

**Biosolids Process Improvements (Study  
Req. No. 2300949  
Cost Summary**

#	Items	Task	Quantity Required	Unit of Measure	Brown and Caldwell, LLC			AECOM Great Lakes, Inc.			CDM Smith Michigan Inc.		
					Unit Price	Total Labor Hours	Total Cost	Unit Price	Total Labor Hours	Total Cost	Unit Price	Total Labor Hours	Total Cost
#0-1	Kick-off workshop and project success efforts	A.1	1	LS	\$14,040.00	48	\$14,040.00	\$56,474.30	165.7143	\$56,474.30	\$52,890.00	261	\$52,890.00
#0-2	Baseline documentation	A.2	1	LS	\$43,094.00	180	\$43,094.00	\$228,810.57	984	\$228,810.57	\$208,541.00	1069	\$208,541.00
#0-3	Decision-making criteria and team training workshops	A.3	1	LS	\$72,829.00	240	\$72,829.00	\$41,866.98	172	\$41,866.98	\$167,436.00	818	\$167,436.00
#0-4	Condition assessment of existing solids processing facilities	A.4	1	LS	\$133,608.00	424	\$133,608.00	\$196,180.25	838.8108	\$196,180.25	\$345,874.00	1693	\$345,874.00
#0-5	Review recent study results and prepare a summary assessment memorandum	A.5	1	LS	\$32,024.00	144	\$32,024.00	\$55,324.50	231	\$55,324.50	\$72,450.00	362	\$72,450.00
#0-6	Regulations and permitting requirements and all other Task A work not included in bid items A.1 through A.5 above	A.6	1	LS	\$36,547.00	152	\$36,547.00	\$33,352.98	161.4286	\$33,352.98	\$82,410.00	411	\$82,410.00
#0-7	Technology screening for resource recovery	B.1	1	LS	\$101,700.00	440	\$101,700.00	\$210,144.39	1101	\$210,144.39	\$162,410.00	840	\$162,410.00
#0-8	Waste stream alternatives	B.2	1	LS	\$70,282.00	312	\$70,282.00	\$32,776.80	169	\$32,776.80	\$160,327.00	817	\$160,327.00
#0-9	Economic analysis of resource recovery options	B.3	1	LS	\$46,701.00	160	\$46,701.00	\$71,815.80	305	\$71,815.80	\$115,478.00	581	\$115,478.00
#0-10	Technology screening for solids management and all other Task B work not included in bid items B.1 through B.3 above	B.4	1	LS	\$63,996.00	216	\$63,996.00	\$94,312.45	415	\$94,312.45	\$138,450.00	701	\$138,450.00
#0-11	Wastewater process investigation tours	C.1	1	LS	\$79,524.00	280	\$79,524.00	\$64,338.18	216	\$64,338.18	\$96,855.00	410	\$96,855.00
#0-12	Scenario development and design charrettes	C.2	1	LS	\$218,789.00	672	\$218,789.00	\$170,193.53	780.7143	\$170,193.53	\$225,850.00	720	\$225,850.00
#0-13	Third party owner/operations evaluation	C.3	1	LS	\$77,283.00	320	\$77,283.00	\$28,153.02	92	\$28,153.02	\$89,941.00	245	\$89,941.00
#0-14	Sites evaluation excluding phase 1 environmental assessments and preliminary geotechnical site investigations	C.4	1	LS	\$41,900.00	160	\$41,900.00	\$171,966.25	822.2867	\$171,966.25	\$98,520.00	350	\$98,520.00
#0-15	Phase 1 environmental assessments	C.4	1	LS	\$20,000.00	112	\$20,000.00	\$9,719.97	60	\$9,719.97	\$112,510.00	403	\$112,510.00
#0-16	Preliminary geotechnical site	C.4	1	LS	\$40,000.00	112	\$40,000.00	\$52,332.00	200	\$52,332.00	\$68,941.00	265	\$68,941.00
