,750.00
2	Demolition Existing Bike Path	\$ 5.00	2875	LF	\$ 14,375.00	\$ 6.00	\$ 17,250.00
3	Demolition Existing Roadway	\$ 13.00	3280	LF	\$ 42,640.00	\$ 15.50	\$ 50,840.00
5	Upland Excavation - Unsuitable	\$ 13.00	1724	CY	\$ 22,412.00	\$ 15.50	\$ 26,722.00
6	Upland Excavation - Unsuitable	\$ 8.00	987	CY	\$ 7,896.00	\$ 10.00	\$ 9,870.00
7	Removal of 73' of existing 42" x	\$ 10,000.00	1	LS	\$ 10,000.00	\$ 12,000.00	\$ 12,000.00
8	Removal of existing abandoned	\$ 2.00	970	lf	\$ 1,940.00	\$ 2.50	\$ 2,425.00
9	Construction Fencing	\$ 4.00	10233	LF	\$ 40,932.00	\$ 3.35	\$ 34,280.55
10	Silt Fence	\$ 2.60	2405	LF	\$ 6,253.00	\$ 2.65	\$ 6,373.25
11	Inlet Protection	\$ 110.00	2	EA	\$ 220.00	\$ 110.00	\$ 220.00
12	Erosion Control Mat	\$ 3.00	50390	SY	\$ 151,170.00	\$ 2.96	\$ 149,154.40
13	Gravel Access Approach	\$ 1,000.00	4	EA	\$ 4,000.00	\$ 1,200.00	\$ 4,800.00
14	Dust Control	\$ 1,000.00	1	LS	\$ 1,000.00	\$ 1,200.00	\$ 1,200.00
15	Upland Excavation - Suitable M	\$ 10.00	8883	CY	\$ 88,830.00	\$ 12.00	\$ 106,596.00
16	Clean Fill - On Site Soil	\$ 8.00	8883	CY	\$ 71,064.00	\$ 7.00	\$ 62,181.00
17	Imported Fill - In excess of ava	\$ 12.00	4641	CY	\$ 55,692.00	\$ 15.00	\$ 69,615.00
18	Fine Grading	\$ 3,200.00	10.44	ACRE	\$ 33,408.00	\$ 4,100.00	\$ 42,804.00
19	Upland Sand for Dune (6" Dep	\$ 25.00	1252	CY	\$ 31,300.00	\$ 40.00	\$ 50,080.00
20	Upland Sand for Side Slopes (3	\$ 25.00	2393	CY	\$ 59,825.00	\$ 40.00	\$ 95,720.00
21	Topsoil for Side Slopes (3" Dep	\$ 42.00	2393	CY	\$ 100,506.00	\$ 48.00	\$ 114,864.00
22	Topsoil for Fill Area Restoration	\$ 42.00	762	CY	\$ 32,004.00	\$ 48.00	\$ 36,576.00
23	Topsoil for Swales (6" Depth)	\$ 42.00	1788	CY	\$ 75,096.00	\$ 48.00	\$ 85,824.00
24	Soil Mix for Backwater Wetland	\$ 45.00	207	CY	\$ 9,315.00	\$ 55.00	\$ 11,385.00
25	Shade Trees - 3" Cal.	\$ 800.00	66	EA	\$ 52,800.00	\$ 715.00	\$ 47,190.00
26	Evergreen Trees - 6' Ht.	\$ 650.00	27	EA	\$ 17,550.00	\$ 630.00	\$ 17,010.00
27	Tree Guard	\$ 13.75	66	EA	\$ 907.50	\$ 26.50	\$ 1,749.00
28	Tree Staking	\$ 49.00	93	EA	\$ 4,557.00	\$ 65.00	\$ 6,045.00
29	Shrubs - 5 Gal	\$ 67.00	210	EA	\$ 14,070.00	\$ 64.00	\$ 13,440.00
30	Shrubs - 3 Gal	\$ 56.00	374	EA	\$ 20,944.00	\$ 41.50	\$ 15,521.00
31	Shrubs - 1 Gal	\$ 35.00	79	EA	\$ 2,765.00	\$ 26.50	\$ 2,093.50
32	Perennials - Plugs	\$ 3.00	7084	EA	\$ 21,252.00	\$ 5.15	\$ 36,482.60
33	Emergent Plants - Plugs (4543	\$ 2.70	1716	EA	\$ 4,633.20	\$ 6.80	\$ 11,668.80
34	Dune Grass - Stolons (93446 s	\$ 1.40	26055	EA	\$ 36,477.00	\$ 1.65	\$ 42,990.75
35	Dune Seed Mix and Great Lake	\$ 2,222.00	4.81	ACRE	\$ 10,687.82	\$ 4,482.58	\$ 21,561.21
36	Great Lakes Barrens Seed Mix	\$ 2,200.00	4.92	ACRE	\$ 10,824.00	\$ 3,951.31	\$ 19,440.45
37	Great Lakes Barrens Seed Mix	\$ 2,500.00	1.55	ACRE	\$ 3,875.00	\$ 6,193.11	\$ 9,599.32
38	Great Lakes Marsh Seed Mix	\$ 2,700.00	0.79	ACRE	\$ 2,133.00	\$ 6,143.96	\$ 4,853.73
39	Vegetation Management - All A	\$ 7,800.00	12.37	ACRE	\$ 96,486.00	\$ 7,385.00	\$ 91,352.45
40	Ramps and Deck Structures	\$ 367.00	990	SF	\$ 363,330.00	\$ 550.00	\$ 544,500.00
41	Stone Aggregate (Supply, Tran	\$ 50.00	205	CY	\$ 10,250.00	\$ 62.00	\$ 12,710.00
42	LVSP Pavement	\$ 325.00	90	Ton	\$ 29,250.00	\$ 400.00	\$ 36,000.00
43	Roll Out Beach Walk	\$ 190.00	55	LF	\$ 10,450.00	\$ 180.00	\$ 9,900.00
44	Signage	\$ 1,000.00	1	LS	\$ 1,000.00	\$ 1,500.00	\$ 1,500.00
45	Installation of Monitoring Bench	\$ 250.00	10	EA	\$ 2,500.00	\$ 500.00	\$ 5,000.00
47	Living Revetment Shoreline Ex	\$ 12.00	9673	CY	\$ 116,076.00	\$ 15.00	\$ 145,095.00

48	Living Revetment - Armor Stor	\$ 10.00	700	Ton	\$ 7,000.00	\$ 10.00	\$ 7,000.00
49	Living Revetment - R2 Stone (4	\$ 19.00	89218	Ton	\$ 1,695,142.00	\$ 26.75	\$ 2,386,581.50
50	Living Revetment - R1 Stone (6	\$ 34.00	10540	Ton	\$ 358,360.00	\$ 46.00	\$ 484,840.00
51	Living Revetment - D Stone (2.	\$ 36.50	223	Ton	\$ 8,139.50	\$ 48.00	\$ 10,704.00
60	North Outfall - Shoreline Exc -	\$ 15.00	124	CY	\$ 1,860.00	\$ 18.00	\$ 2,232.00
61	North Outfall - D Stone (2.5"-12	\$ 36.50	53	Ton	\$ 1,934.50	\$ 48.00	\$ 2,544.00
62	North Outfall - A1 Stone (1-2 T	\$ 10.00	105	Ton	\$ 1,050.00	\$ 10.00	\$ 1,050.00
63	South Outfall - Shoreline Exc -	\$ 15.00	518	CY	\$ 7,770.00	\$ 18.00	\$ 9,324.00
64	South Outfall - D Stone (2.5"-12	\$ 36.50	105	Ton	\$ 3,832.50	\$ 48.00	\$ 5,040.00
65	South Outfall - R1 Stone (6"-18	\$ 34.00	1241	Ton	\$ 42,194.00	\$ 46.00	\$ 57,086.00
66	South Outfall - A1 Stone (1-2 T	\$ 10.00	1766	Ton	\$ 17,660.00	\$ 10.00	\$ 17,660.00
67	South Outfall - Storm Headwall	\$ 15,000.00	1	LS	\$ 15,000.00	\$ 18,500.00	\$ 18,500.00
68	Foredune Reinforcement - Bea	\$ 35.00	2505	CY	\$ 87,675.00	\$ 40.00	\$ 100,200.00
69	Armor Stone Shoreline Stabiliz	\$ 34.00	408	Ton	\$ 13,872.00	\$ 46.00	\$ 18,768.00
70	Armor Stone Shoreline Stabiliz	\$ 25.00	432	Ton	\$ 10,800.00	\$ 10.00	\$ 4,320.00
71	Existing Armor Stone Re-Use	\$ 10.00	750	Ton	\$ 7,500.00	\$ 40.00	\$ 30,000.00
73	South Outfall - Geotextile	\$ 4.00	456	SY	\$ 1,824.00	\$ 5.75	\$ 2,622.00
74	Armor Stone Shoreline Stabiliz	\$ 4.00	389	SY	\$ 1,556.00	\$ 5.75	\$ 2,236.75
75	Turbidity Curtain, Furnish	\$ 0.50	3500	LF	\$ 1,750.00	\$ 15.00	\$ 52,500.00
76	Turbidity Curtain, Instal & Main	\$ 0.50	3500	LF	\$ 1,750.00	\$ 40.00	\$ 140,000.00
77	Sand (City): Class II	\$ (9.00)	2000	CY	\$ (18,000.00)	\$ (8.00)	\$ (16,000.00)
78	Sand (City): Beach Sand - 2NS	\$ (9.00)	2100	CY	\$ (18,900.00)	\$ (25.00)	\$ (52,500.00)
79	Sand (City): Upland - 2MS	\$ (9.00)	2000	CY	\$ (18,000.00)	\$ (28.00)	\$ (56,000.00)

