



City of Ann Arbor WRRF  
Odor Control System for SHB Truck Loading

Design Services - Fee Table

Phase and Task	Professional Labor Hours																											
	Principal	GE 2	Design Tech	Jacobs	Jacobs	Jacobs	GE V	PE III	GE 3	PE III	GE 2	Principal	PA III	GA III	PE III	GE IV	Tech II	GEOTECH	ODOR SAMPLING	Professional Surveyor	Surveyor III	Admin						
	PM	Process Eng	CADD	QAQC	Odor Tech Lead	I&C	Lead Mech	Lead Elec	MEP	Lead Civil	Civil Designer	Tech Director	Architect	CAD Support	Structural QAQC	Structures	Structures	FKE CONSULT		Survey	Survey	Clerical Aide						
	Jennifer Drinan	Aliyah Gilbert	Chris Temple	Allen Gelderloos	Bill Desing	Vance Martin	Sean Tabacsko	Ted Cogswell	CADD	Tavio Palazzolo		Kirk Loveall	Chris Ozog		Michael Spurbek	Habib Haidar	Stefani Morris	Lump sum	Per air sample			Tiffany Bryan	Total Hours	Total Labor				
	\$ 247	\$ 160	\$ 151	\$ 285	\$ 340	\$ 290	\$ 182	\$ 194	\$ 151	\$ 194	\$ 156	\$ 247	\$ 210	\$ 162	\$ 194	\$ 169	\$ 134	\$ 6,500	\$ 500	\$ 173	\$ 132	\$ 110						
TASK 1 -Kickoff Meeting																												
INSERT BELOW THIS ROW																												
Data Request and Review	4				8		8																20	\$ 5,164				
Kickoff Meeting in person	8	2			8		8						2										28	\$ 6,892				
Project Management	4																						4	\$ 948				
INSERT ABOVE THIS ROW																												
Hours Subtotal	16	2	0	0	16	0	16	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	52	\$ 13,004				
Fee Subtotal	\$ 3,912	\$ 320	\$ -	\$ -	\$ 5,440	\$ -	\$ 2,912	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 420	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
TASK 2 - Basis of Design Verification & Conceptual Design																												
INSERT BELOW THIS ROW																												
Convert existing CADD files	2		10						10					5			5						32	\$ 4,994				
Contact odor control vendors for preliminary sizing					4		2																6	\$ 1,724				
Site visit to determine layout options		4					8	4					4			4							24	\$ 4,388				
Preliminary layout drawings		2					6		8														16	\$ 2,620				
Schematics of HV & Odor Control operating systems, Electrical one line		2			8	8	6	6	12						2	2							46	\$ 10,154				
Opinion of Probable Costs and Construction Schedule		2			4		4																10	\$ 2,408				
Topographical survey																				10	25		35	\$ 5,030				
Geotech investigation															1	1		1					3	\$ 6,863				
Progress Meetings Virtual (3 each at 2 hours)	6				6		6	6					2		2	2	2						32	\$ 7,192				
Project Management	16																						16	\$ 4,031				
INSERT ABOVE THIS ROW																												
Hours Subtotal	24	10	10	0	22	8	32	16	30	0	0	0	6	5	5	9	7	1	0	10	25	0	220	\$ 49,404				
Fee Subtotal	\$ 6,007	\$ 1,600	\$ 1,510	\$ -	\$ 7,480	\$ 2,320	\$ 5,824	\$ 3,104	\$ 4,530	\$ -	\$ -	\$ -	\$ 1,260	\$ 810	\$ 970	\$ 1,521	\$ 938	\$ 6,500	\$ -	\$ 1,730	\$ 3,300	\$ -						
TASK 3 -Detailed Design																												
INSERT BELOW THIS ROW																												
60% design development:																							0	\$ -				
Field verify layouts and resolve interferences							8	4		5	5				1	1	1						25	\$ 4,479				
Confirm OC and blower equipment design criteria					4		8	2															14	\$ 3,204				
Develop drawings and details							6	6	40														52	\$ 8,296				
Identify structural improvements to existing structures for support of equipment and penetrations, foundations, pipe supports, access platforms						8	2								10	24	24						68	\$ 11,896				
Architectural layouts for louvers and penetrations							2						10	10									22	\$ 4,084				
Sequence of construction & MOPO Plan							4	4															8	\$ 1,504				
Permit preliminary discussions		2								4			2										8	\$ 1,516				
Update Opinion of Probable Costs and Construction Schedule		2		2			2	2					2		1	2							13	\$ 2,594				
Specifications TOC		2			2		2	2		2			1		1	2					5		19	\$ 3,432				
QAQC	4			8			2	2	4			2			2								24	\$ 5,506				
90% design development:																							0	\$ -				
Finalize equipment payouts, pipe supports details and schedules					12		6	6	40				5	5	8	24	24						130	\$ 23,060				
Finalize specifications for OC and blower equipment design criteria					6		4																10	\$ 2,768				
Complete MOPO plan						4	4	4															12	\$ 2,664				
Complete technical specifications		8			8	8	8	8		8			8		2	4					10		72	\$ 14,724				
Finalizing electrical and I&C plans.						12		8	10														30	\$ 6,542				
Coordinate I&C with WRRF's SCADA system						16																	16	\$ 4,640				
Submit part 41 and Ann Arbor Twp permit applications		8		2	2		4	2	2	5	2		4	2			2						35	\$ 6,662				
Update Opinion of Probable Costs and Construction Schedule		2		2	2	2	2	2		2			2			2							18	\$ 4,048				
QAQC	4			8			4	4				2			2								24	\$ 5,654				
100% design development:																							0	\$ -				
Finalize Contract Documents for comments received		4			4	4	4	4	20	2	2		2	5		4	8						63	\$ 11,362				
QAQC	4			2			2	2															10	\$ 2,310				
Progress Meetings Virtual (3 each at 2 hours)	6			6	6		6	2					2		2	1	1						32	\$ 7,823				
In Person design submittal review meeting	8			8			8																24	\$ 5,712				
Project Management	58																						58	\$ 14,405				
INSERT ABOVE THIS ROW																												
Hours Subtotal	84	28	0	38	46	54	88	64	116	28	9	4	38	22	29	64	60	0	0	0	0	15	787	\$ 158,885				
Fee Subtotal	\$ 20,827	\$ 4,480	\$ -	\$ 10,830	\$ 15,640	\$ 15,660	\$ 16,016	\$ 12,416	\$ 17,516	\$ 5,432	\$ 1,404	\$ 988	\$ 7,980	\$ 3,564	\$ 5,626	\$ 10,816	\$ 8,040	\$ -	\$ -	\$ -	\$ -	\$ 1,650						



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