#0-17	Selection of best three biosolids processing systems alternatives and all other Task C work not included in bid items C.1 through C.4 above	C.5	1	LS	\$170,841.00	600	\$170,841.00	\$121,601.15	527	\$121,601.15	\$215,741.00	767	\$215,741.00
#0-18	Technology symposium	D.1	1	LS	\$153,949.00	208	\$153,949.00	\$119,290.30	455.7143	\$119,290.30	\$48,710.00	225	\$48,710.00
#0-19	Study development	D.2	1	LS	\$204,792.00	344	\$204,792.00	\$292,964.67	1386.766	\$292,964.67	\$215,410.00	1019	\$215,410.00
#0-20	Study development workshop	D.3	1	LS	\$318,011.00	352	\$318,011.00	\$27,949.16	125.2406	\$27,949.16	\$35,485.00	170	\$35,485.00
#0-21	Life cycle cost analyses	D.4	1	LS	\$125,842.00	112	\$125,842.00	\$27,941.69	131	\$27,941.69	\$65,841.00	320	\$65,841.00
#0-22	Financial models for management options	D.5	1	LS	\$34,184.00	160	\$34,184.00	\$23,449.76	136	\$23,449.76	\$32,510.00	160	\$32,510.00
#0-23	Risk analyses, resiliency screening, and risk management strategies	D.6	1	LS	\$33,380.00	120	\$33,380.00	\$72,025.85	275	\$72,025.85	\$32,784.00	165	\$32,784.00
#0-24	Risk Mitigation Plans	D.7	1	LS	\$15,625.00	16	\$15,625.00	\$61,747.68	191	\$61,747.68	\$65,842.00	325	\$65,842.00
#0-25	Regulatory Confirmation	D.8	1	LS	\$25,905.00	80	\$25,905.00	\$37,482.26	159.4286	\$37,482.26	\$35,240.00	175	\$35,240.00
#0-26	Process Evaluation and Scoring	D.9	1	LS	\$22,743.00	80	\$22,743.00	\$116,317.01	546.5714	\$116,317.01	\$89,510.00	440	\$89,510.00
#0-27	Process Evaluation Workshop	D.10	1	LS	\$27,498.00	40	\$27,498.00	\$60,317.44	293.8571	\$60,317.44	\$41,741.00	205	\$41,741.00
#0-28	Process Evaluation Report	D.11	1	LS	\$21,000.00	40	\$21,000.00	\$83,220.93	377.5714	\$83,220.93	\$34,640.00	170	\$34,640.00
#0-29	Final Recommendation Confirmation	D.12	1	LS	\$12,618.00	128	\$12,618.00	\$61,215.61	306.8571	\$61,215.61	\$46,574.00	230	\$46,574.00
#0-30	Board Workshop	D.13	1	LS	\$22,228.00	80	\$22,228.00	\$40,186.35	187	\$40,186.35	\$42,510.00	210	\$42,510.00
#0-31	Finalize Study Report	D.14	1	LS	\$11,910.00	56	\$11,910.00	\$99,826.69	461.8571	\$99,826.69	\$84,105.00	420	\$84,105.00
#0-32	Compile data for designer and provide all other Task D work not included in bid items D.1 through D.14 above	D.15	1	LS	\$17,678.00	64	\$17,678.00	\$98,336.27	612	\$98,336.27	\$64,850.00	320	\$64,850.00
#0-33	Project Management (including all subtasks of Task E) and all other Contract work not included in the above bid items	E	1	LS	\$175,744.00	680	\$175,744.00	\$314,780.12	1330.126	\$314,780.12	\$343,681.00	1307	\$343,681.00
#0-34	Allowance for Symposium Participant Travel	N/A	1	NTE	\$50,000.00	1	\$50,000.00	\$50,000.00	0	\$50,000.00	\$50,000.00	1	\$50,000.00
#0-35	Allowance for GLWA authorized Extra Work	N/A	1	NTE	\$300,000.00	1	\$300,000.00	\$300,000.00	0	\$300,000.00	\$300,000.00	1	\$300,000.00
<b>Totals</b>							<b>\$2,836,265.00</b>			<b>\$3,526,414.92</b>			<b>\$4,044,057.00</b>