2022 Total = \$ 4,334,465.02	2024 Total = \$ 5,817,941.25
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Summary of Cost Changes:

Other Cost

Description	2022 Bid	2024 Bid	Cost Change	%
Bonds	\$ 39,150.00	\$ 53,050.00	\$ -	36%
Subtotals	\$ 39,150.00	\$ 53,050.00	\$ -	36%

Labor Rates

Description	2024 Bid Hours	2022 Bid Rate	Total with 2022 Rates	2024 Bid Rate	Total with 2024 Rates	Cost Change	%
Superintendent	792	\$ 60.00	\$ 47,520.00	\$ 65.00	\$ 51,480.00	\$ 3,960.00	8%
Surveyor/Foreman	384	\$ 45.00	\$ 17,280.00	\$ 55.00	\$ 21,120.00	\$ 3,840.00	22%
Pit Loader Operator	262	\$ 35.00	\$ 9,170.00	\$ 52.00	\$ 13,624.00	\$ 4,454.00	49%
Truck Driver	5443	\$ 32.00	\$ 174,171.88	\$ 39.00	\$ 212,271.97	\$ 38,100.10	22%
Operator - ONSITE	4889	\$ 70.00	\$ 342,197.24	\$ 77.00	\$ 376,416.97	\$ 34,219.72	10%
Laborer - ONSITE	2091	\$ 43.00	\$ 89,893.06	\$ 46.00	\$ 96,164.67	\$ 6,271.61	7%
Subtotals			\$ 680,232.18		\$ 771,077.61	\$ 90,845.43	13%

Equipment Rates

Description	2024 Bid Hours	2022 Bid Rate	Total with 2022 Rates	2024 Bid Rate	Total with 2024 Rates	Cost Change	%
Pickup	2105	\$ 15.00	\$ 31,581.45	\$ 20.00	\$ 42,108.60	\$ 10,527.15	33%
Lead Dump Truck	5386	\$ 85.00	\$ 457,771.03	\$ 90.00	\$ 484,698.74	\$ 26,927.71	6%
Quad Dump Truck	13	\$ 70.00	\$ 933.07	\$ 75.00	\$ 999.72	\$ 66.65	7%
Tractor w/Lowboy Trailer	44	\$ 105.00	\$ 4,620.00	\$ 125.00	\$ 5,500.00	\$ 880.00	19%
Survey Equipment	384	\$ 15.00	\$ 5,760.00	\$ 20.00	\$ 7,680.00	\$ 1,920.00	33%
Loader, 4 Cyd	1894	\$ 75.00	\$ 142,050.00	\$ 90.00	\$ 170,460.00	\$ 28,410.00	20%
Pit Loader, 6 Cyd	262	\$ 85.00	\$ 22,270.00	\$ 105.00	\$ 27,510.00	\$ 5,240.00	24%
Excavator, 90,000 Lb	1964	\$ 95.00	\$ 186,613.30	\$ 125.00	\$ 245,543.81	\$ 58,930.51	32%
Dozer, w/GPS	511	\$ 85.00	\$ 43,406.66	\$ 125.00	\$ 63,833.32	\$ 20,426.66	47%
Off Road Truck, 40 Ton	160	\$ 135.00	\$ 21,534.53	\$ 165.00	\$ 26,319.98	\$ 4,785.45	22%
Roller	10	\$ 65.00	\$ 650.00	\$ 70.00	\$ 700.00	\$ 50.00	8%
Grader, 12' Moldboard	20	\$ 65.00	\$ 1,300.00	\$ 95.00	\$ 1,900.00	\$ 600.00	46%
Skidsteer	20	\$ 65.00	\$ 1,300.00	\$ 65.00	\$ 1,300.00	\$ -	0%
Subtotals			\$ 919,790.03		\$1,078,554.17	\$ 158,764.13	17%

Material Rates

Description	Quantity (Ton)	2022 Bid Rate	Total with 2022 Rates	2024 Bid Rate	Total with 2024 Rates	Cost Change	%
Class II Sand	6962	\$ 2.00	\$ 13,924.00	\$ 4.00	\$ 27,848.00	\$ 13,924.00	100%
Beach Sand - 2NS	3758	\$ 10.00	\$ 37,580.00	\$ 12.00	\$ 45,096.00	\$ 7,516.00	20%
2MS Sand	5468	\$ 15.00	\$ 82,020.00	\$ 18.00	\$ 98,424.00	\$ 16,404.00	20%
6AAA	510	\$ 16.00	\$ 8,160.00	\$ 18.00	\$ 9,180.00	\$ 1,020.00	13%
Screened Topsoil	6125	\$ 12.00	\$ 73,500.00	\$ 18.00	\$ 110,250.00	\$ 36,750.00	50%
A-1 Stone, 1-2 Ton Bould	3003	\$ -	\$ -	\$ -	\$ -	\$ -	
R1 Riprap, 6" to 18"	12189	\$ 11.45	\$ 139,564.05	\$ 18.12	\$ 220,864.68	\$ 81,300.63	58%
R2 Riprap, 4" to 8"	89218	\$ 11.45	\$ 1,021,546.10	\$ 18.12	\$ 1,616,630.16	\$ 595,084.06	58%
D Stone, 2.5" to 12"	381	\$ 11.45	\$ 4,362.45	\$ 18.12	\$ 6,903.72	\$ 2,541.27	58%
Subtotals			\$ 1,380,656.60		\$2,135,196.56	\$ 754,539.96	55%
6% Sales Tax			\$ 82,839.40		\$ 128,111.79	\$ 45,272.40	55%
Subtotals			\$ 1,463,496.00		\$2,263,308.35	\$ 799,812.36	55%

Subcontracted Work

Description	Quantity	2022 Bid Rate	Total with 2022 Rates	2024 Bid Rate	Total with 2024 Rates	Cost Change	%
GEI Consultants							
Rock QC	1	\$ 69,016.00	\$ 69,016.00	\$ 73,966.50	\$ 73,966.50	\$ 4,950.50	7%
Plutchak Fabricating							
Ramps and Deck Structur	990	\$ 367.00	\$ 363,330.00	\$ 542.00	\$ 536,760.00	\$ 173,430.00	48%

Payne and Dolan			\$	-	\$	-	\$	-	
Mobilization	1	\$ 8,320.00	\$	8,320.00	\$ 10,400.00	\$	10,400.00	\$	2,080.00 25%
HMA, LVSP	90	\$ 225.00	\$	20,250.00	\$ 281.25	\$	25,312.50	\$	5,062.50 25%
G and J Site Solutions			\$	-	\$	-	\$	-	
Mobilization	1	\$ 36,500.00	\$	36,500.00	\$ 45,650.00	\$	45,650.00	\$	9,150.00 25%
Construction Fence	10233	\$ 3.72	\$	38,066.76	\$ 3.35	\$	34,280.55	\$	(3,786.21) -10%
Silt Fence	2405	\$ 2.40	\$	5,772.00	\$ 2.65	\$	6,373.25	\$	601.25 10%
Inlet Protection	2	\$ 100.00	\$	200.00	\$ 110.00	\$	220.00	\$	20.00 10%
Erosion Blanket	50390	\$ 2.70	\$	136,053.00	\$ 2.96	\$	149,154.40	\$	13,101.40 10%
Fine Grading	10.44	\$ 2,855.00	\$	29,806.20	\$ 1,465.00	\$	15,294.60	\$	(14,511.60) -49%
Shade Trees	66	\$ 735.00	\$	48,510.00	\$ 715.00	\$	47,190.00	\$	(1,320.00) -3%
Evergreen Trees	27	\$ 590.00	\$	15,930.00	\$ 630.00	\$	17,010.00	\$	1,080.00 7%
Tree Guard	66	\$ 12.50	\$	825.00	\$ 26.50	\$	1,749.00	\$	924.00 112%
Tree Staking	93	\$ 45.00	\$	4,185.00	\$ 65.00	\$	6,045.00	\$	1,860.00 44%
Shrub, 5 gal	210	\$ 61.25	\$	12,862.50	\$ 64.00	\$	13,440.00	\$	577.50 4%
Shrub, 3 gal	374	\$ 51.25	\$	19,167.50	\$ 41.50	\$	15,521.00	\$	(3,646.50) -19%
Shrub, 1 gal	79	\$ 32.35	\$	2,555.65	\$ 26.50	\$	2,093.50	\$	(462.15) -18%
Perennials, plug	7084	\$ 2.75	\$	19,481.00	\$ 5.15	\$	36,482.60	\$	17,001.60 87%
Emergent Plant	1716	\$ 2.45	\$	4,204.20	\$ 6.80	\$	11,668.80	\$	7,464.60 178%
Dune Grass Stolons	26055	\$ 1.30	\$	33,871.50	\$ 1.65	\$	42,990.75	\$	9,119.25 27%
Dune Seed Mix	4.81	\$ 2,025.00	\$	9,740.25	\$ 4,482.58	\$	21,561.21	\$	11,820.96 121%
GLB Seed Mix B	4.92	\$ 1,985.00	\$	9,766.20	\$ 3,951.31	\$	19,440.45	\$	9,674.25 99%
GLB Seed Mix C	1.55	\$ 2,245.00	\$	3,479.75	\$ 6,193.11	\$	9,599.32	\$	6,119.57 176%
GLM Seed Mix	0.79	\$ 2,450.00	\$	1,935.50	\$ 6,143.96	\$	4,853.73	\$	2,918.23 151%
Vegetation Management	12.37	\$ 7,150.00	\$	88,445.50	\$ 7,385.00	\$	91,352.45	\$	2,906.95 3%
Roll Out Beach Walk	55	\$ 175.50	\$	9,652.50	\$ 180.00	\$	9,900.00	\$	247.50 3%
Subtotals			\$	922,910.01		\$	1,174,343.10	\$	256,383.59 28%

Smith Increase = \$ 1,063,321.92

10% Overhead = \$ 106,332.19

5% Profit = \$ 58,482.71

Smith Total Increase = \$ 1,228,136.82

Subcontract Increase = \$ 256,383.59

10% Markup = \$ 25,638.36

Subcontract Total Increase = \$ 282,021.95



John Daavettila <johnd@smith49855.net>

Marq. Pedestrian Boardwalk

1 message

Tim Plutchak <tplutchak@plutchakfab.com>
To: "johnd@smith49855.net" <johnd@smith49855.net>
Cc: Chris Plutchak <cplutchak@plutchakfab.com>

Mon, Jan 29, 2024 at 5:22 PM

Hello John,

Quoting the Attached Fiberglass materials for the Pile & Boardwalk. Also, includes the Steel Handrailing and labor to install the Piling and Assemble the Boardwalk framing and walk planks.

- Includes: Mobilization of equip. to jobsite.
- Fiberglass Pile per specification.
- Fiberglass Structural members.
- Composite handrail posts.
- FRP deck planking.
- Steel handrail panels painted per spec..
- Fasteners for all connections.
- Equip. and labor as needed.

Total cost for above work: \$ 536,760.00

Terms: 25% ARO, Progress Payments.

Total does not include and Federal, State or local taxes.

No permit costs, if any are included.

Best Regards,

Chris Plutchak
Plutchak Fab., LLC
N1715 US 41
Menominee, Mi. 49858

O: 906-864-4650

C: 906-290-2750

2022 to 2024 Crushing Cost Comparison

Rip Rap Cost 2022:	Unit Price	Unit	Quantity	Total
Great Lakes Minerals:				
- R1, R2 and D-Stone	\$ 10.45	ton	93810	\$ 980,314.50
- Drill and Blast	\$ -	ton	166773	\$ -
- Mobilization	\$ -	LS	1	\$ -
Smith Loading Trucks	\$ 1.00	ton	93810	\$ 93,810.00
				\$ 1,074,124.50
				\$ 11.45 per ton total

Rip Rap Cost 2024:	Unit Price	Unit	Quantity	Total
Great Lakes Minerals:				
- R1, R2 and D-Stone	\$ 10.95	ton	101788	\$ 1,114,578.60
- Mobilization	\$ 15,000.00	LS	1	\$ 15,000.00
SX Blasting				
- Drill and Blast	\$ 2.32	ton	101788	\$ 236,148.16
Smith Sorting Blast Pile:				
				\$ -
- Excavator	\$ 125.00	hour	905	\$ 113,097.78
- Off Road Truck	\$ 165.00	hour	905	\$ 149,289.07
- Operator	\$ 52.00	hour	1810	\$ 94,097.35
Smith Loading Trucks	\$ 1.20	ton	101788	\$ 122,145.60
				\$ 1,844,356.56
				\$ 18.12 per ton total
				58% crushing cost increase

QUOTE

Smith Construction
4090 US 41 West
Marquette, MI 49855

January 16, 2024

It is our pleasure to offer you the following rates to produce materials for the 2024 season.

Project Description: Crushing Service in US 41 Quarry location

Material	Processing Price
Plain Rip Rap	\$ 10.95 / ton
21AA	\$ 6.00 / ton
3" Minus	\$ 5.75 / ton
Mobilization	\$ 15,000

- Purchase Order required in advance to insure schedule availability
- Fuel baseline of \$5.00/gallon for clear diesel per DOE Midwest average
- Prices quoted are valid through 11.01.2024
- Price does not include drilling and blasting costs
- Mobilization Fee and any open balances must be paid prior to mobilization

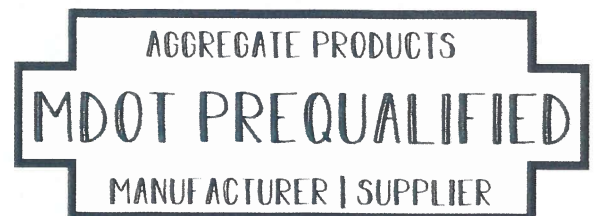
Thank you for the opportunity to quote this project. We look forward to working with you. Please feel free to call with any questions or concerns, or if we can be of assistance in any other way.

Respectfully Submitted by:

GREAT LAKES MINERAL WORKS, LLC
VALLEY VIEW QUARRY



Gary A. Moyle



SX Blasting, Inc.

N59 W14601 Bobolink Ave.
Menomonee Falls, WI 53051-5990
Cell 414-235-0898 / Office 262-252-3200



Quotation

Date: 01/09/24
Quotation #: 1
Customer ID:

DRILLING & BLASTING QUOTE:

PROJECT: Kalkaska Drive Quarry Site. Negaunee, MI.
2024 Drilling & Blasting Services

General Contractor to supply: Access, Traffic Control and a Safe and Secure Work Area.
SX Blasting will include Fuel and Stemming for this quote.

Subcontractor Scope of Work	AMOUNT
7x7 Pattern 3.5" Hole - Drill and Blast estimated 160,000 tons at \$2.32 per ton. For Rip-Rap	\$371,200.00
Permits, Inspections and Setup	\$2,170.00
Mobilization	\$5,940.00
SX Blasting will be supplying the Drilling and Blasting Services for this project.	
TOTAL	\$ 379,310.00

By His or Her signature below, CONTRACTOR hereby accepts and agrees to SUBCONTRACTOR'S quotation as written. Price is valid 90 days from the date of this estimate.

CONTRACTOR:	_____	DATE: _____
	<i>signature</i>	

	<i>written/typed</i>	
SUBCONTRACTOR:	_____	DATE: _____
	<i>signature</i>	

	<i>written/typed</i>	

>We trust that you will find our quote satisfactory and look forward to working with you. If you have any concerning this quotation, contact Dick Boening at 414-235-0898 or email: dboening@sxblasting.com

THANK YOU FOR YOUR BUSINESS!!

QUOTE

Smith Construction
4090 US 41 West
Marquette, MI 49855

May 03, 2022

It is our pleasure to offer you the following rates for the production of materials for the 2022 season.

Project Description: Crushing Service in US 41 Quarry location

Material	Processing Price
Plain Rip Rap	\$ 10.45 / ton
2 1/2" AA	\$ 6.40 / ton
3" Minus	\$ 6.40 / ton
Mobilization	\$ 12,000*

- Purchase Order required in advance to insure schedule availability
- Fuel baseline of \$4.00/gallon for off road diesel per DOE Midwest average
- Prices quoted are valid through 11.01.2022
- Prices include drilling and blasting costs
- * one time charge, waived at 60,000 ton processed

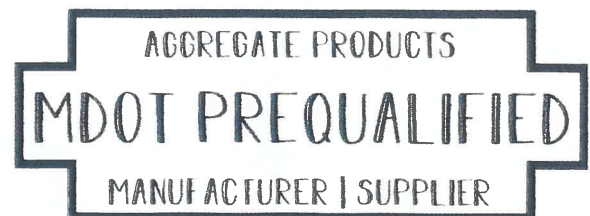
Thank you for the opportunity to quote this project. We look forward to working with you. Please feel free to call with any questions or concerns, or if we can be of assistance in any other way.

Respectfully Submitted by:

GREAT LAKES MINERAL WORKS, LLC
VALLEY VIEW QUARRY



Gary A. Moyle



2022 Davis Bacon Wage Worksheet

Owner: City of Marquette
 Project: Lakeshore Boulevard Shoreline Restoration
 Location: Marquette

Revised 1/21/2022

LABOR CATEGORIES

Decision #	MI20220048				
Class ID	ENGI0326-006		LABO0334-002		
Group	Group 1		Laborer 4		
	Equipment	Truck	General	Restoration	
	Operator	Driver	Laborer	Laborer	Flagger
Base Wage	\$ 33.11	\$ 24.00	\$ 21.51		
Fringe	\$ 24.60		\$ 12.85		
	Open Cut		Open Cut	Open Cut	

BASE WAGE RATE

Payroll Taxes							
FICA	7.65%	\$ 2.53	\$ 1.84	\$ 1.65	\$ -	\$ -	\$ -
MESC		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FUTA	6.00%	\$ 1.99	\$ 1.44	\$ 1.29	\$ -	\$ -	\$ -
SBT	6.00%	\$ 1.99	\$ 1.44	\$ 1.29	\$ -	\$ -	\$ -
Sub Total Payroll Taxes		\$ 6.51	\$ 4.72	\$ 4.23	\$ -	\$ -	\$ -

Work. Comp. Rates							
0042 Landscape Gardening	2.31%				\$ -	\$ -	\$ -
1624 Quarry NOC	1.50%						
5221 Concrete Construction	2.99%						
5507 Subsurface	2.77%						
5506 Paving or Re Paving	2.34%						
5606 Contractor Executive	0.72%						
6217 Excavation	2.20%	\$ 1.30					
6306 Sewer Construction	3.01%			\$ 1.15			
6319 Water Mains	1.43%						
7380 Drivers	2.87%		\$ -				
8227 Contractors Permanent Yard	1.90%						
8720 Salesperson	0.66%						
8810 Clerical Office Employees	0.07%						
9402 Street Cleaning & Drivers (Snow)	1.820%						
2022 Work Comp Exp. Factor	1.78						
General Liability	1.69%	\$ 0.56	\$ 0.41	\$ 0.36	\$ -	\$ -	\$ -
Sub Total Insurance		\$ 1.86	\$ 0.41	\$ 1.52	\$ -	\$ -	\$ -

Total Base Wage Labor Rates	\$ 66.07	\$ 29.12	\$ 40.10	\$ -	\$ -
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TIME & ONE HALF WAGE RATE

Base Wage		\$ 49.67	\$ 36.00	\$ 32.27	\$ -	\$ -	
Payroll Taxes							
FICA	7.65%	\$ 3.80	\$ 2.75	\$ 2.47	\$ -	\$ -	
MESC	12.7%	\$ 4.20	\$ 3.05	\$ 2.73	\$ -	\$ -	
FUTA	0.08%	\$ 0.04	\$ 0.03	\$ 0.03	\$ -	\$ -	
SBT	1.75%	\$ 0.87	\$ 0.63	\$ 0.56	\$ -	\$ -	
Work Comp Insurance		\$ 1.86	\$ 0.41	\$ 1.52	\$ -	\$ -	

Total Time & One Half Labor Rates	\$ 85.03	\$ 42.87	\$ 52.42	\$ -	\$ -
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AVERAGE 10 HOURS PER DAY RATE

Equipment	Truck	Construction	Restoration	Flagger
Operator	Driver	Laborer	Laborer	
\$ 528.58	\$ 232.97	\$ 320.82	\$ -	\$ -
\$ 170.07	\$ 85.73	\$ 104.84	\$ -	\$ -
\$ 698.65	\$ 318.71	\$ 425.66	\$ -	\$ -
\$ 69.86	\$ 31.87	\$ 42.57	\$ -	\$ -

2022 Davis Bacon Rates

"General Decision Number: MI20220048 02/25/2022"

Superseded General Decision Number: MI20210048

State: Michigan

Construction Type: Heavy

Counties: Iron and Marquette Counties in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar Pipeline Construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 35.92	24.85
GROUP 2.....	\$ 31.03	24.85
GROUP 3.....	\$ 30.53	24.85
GROUP 4.....	\$ 30.25	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer, Crane, Scraper, Loader, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor

 ENGI0326-006 05/01/2021

EXCLUDES UNDERGROUND CONSTRUCTION

	Rates	Fringes
OPERATOR: Power Equipment		
Crane, main boom & jib 120' or longer.....	\$ 36.41	24.60
Crane, main boom & jib 140' or longer.....	\$ 37.23	24.60
Crane, main boom & jib 220' or longer.....	\$ 37.52	24.60
GROUP 1 - Backhoe/Excavator; Bulldozer; Crane; Compactor; Scraper; Loader..	\$ 33.11	24.60
GROUP 2 - Boom truck (non- swing).....	\$ 29.86	24.60
GROUP 3 - Oiler.....	\$ 28.46	12.10

FOOTNOTES: Premium rate: main boom and jib 300 feet or longer is \$1.50 per hour above the 220 ft. boom and jib rate. Main boom and jib 400 feet or longer is \$3.00 per hour above the 220 ft. boom and jib rate.

 IRON0008-009 06/01/2021

Rates	Fringes
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IRONWORKER, REINFORCING AND
STRUCTURAL

Contracts \$10,000,000 or greater.....	\$ 36.45	27.65
Contracts less than \$10,000,000.....	\$ 36.45	27.65

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

LAB00334-002 09/01/2018

SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Rates	Fringes
LABORER		
(1) Common or General.....	\$ 21.19	12.85
(2) Mason Tender-Cement/Concrete.....	\$ 21.33	12.85
(4) Grade Checker.....	\$ 21.51	12.85
(5) Pipelayer.....	\$ 21.56	12.85

LAB01329-002 05/01/2021

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
LABORER		
Common or General; Mason Tender - Cement/Concrete....	\$ 30.09	12.95
Pipelayer.....	\$ 30.09	12.95

PLAS0016-035 04/01/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 20.17	10.13

PLUM0111-009 05/27/2019

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 34.48	25.18

TEAM0007-010 06/01/2020

2024 Davis Bacon Wage Worksheet

Revised 1/9/2024

Owner: City of Marquette
 Project: Lakeshore Boulevard Shoreline Restoration
 Location: Marquette

LABOR CATEGORIES

Decision #	MI20220048			
Class ID	ENGI0326-006	LABO0334-002		
Group	Group 1	Laborer 4		

Base Wage
 Fringe

BASE WAGE RATE

	Equipment Operator	Truck Driver	General Laborer	Restoration Laborer	Flag Person
Base Wage	\$ 35.71	\$ 26.00	\$ 21.51		
Fringe	\$ 25.00		\$ 12.85		

Open Cut			Open Cut	Open Cut	
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Payroll Taxes

FICA	7.65%	\$ 2.73	\$ 1.99	\$ 1.65	\$ -	\$ -
MESC	3.0%	\$ 1.07	\$ 0.78	\$ 0.65	\$ -	\$ -
FUTA	6.00%	\$ 2.14	\$ 1.56	\$ 1.29	\$ -	\$ -
Sub Total Payroll Taxes		\$ 5.95	\$ 4.33	\$ 3.58	\$ -	\$ -

Smith Health Insurance	\$ 410.00	\$ 2.44	\$ 2.44	\$ 2.44	\$ 2.44	\$ 2.44
Smith 401K Match	5%	\$ 1.79	\$ 1.30	\$ 1.08	\$ -	\$ -

Vacation 1yr plan 1.85 hours per 40	\$ 1.65					
Vacation 2yr plan 2.62 hours per 40	\$ 2.34					
Vacation 5yr plan 3.38 hours per 40	\$ 3.02					
Vacation 10yr plan 4.15 hours per 40	\$ 3.70		\$ 2.70			

Sub Total Smith Benefits		\$ 4.23	\$ 6.44	\$ 3.52	\$ 2.44	\$ 2.44
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Work. Comp. Rates

0042 Landscape Gardening	3.18%					
1624 Quarry NOC	1.95%					
5221 Concrete Construction	3.03%					
5507 Subsurface	2.87%					
5506 Paving or Re Paving	2.77%					
5606 Contractor Executive	0.66%					
6217 Excavation	2.59%	\$ 1.86				
6306 Sewer Construction	3.34%			\$ 1.44		
6319 Water Mains	1.74%					
7380 Drivers	3.62%		\$ 0.02			
8227 Contractors Permanent Yard	2.16%					
8720 Salesperson	0.73%					
8810 Clerical Office Employees	0.07%					
9402 Street Cleaning & Drivers (Snow)	1.970%					
2024 Work Comp Exp. Factor	2.01	\$ 3.74	\$ 0.03	\$ 2.90	\$ -	\$ -
General Liability	1.80%	\$ 0.64	\$ 0.47	\$ 0.39	\$ -	\$ -
Sub Total Insurance		\$ 6.24	\$ 0.52	\$ 4.73	\$ -	\$ -

Total Base Wage Labor Rates		\$ 72.89	\$ 37.29	\$ 42.68	\$ -	\$ -
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TIME & ONE HALF WAGE RATE

Base Wage		\$ 53.57	\$ 39.00	\$ 32.27	\$ -	\$ -
Payroll Taxes						
FICA	7.65%	\$ 4.10	\$ 2.98	\$ 2.47	\$ -	\$ -
MESC	3.0%	\$ 1.07	\$ 0.78	\$ 0.65	\$ -	\$ -
FUTA	6.00%	\$ 3.21	\$ 2.34	\$ 1.94	\$ -	\$ -
Work Comp Insurance	3.13%	\$ 6.24	\$ 0.52	\$ 4.73	\$ -	\$ -

Total Time & One Half Labor Rates		\$ 93.19	\$ 45.62	\$ 54.90	\$ -	\$ -
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AVERAGE 10 HOURS PER DAY RATE

Equipment Operator	Truck Driver	Construction Laborer	Restoration Laborer	Flagger
\$ 583.15	\$ 298.29	\$ 341.40	\$ -	\$ -
\$ 186.37	\$ 91.24	\$ 109.80	\$ -	\$ -
\$ 769.53	\$ 389.53	\$ 451.20	\$ -	\$ -
\$ 76.95	\$ 38.95	\$ 45.12	\$ -	\$ -

2024 Davis Bacon Rates

"General Decision Number: MI20230048 09/01/2023"

Superseded General Decision Number: MI20220048

State: Michigan

Construction Type: Heavy

Counties: Iron and Marquette Counties in Michigan.

Heavy, Includes Water, Sewer Lines and Excavation (Excludes Hazardous Waste Removal; Coal, Oil, Gas, Duct and other similar Pipeline Construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

~~MI 2023 0048~~

ELECTRICIAN

Contracts \$135,000 and under.....	\$ 31.44	18.59
Contracts over \$135,000.....	\$ 33.44	18.67

ENGI0325-021 09/01/2022

POWER EQUIPMENT OPERATORS: Underground Construction (Including Sewer)

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 37.67	24.85
GROUP 2.....	\$ 32.78	24.85
GROUP 3.....	\$ 32.28	24.85
GROUP 4.....	\$ 32.00	24.85

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/ Excavator, Boring Machine, Bulldozer, Crane, Scraper, Loader, Trencher (over 8 ft. digging capacity)

GROUP 2: Trencher (8-ft digging capacity and smaller)

GROUP 3: Boom Truck (non-swinging, non- powered type boom)

GROUP 4: Broom/ Sweeper, Fork Truck, Tractor

ENGI0326-006 05/01/2023

EXCLUDES UNDERGROUND CONSTRUCTION

	Rates	Fringes
OPERATOR: Power Equipment		
Crane, main boom & jib		
120' or longer.....	\$ 39.01	25.00
Crane, main boom & jib		
140' or longer.....	\$ 39.83	25.00
Crane, main boom & jib		
220' or longer.....	\$ 39.83	25.00
GROUP 1 -		
Backhoe/Excavator;		
Bulldozer; Crane;		
Compactor; Scraper; Loader..	\$ 35.71	25.00
GROUP 2 - Boom truck (non-		

swing).....	\$ 32.46	25.00
GROUP 3 - Oiler.....	\$ 31.06	12.50

FOOTNOTES: Premium rate: main boom and jib 300 feet or longer is \$1.50 per hour above the 220 ft. boom and jib rate. Main boom and jib 400 feet or longer is \$3.00 per hour above the 220 ft. boom and jib rate.

IRON0008-009 06/01/2023

	Rates	Fringes
IRONWORKER, REINFORCING AND STRUCTURAL		
Contracts \$10,000,000 or greater.....	\$ 39.17	30.42
Contracts less than \$10,000,000.....	\$ 39.17	30.43

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

LAB00334-002 09/01/2018

SCOPE OF WORK:

OPEN CUT CONSTRUCTION: Excavation of earth and sewer, utilities, and improvements, including underground piping/conduit (including inspection, cleaning, restoration, and relining)

	Rates	Fringes
LABORER		
(1) Common or General.....	\$ 21.19	12.85
(2) Mason Tender-Cement/Concrete.....	\$ 21.33	12.85
(4) Grade Checker.....	\$ 21.51	12.85
(5) Pipelayer.....	\$ 21.56	12.85

LAB01329-002 05/01/2023

EXCLUDES OPEN CUT CONSTRUCTION

	Rates	Fringes
LABORER		
Common or General; Mason		



51811 Industrial Drive
 Calumet, MI 49913
 Phone: 906-369-3455 Fax 906-483-2455

Traverse City, Michigan
 Phone: 231-941-4400 Fax 231-942-4404

Wednesday, May 4, 2022

**City of Marquette
 Lake Superior Shoreline Restoration
 Marquette County, Mi**

Item #	Item Description	Quantity	Unit	Unit Price	Item Price
0001	Mobilization	1.00	LS	\$36,500.00	\$36,500.00
0009	Construction Fencing Installation and Removal	10,233.00	LF	\$3.72	\$38,066.76
0010	Silt Fence Installation and Removal	2,192.00	LF	\$2.40	\$5,260.80
0011	Inlet Protection	2.00	EA	\$100.00	\$200.00
0012	Erosion Blanket	49,442.00	Sy	\$2.70	\$133,493.40
0018	Fine Grading	10.19	ACRE	\$2,855.00	\$29,092.45
0025	Shade Trees - 3" Cal.	66.00	EA	\$735.00	\$48,510.00
0026	Evergreen Trees - 6' Ht.	27.00	EA	\$590.00	\$15,930.00
0027	Tree Guard	66.00	EA	\$12.50	\$825.00
0028	Tree Staking	93.00	EA	\$45.00	\$4,185.00
0029	Shrubs - 5 Gal.	192.00	EA	\$61.25	\$11,760.00
0030	Shrubs - 3 Gal.	343.00	EA	\$51.75	\$17,750.25
0031	Shrubs - 1 Gal.	75.00	EA	\$32.35	\$2,426.25
0032	Perennials - Plugs	6,710.00	EA	\$2.75	\$18,452.50
0033	Emergent Plants - Plugs (4,543 SF @ 24" O.C.)	1,248.00	EA	\$2.45	\$3,057.60
0034	Dune Grass - Stolons (93,446 SF @ 24" O.C.)	25,542.00	EA	\$1.30	\$33,204.60
0035	Dune Seed Mix and Great Lakes Barrens Seed Mix A	4.75	ACRE	\$2,025.00	\$9,618.75
0036	Great Lakes Barrens Seed Mix B	4.97	ACRE	\$1,985.00	\$9,865.45
0037	Great Lakes Barrens Seed Mix C	1.62	ACRE	\$2,245.00	\$3,636.90
0038	Great Lakes Marsh Seed Mix	0.63	ACRE	\$2,450.00	\$1,543.50
0039	Vegetation Man. - All Areas (including preserved areas) 3 years	12.13	ACRE	\$7,150.00	\$86,729.50
G & J has included the installation of an automatic Irrigation System to successfully water the native plant areas.					
Water and Power will need to be provided either along the lakeshore or at hydrant locations.					
0043	Roll Out Beach Walk	55.00	LF	\$175.50	\$9,652.50
0046	Turbidity Curtain (3 each at 3400 ft)	10,200.00	LF	\$30.46	\$310,692.00

Notes/Exclusions

The foregoing proposal is explicitly conditioned upon the fact that G & J Site Solutions, Inc. and its employees, officers, directors, affiliates, subsidiaries, or successors, is NOT subject to and DOES NOT assume any obligations relating to wages, hours, benefits or any other terms and conditions of any labor agreement (the recipient of this proposal or any other contractor or entity associated with the quoted work may be party. **RATHER, ANY SUCH OBLIGATIONS ARE SPECIFICALLY DISCLAIMED**

G & J assumes installing Turbidity barrier in 500' sections as work progresses and 10 Mobilizations. Maintenance is Responsible of the Prime Contractor

G & J is not responsible for Traffic Control and Flagging

SUBTOTAL \$830,453.21

G & J Site solutions, Inc. hereby to furnish all qualified labor; material; tools; competent supervision; layout; temporary support facilities; final clean up and all other services required to professionally perform and timely complete the soil erosion items in strict accordance within the contract documents.

All unit prices will be evaluated at the completions of work. Any additional work incidental to the project will be billed per the contract unit prices or on a Time and Materials rate sheet.

Authorized Signature
 By: Geoffrey Cutsy
 President

Authorized Accepting Signature
 By:



51811 Industrial Drive
 Calumet, MI 49913
 Phone: 906-369-3455 Fax 906-483-2455

Traverse City, Michigan
 Phone: 231-941-4400 Fax 231-942-4404

Thursday, January 18, 2024

**City of Marquette
 Lake Superior Shoreline Restoration
 Marquette County, Mi**

Item #	Item Description	Quantity	Unit	Unit Price	Item Price
0001	Mobilization	1.00	LS	\$45,650.00	\$45,650.00
0009	Construction Fencing	10,233.00	LF	\$3.35	\$34,280.55
0010	Silt Fence Installation	2,405.00	LF	\$2.65	\$6,373.25
0011	Inlet Protection	2.00	EA	\$110.00	\$220.00
0012	Erosion Control Mat	50,390.00	Sy	\$2.96	\$149,154.40
0018	Fine Grading All Turf Areas	10.44	ACRE	\$1,465.00	\$15,294.60
0025	Shade Trees - 2-1.2" Cal.	66.00	EA	\$715.00	\$47,190.00
0026	Evergreen Trees - 6' Ht.	27.00	EA	\$630.00	\$17,010.00
0027	Tree Guard	66.00	EA	\$26.50	\$1,749.00
0028	Tree Staking	93.00	EA	\$65.00	\$6,045.00
0029	Shrubs - 5 Gal.	210.00	EA	\$64.00	\$13,440.00
0030	Shrubs - 3 Gal.	374.00	EA	\$41.50	\$15,521.00
0031	Shrubs - 1 Gal.	79.00	EA	\$26.50	\$2,093.50
0032	Perennials - Plugs	7,084.00	EA	\$5.15	\$36,482.60
0033	Emergent Plants - Plugs (4,543 SF @ 24" O.C.)	1,716.00	EA	\$6.80	\$11,668.80
0034	Dune Grass - Stolons (93,446 SF @ 24" O.C.)	26,055.00	EA	\$1.65	\$42,990.75
0035	Dune Seed Mix and Great Lakes Barrens Seed Mix A	4.81	ACRE	\$4,482.58	\$21,561.19
0036	Great Lakes Barrens Seed Mix B	4.92	ACRE	\$3,951.31	\$19,440.44
0037	Great Lakes Barrens Seed Mix C	1.55	ACRE	\$6,193.11	\$9,599.32
0038	Great Lakes Marsh Seed Mix	0.79	ACRE	\$6,143.96	\$4,853.72
0039	Vegetation Management - All Areas (including preserved areas) 3 years	12.37	ACRE	\$7,385.00	\$91,352.45
0043	Roll Out Beach Walk	55.00	LF	\$180.00	\$9,900.00
0046	Turbidity Curtain (3 each at 3400 ft)	10,200.00	LF	\$47.00	\$479,400.00

**G & J has included the installation of an automatic irrigation system to successfully water all native plants and trees
 Water and power will need to be provided either along the lakeshore or at the hydrant location**

Notes/Exclusions

The foregoing proposal is explicitly conditioned upon the fact that G & J Site Solutions, Inc. and its employees, officers, directors, affiliates, subsidiaries, or successors, is NOT subject to and DOES NOT assume any obligations relating to wages, hours, benefits or any other terms and conditions of any labor agreement the recipient of this proposal or any other contractor or entity associated with the quoted work may be party. RATHER, ANY SUCH OBLIGATIONS ARE SPECIFICALLY DISCLAIMED

G & J is not responsible for Traffic Control and Flagging

SUBTOTAL \$1,081,270.58

G & J Site solutions, Inc. hereby to furnish all qualified labor; material; tools; competent supervision; layout; temporary support facilities; final clean up and all other services required to professionally perform and timely complete the soil erosion items in strict accordance within the contract documents.

All unit prices will be evaluated at the completions of work. Any additional work incidental to the project will be billed per the contract unit prices or on a Time and Materials rate sheet.

Authorized Signature
 By: Geoffrey Cutsy
 President

Authorized Accepting Signature
 By:



John Daavettila <johnd@smith49855.net>

Master Services Agreement and Shoreline Cost Estimate

2 messages

Abraham, Chris <cabraham@geiconsultants.com>

Thu, Jan 18, 2024 at 3:44 PM

To: "johnd@smith49855.net" <johnd@smith49855.net>, Wyatt Smith <wasmith@smith49855.net>

Cc: "Roberts, Isaac" <iroberts@geiconsultants.com>, "Prentice, Samuel" <sprentice@geiconsultants.com>, "Helppi, Chad" <chelppi@geiconsultants.com>

Hi John and Wyatt,

Thank you for taking the time to meet with us on Tuesday. Per our discussion, attached you will find the Master Services Agreement for 2024 and also the Cost Estimate for the services requested related to the City of Marquette – Lakeshore Boulevard Shoreline Project.

Task A presents fees for the laboratory testing. Please note that we will use a partner in the industry for both the Wet-Dry and Freeze-Thaw tests. The fees presented on the spreadsheet include the cost to ship the samples to our partner. GEI will perform the remaining testing here in Marquette. As I mentioned in the meeting, I would suggest trying to have the City accept the materials without the laboratory testing. At least the materials that you will be reusing. If successful there could be some cost savings here.

Tasks B & C present fees associated with field services as we discussed in the meeting.

Lastly, Task D presents the fees associated with processing the pre and post construction survey data.

Please review the cost estimate and feel free to contact me if you have any questions.

Best regards,

CHRIS R. ABRAHAM, PE, (MI, WI)
Vice President / Branch Manager

cell: 906.284.9044

109 W. Baraga Avenue, Marquette, MI 49855



Estimated Budget Table - Revision 1
 Construction Quality Assurance Observation and Testing Services
 Lakeshore Boulevard Restoration Project
 Marquette, Michigan

Task A - Laboratory Aggregate Testing

This task assumes 1 test will be required for the existing material that will be reused and 1 test will be required that represents the processed and imported materials. Test results will be submitted under transmittal.

<u>Resource</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Cost</u>
Relative Density, SSD, Absorption	test	\$ 225	2	\$ 450
Wet-Dry	test	\$ 2,100	2	\$ 4,200
Freeze-Thaw	test	\$ 2,100	2	\$ 4,200
Soundness	test	\$ 750	2	\$ 1,500
LA Abrasion	test	\$ 275	2	\$ 550

Estimated Subtotal (Task A): \$ 10,900

Task B - Site Observation and Testing of Re-Purposed Stone (A1)

This task assumes a Field Professional will be required on-site for 10 days averaging 10 hours per day to perform gradation testing on the existing material that will be re-used for this project. Test results will be submitted under transmittal.

<u>Resource</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Cost</u>
Senior Consultant - Grade 8	hour	\$ 283	4	\$ 1,132
Project Professional - Grade 4	hour	\$ 131	10	\$ 1,310
Field Professional	hour	\$ 107	100	\$ 10,700
Administrative Staff	hour	\$ 80	8	\$ 640
Mileage	mile	\$ 0.75	100	\$ 75

Estimated Subtotal (Task B): \$ 13,857

Task C - Site Observation and Testing of Quarry Stone (R1, R2 and D)

This task assumes a Field Professional will be required on-site for 45 days averaging 8 hours per day to perform gradation testing on the newly processed quarry material that will be used for this project. Test results will be submitted under transmittal.

<u>Resource</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Cost</u>
Senior Consultant - Grade 8	hour	\$ 283	12	\$ 3,396
Project Professional - Grade 4	hour	\$ 131	36	\$ 4,716
Field Professional	hour	\$ 107	360	\$ 38,520
Administrative Staff	hour	\$ 80	28	\$ 2,240
Mileage	mile	\$ 0.75	450	\$ 338

Estimated Subtotal (Task C): \$ 49,210

Task D - Pre and Post Construction Cross-Section Development

This task assumes an Project Engineer will spend approximately 2 hours each week over 34 weeks, during construction, to process survey data for quantity verification. This engineer will also develop AutoCAD Civil 3D base files for data processing as well and final record drawings of stone placement along the revetment area. Deliverables are anticipated to incorporate a cover sheet, plan of area of influence, and cross-sections at 25 foot intervals along the revetment area. Data will be submitted under transmittal.

<u>Resource</u>	<u>Units</u>	<u>Unit Cost</u>	<u>Units</u>	<u>Cost</u>
Senior Consultant - Grade 8	hour	\$ 283	18	\$ 5,094
Senior Professional - Grade 5	hour	\$ 148	50	\$ 7,400
Project Professional - Grade 3	hour	\$ 121	132	\$ 15,972
Administrative Staff	hour	\$ 80	36	\$ 2,880
				\$ -

Estimated Subtotal (Task D): \$ 31,346

Total = \$ 105,312.50

Note: These costs should be considered an estimate of possible project costs based on broad assumptions regarding project schedule, quantity of testing required, and our experience with projects similar in nature. Actual costs will be determined based on the level of effort and the quantity of testing required. Furthermore, the amount of observation and/or testing required to meet the project specifications and to document the material quality must be determined by the owner and/or contractor, regardless of the quantities estimated herein.



Consulting
Engineers and
Scientists

May 5, 2022
Proposal No. 610043

John Daavettila
Smith Construction, Inc.
4090 US-41
Marquette, MI 49855
jchnd@smith49855.net

RE: Lake Superior Shoreline Restoration, Marquette, Michigan

Dear Mr. Daavettila:

GEI Consultants of Michigan, P.C. (GEI) is pleased to provide the following proposal for the Lake Superior Shoreline Restoration in Marquette, Michigan. Proposed restoration and material testing scope and costs associated with the project have been provided below. All scope and costs are per the City of Marquette Bid Documents MQ13-502 BP22-04 and the five bid addendums.

Scope of Services and Assumptions

This section outlines GEI's proposed scope of services which includes the following pay items:

- 012 (Erosion Control Mat),
- 025-39 (evergreen and shade tree planting, shrub, plug, and dune grass planting, seeding, and vegetation management),
- 048-51 (Living Revetment Stone),
- 054-056 and 59 (Pocket Beach Stone),
- 061-62 and 064-66 (North and South Outfall Stone), and
- 069-71 (Armor Stone Shoreline Stabilization).

Pay items 025-39 will be a combination of field oversight of Superior Watershed Partnership's (SWP) Great Lakes Conservation Corps (GLCC) and installation and maintenance by GEI. These roles will be further detailed in the pay item descriptions below.

Please note mobilization fees are included within each bid item and are not itemized in the separate mobilization bid item. We assume all soil preparation will be completed by the prime contractor prior to SWP GLCC or GEI mobilizing to the site. The preparation of the Quarry Quality Control Program (QQCP) is also included, with fees spread across pay items 048-51, 054-056, 59, 061-62, 064-66, and 069-71.

We assume the prime contractor, or their subcontractors will complete the remainder of the project to the client's approval. Each of the following scope items follows the pay item form provided by the City of Marquette.

Pay Item 12 – Erosion Blanket

GEI will install forty-nine thousand four hundred forty-two (49,442) square yards of erosion blanket as specified in Section 6.11, Native Seeding. This material will meet the 100% biodegradable and double netting specification. GEI will source and order these materials and unloading and placement of ECM near the installation location by the Prime Contractor will be appreciated and increase efficiency of installation. Erosion Blanket will be installed in accordance with the specified manufacturer's instructions after seeding has been completed. To secure the blanket, natural-based plastic fasteners that are 100% biodegradable meeting ASTM D5338 and D5271 will be installed.

Pay Items 025 through 28 – Evergreen Trees, Shade Trees, Tree Guards, and Tree Staking

Evergreen and shade trees will be installed by GEI prior to seeding and blanketing. GEI assumes excavation of planting holes for evergreen and shade trees will be completed by Prime Contractor. Scarifying edges of planting holes and stockpiling of loose excavated material near the holes by the prime contractor will be appreciated and decrease hauling and installation time for the ninety-three (93) evergreen and shade trees included in the project.

After installation, hardwood mulch will be spread around the trees and a soil saucer will be constructed by GEI as shown on the project drawings. Tree stakes will be installed on all trees, with tree guards buried into the backfill around the trees and installed on only the sixty-six (66) shade trees. Species and sizes of all live material are subject to change due to nursery availability at time of shipping. Species substitutions will be subject to approval by the Owner/Engineer.

Pay Items 029 through 34 – Shrubs, Plugs, and Dune Grass Stolons

These pay items includes procurement, delivery, unloading, and observation by GEI. Installation of the shrubs, plugs, and dune grass stolons will be provided by SWP GLCC. GEI will be present at the project site to observe delivery and unload the plant material and will continue to remain onsite to observe the SWP GLCC crew during installation. We have assumed plant installation will take three to four (3-4) weeks and have estimated oversight for fifteen (15), 10-hour days. Following plant installation, GEI will perform final inspections and communicate with the Prime Contractor that planting work is complete.

Pay Items 035 through 38 – Dune Seed Mix, Great Lakes Barrens, and Great Lakes Marsh

This item includes all labor, materials, and equipment necessary for planting the dune seed mix, Great Lakes Barrens Seed Mixes A, B, and C, and the Great Lakes Marsh Seed Mix. The total seeding area is 11.97 acres. Seed mixes will be installed following grading and soil preparation by the prime contractor and herbicide application by a subcontracted organization of GEI.

Pay Item 39 – Vegetation Management

Following completion of all planting, seeding, and blanketing pay items, maintenance will be performed at the site on the entire 12.13 acres of planting area to meet the 3-year warranty requirement. Maintenance includes watering as many as one (1) time in 2022, four (4) times in 2023, four (4) times in 2024, and twice (2) in 2025. Mowing with a flail-type mower up to eight (8) times is included for the entire management period, and spot application of herbicide via wick or soaked gloved methods by a certified pesticide application until October 1, 2025. In addition, we have also included a single (1) replanting and seeding effort for the duration of the vegetation management period. We assume the division of responsibilities between GEI and SWP's GLCC will be the same as Pay Items 029 through 34.

Three (3) years of vegetation monitoring is also included in this Pay Item. This includes meeting the requirements of the vegetation performance standards within the National Fish and Wildlife Foundation (NFWF) Appendix D. Vegetation sampling transects will be performed each year and a summary report will be produced each year to be shared with the Prime Contractor, Owner, and Engineer. Field time for this item is estimated at one (1) week every year for three years and one (1) week every year for three years to complete the reporting requirements.

Pay Items 048, 055 through 56, 062, 066, and 070 through 71 – A1 and A2 Armor Stone

This item includes all labor to complete the QQCP and perform quality control inspections on all armor stones placed on the project site. This includes an estimated four-thousand nine-hundred and sixty-nine (4,969) tons of A1 and A2 stone sourced either from an approved quarry or from the existing shoreline adjacent to the project site. GEI will provide a draft of the QQCP to the Prime Contractor for review and it will be the contractor's responsibility to submit the final draft to the Engineer and Owner for approval. Following approval, GEI will complete pre-production responsibilities including selecting the set of Pre-Production Reference Stones that are free of cracks and collecting information on their corresponding size and aspect ratio. GEI will attend the Pre-production site visit and inspection and accompany the Engineer during their inspection. During the inspection, gradations for armor stone will be provided. We assume the quarry will be within 30 miles of the project site.

During construction, GEI will measure each armor stone in three dimensions, estimate the aspect ratio based on these measurements, and record the weight of each stone. GEI assumes armor stone will be laid out by the Prime Contractor with room in between to make inspection and measuring more efficient and safe. If necessary, the Prime Contractor will have an operator and heavy equipment available to roll the armor stones for measures and inspection of cracks. We assume the Prime Contractor chooses to salvage stone from the existing shoreline, therefore GEI will perform these testing services at the project site. This portion of the project is estimated to take twenty-seven (27) 10-hour workdays to complete.

GEI assumes the Prime Contractor will supply the remaining stone quality control requirements, including, but not limited to:

1. Drop tests during the pre-production inspection and construction, and
2. ASTM D 4992, ASTM C127, ASTM D 5313, ASTM D 5312, and ASTM D 5420 Compliance.

Pay Items 049 through 50, 054, 065, and 069 – R1 and R2 Riprap

This item includes all labor to complete the QQCP and perform quality control inspections on all riprap stones placed on the project site. This includes an estimated ninety-three thousand one-hundred forty-eight (93,148) tons of R1 and R2 stone sourced either from an approved quarry or from the existing shoreline adjacent to the project site. During production and hauling, GEI will complete a gradation test every 2,500 and 5,000 tons for R1 and R2 stone, respectively. This results in approximately 32 tests of R1 material and 3 tests for R2 material. GEI assumes R1 and R2 stone will be loaded and processed during the gradation by the Prime Contractor. If the Prime Contractor chooses to salvage R1 and R2 stone from the existing shoreline, GEI can perform these same testing services at no additional cost at the project site instead of at the quarry. This portion of the project is estimated to take thirteen (13) 10-hour workdays to complete.

GEI assumes the Prime Contractor will supply the remaining stone quality control requirements, including, but not limited to: ASTM D 4992, ASTM C127, ASTM D 5313, ASTM D 5312, and ASTM D 5420 Compliance.

Pay Items 051, 059, 061, and 064 – D Bedding Stone

This item includes all labor to complete the QQCP and perform quality control inspections on all bedding stone placed on the project site. This includes an estimated six-hundred fifty-two (652) tons of D stone sourced either from an approved quarry or from the existing shoreline adjacent to the project site. During production and hauling, GEI will complete a gradation test on two (2) samples. GEI assumes D stone will be loaded and processed during the gradation by the Prime Contractor. If the Prime Contractor chooses to salvage D stone from the existing shoreline, GEI can perform these same testing services at no additional cost at the project site instead of at the quarry. This portion of the project is estimated to take one (1) 10-hour day to complete.

GEI assumes the Prime Contractor will supply the remaining stone quality control requirements, including, but not limited to: ASTM D 4992, ASTM C127, ASTM D 5313, ASTM D 5312, and ASTM D 5420 Compliance.

Assumptions

- GEI assumes grading, soil preparation, assistance with unloading heavy materials, and tree hole excavation will be provided by the prime contractor.
- GEI will not be responsible for traffic control during the life of the contract.
- GEI assumes the contractor will finish grading enough area at a time to accommodate five (5) consecutive weekday workdays for SWP GLCC and GEI staff.
- Species and sizes of live plant material are subject to change due to nursery availability at time of shipping, Species substitutions will be subject to approval by the Owner/Engineer.

Project Fees

The proposed scope of services outlined above will be performed on a lump sum basis for restoration items, not to exceed \$392,998 and for stone and quality control on an estimated time and materials basis of \$69,016. This fee is broken down by bid item in the table below:

Base Bid Item No.	Description	Quantity	Unit	Bid Amount
12	Erosion Blanket	49,442	Syd	\$113,191
25	Shade Trees- 3" Cal.	66	Each	\$23,155
26	Evergreen Trees- 6' Height	27	Each	\$7,701
27	Tree Guard	66	Each	\$2,733
28	Tree Staking	93	Each	\$3,842
29	Shrubs- 5 gal	192	Each	\$4,196
30	Shrubs- 3 gal	343	Each	\$9,889
31	Shrubs - 1 gal	75	Each	\$7,271
32	Perennials - Plugs	6,710	Each	\$14,762
33	Emergent Plants - Plugs (4,543 SF @ 24" O.C.)	1,248	Each	\$4,691
34	Dune Grass (93,446 SF @ 24" O.C.)	22,542	Each	\$34,470
35	Dune Seed Mix and Great Lakes Barrens Seed Mix A	4.75	Acre	\$8,929
36	Great Lakes Barrens Seed Mix B	4.97	Acre	\$9,210
37	Great Lake Barrens Seed Mix C	1.62	Acre	\$4,910
38	Great Lakes Marsh Seed Mix	0.63	Acre	\$841
39	Vegetation Management – All Areas (including preserved areas) 3 years	12.13	Acre	\$143,207
48	Living Revetment (Comprised of Stone) - Armor Stone 1-2 Ton (A1 Stone)	365	Ton	\$3,178
49	Living Revetment (Comprised of Stone) Quarried Cobble Sized Stone 4-8 inches (R2 Stone)	81,760	Ton	\$4,131
50	Living Revetment Living Revetment (Comprised of Stone) Quarried Stone - 6-18 Inches (R1 Stone)	6,340	Ton	\$6,991
51	Living Revetment Living Revetment (Comprised of Stone) - Blinding Stone D Stone	113	Ton	\$976
54	Pocket Beach - Quarried Stone - 6-18 Inches (R1 Stone)	3,409	Ton	\$4,121
55	Pocket Beach - Armor Stone - 1-2 Ton (A1 Stone)	2,276	Ton	\$15,717
56	Pocket Beach - Armor Stone - 1-2 Ton (A2 Stone)	457	Ton	\$9,990
59	Pocket Beach - Blinding Stone (D Stone)	381	Ton	\$1,435
61	North Outfall - Bedding Stone (D Stone)	53	Ton	\$874
62	North Outfall - Armor Stone 1-2 Ton (A1 Stone)	105	Ton	\$1,472
64	South Outfall - Blinding Stone (D Stone)	105	Ton	\$963
65	South Outfall - Quarried Stone – 6-18 inches (R1 Stone)	1,241	Ton	\$1,998
66	South Outfall - Armor Stone - 1-2 Ton A1	1,766	Ton	\$12,371

Base Bid Item No.	Description	Quantity	Unit	Bid Amount
	Stone 1766 Tons			
69	Armor Stone Shoreline Stabilization - Quarried Stone R1 Stone 408 Tons	408	Ton	\$1,182
70	Armor Stone Shoreline Stabilization - Armor Stone - 1-2 Ton A1 Stone 432 Tons	432	Ton	\$3,618
Total Base Bid:				\$462,014

Schedule of Unit Prices

The table below outlines unit prices that the prime contractor may include within their bid. We understand that these unit prices may or may not be incorporated into the Contract Documents based on the Prime Contractor's negotiations with the Owner.

Base Bid Item No.	Description	Unit	Unit Cost
12	Erosion Blanket	Syd	\$2.29
25	Shade Trees- 3" Cal.	Each	\$350.84
26	Evergreen Trees- 6' Height	Each	\$285.24
27	Tree Guard	Each	\$41.41
28	Tree Staking	Each	\$41.31
29	Shrubs- 5 gal	Each	\$37.87
30	Shrubs- 3 gal	Each	\$28.83
31	Shrubs - 1 gal	Each	\$55.94
32	Perennials - Plugs	Each	\$2.20
33	Emergent Plants - Plugs (4,543 SF @ 24" O.C.)	Each	\$3.76
34	Dune Grass (93,446 SF @ 24" O.C.)	Each	\$1.35
35	Dune Seed Mix and Great Lakes Barrens Seed Mix A	Acre	\$1,879.86
36	Great Lakes Barrens Seed Mix B	Acre	\$1,853.11
37	Great Lake Barrens Seed Mix C	Acre	\$3,031.04
38	Great Lakes Marsh Seed Mix	Acre	\$1,334.39
39	Vegetation Management – All Areas (including preserved areas) 3 years	Acre	\$11,806.02
48	Living Revetment (Comprised of Stone) - Armor Stone 1-2 Ton (A1 Stone)	Ton	\$10.96
49	Living Revetment (Comprised of Stone) Quarried Cobble Sized Stone 4-8 inches (R2 Stone)	Ton	\$0.05
50	Living Revetment Living Revetment (Comprised of Stone) Quarried Stone - 6-18 Inches (R1 Stone)	Ton	\$1.10
51	Living Revetment Living Revetment (Comprised of Stone) - Blinding Stone D Stone	Ton	\$8.64
54	Pocket Beach - Quarried Stone - 6-18 Inches (R1 Stone)	Ton	\$1.21
55	Pocket Beach - Armor Stone - 1-2 Ton (A1 Stone)	Ton	\$9.16
56	Pocket Beach - Armor Stone - 1-2 Ton (A2 Stone)	Ton	\$29.80
59	Pocket Beach - Blinding Stone (D Stone)	Ton	\$3.77
61	North Outfall - Bedding Stone (D Stone)	Ton	\$16.49

62	North Outfall - Armor Stone 1-2 Ton (A1 Stone)	Ton	\$16.28
64	South Outfall - Blinding Stone (D Stone)	Ton	\$9.17
65	South Outfall - Quarried Stone – 6-18 inches (R1 Stone)	Ton	\$1.61
66	South Outfall - Armor Stone - 1-2 Ton A1 Stone 1766 Tons	Ton	\$9.26
69	Armor Stone Shoreline Stabilization - Quarried Stone R1 Stone 408 Tons	Ton	\$2.90
70	Armor Stone Shoreline Stabilization - Armor Stone - 1-2 Ton A1 Stone 432 Tons	Ton	\$10.63

Please review the proposal and call the GEI Project Manager, Sam Prentice, at 906-629-6069 or email sprentice@geiconsultants.com with any questions you may have. These costs remain valid for acceptance within sixty (60) days of the date on this proposal.

Sincerely,

GEI CONSULTANTS OF MICHIGAN, P.C.



Samuel H. Prentice, PE
Project Manager



George M. Meister
Senior Engineer

SHP/GMM:lmc