SOUTH PLANT AERATION BASIN OPTIMIZATION PROJECT

Engineers Estimate \$3,870,000

May 23, 2018 C. OVERAA & CO. - RICHMOND, CA

ITE M NO.	ITEM DESCRIPTION	ESTIMATED QUANTITIES	UNIT	τ	UNIT PRICE		TOTAL	
	Mobilization, submittals, bonds, licenses, permits, fees, and insurance (maximum of 4% of total bid amount)	1	LS	\$	167,427.00	\$	167,427.00	
2	Temporary Facilities, Temporary Power, Fences Roads, and Protection Of the Work	1	LS	\$	100,000.00	\$	100,000.00	
	Demolition of existing blower piping, and associated blower equipment and disassembly and removal of existing blowers in the South Plant Gallery.	3	EA	\$	15,000.00	\$	45,000.00	
4	Disposal/Salvage value of the existing blowers in the South Plant Gallery. (add or deduct)	3	EA	\$	5,000.00	\$	15,000.00	
5	Demolition of concrete pads and other miscellaneous items in the South Plant Gallery.	3	EA	\$	5,000.00	\$	15,000.00	
	Demolition of aeration fine bubble diffusers, supports, hoses, and anchors in each South Basin.	5	EA	\$	15,000.00	\$	75,000.00	
/	Repair of concrete floors at removed blower locations in the South Plant Gallery.	3		\$	2,000.00	\$	6,000.00	
	Crack injection at all locations at South Plant (Section 03932)	600		\$	100.00	\$	60,000.00	
	Grout wall openings at pipe notch out at 3 walls at South aeration basins.	3		\$	2,500.00	\$	7,500.00	
	Purchase of motorized valves for the South aeration basins.	20	EA	\$	4,258.00	\$	85,160.00	
11	Mark up, TAX, and installation of motorized valves for the South aeration basins.	20	EA	\$	625.00	\$	12,500.00	
12	Modifications to South aeration basin drop leg piping to install air flow conditioners, air flow meters, valves, hoses, and supports.	20		\$	10,000.00	\$	200,000.00	
	Installation of all aeration hose from drop legs to diffusers in South basins.	1	LS	\$	73,000.00	\$	73,000.00	
14	Removal of, and installation of, new baffle supports at top of the 20 walls at South Aeration Basin.	20	EA WALL	\$	1,050.00	\$	21,000.00	
1.5	Installation of new closure plate at bottom of 10 walls at South aeration basin wall openings.	10	EA WALL	\$	1,050.00	\$	10,500.00	
	Purchase of new Pod Fine Bubble Membrane Aeration System from OTT. Prenegotiated price with manufacturer. Includes TAX. (No alternate allowed).	1	LS	\$	376,763.00	\$	376,763.00	
17	Markup, assembly and installation of new fine bubble diffusers in all 5 aeration basins.	5	EA	\$	12,200.00	\$	61,000.00	
18	Purchase of new High Efficiency Turbo blowers at South Plant, control panels, control equipment, and warranties from Neuros. Pre-negotiated price with manufacturer. Does not include TAX. (No alternate allowed).	1	LS	\$	820,240.00	\$	820,240.00	
	Tax, markup, assembly and installation of new High Efficiency Turbo blowers at South Plant.	3	EA	\$	36,000.00	\$	108,000.00	
	Piping modifications to aeration basin header, installation of new piping, valves, fittings, and supports in the South plant gallery.	1	LS	\$	107,000.00	\$	107,000.00	
21	Cladding and insulation of aeration air piping South plant gallery.	1	LS	\$	65,000.00	\$	65,000.00	
22	Mechanical equipment testing and other specified tests for South plant.	1	LS	\$	24,000.00	\$	24,000.00	
	Coatings at all new equipment, piping, and all other miscellaneous coatings for South plant.	1	LS	\$	5,000.00	\$	5,000.00	
	Modifications to existing MCC and electrical panels, and installation of new electrical panels for South plant.	1	LS	\$	50,000.00	\$	50,000.00	
25	Installation of exposed electrical conduit, pull boxes, and supports for South plant.	1	LS	\$	265,000.00	\$	265,000.00	
	Installation of all electrical wiring, terminations, and labeling for South plant.	1		\$	90,000.00	\$	90,000.00	
	Modifications to existing control panels in South plant.	1	LS	\$	30,000.00	\$	30,000.00	
28	Purchase of air flow meters in South aeration basins.	20	EA	\$	7,250.00	\$	145,000.00	
	Mark up, TAX, and installation of air flow meters for the South aeration basins.	20	EA	\$	2,000.00	\$	40,000.00	
30	Purchase of DO probes and analyzers. Pre-negotiated price with manufacturer. Does not include TAX. (No alternate allowed).	1	LS	\$	41,118.05	\$	41,118.05	
31	Mark up, TAX, and installation of DO meters and analyzers for the aeration basins.	1	LS	\$	2,090.00	\$	2,090.00	
32	Installation of all remaining instruments, preparation of South plant interconnects and loop drawings, and As-built drawings.	1		\$	40,000.00	\$	40,000.00	
	Programming of all new and existing PLCs in South plant.	1	LS	\$	45,000.00	\$	45,000.00	
	Installation of all IFIX SCADA programming to support the South plant.	1	LS	\$	30,000.00	\$	30,000.00	
35	BID ITEM REMOVED PER ADDENDUM NO. 2							

	Electrical equipment testing, wire testing, and other specified tests for South						
36	plant.	1	LS	\$	32,000.00	\$	32,000.00
37	Phased startup of all blower equipment in South plant systems and Owner training.	1	LS	\$	27,000.00	\$	27,000.0
38	Phased startup of all aeration systems and Owner training.	1	LS	\$	20,000.00	\$	20,000.0
39	Construction Manager's trailer and ongoing maintenance per Section 01500.	1	LS	\$	50,000.00	\$	50,000.0
40	Additional cost for providing all shoring and bracing on all bid items above, including but not limited to that as required by Section 6700-6708 of the Labor Code.	1	LS	\$	1,000.00	\$	1,000.00
41	Miscellaneous items specified or indicated elsewhere but not listed above.	1	LS	\$	73,959.95	\$	73,959.9
42	Demobilization, warranty paper work, and project closeout (minimum of 1%).	1	LS	\$	47,500.00	\$	47,500.0
	BID ALTERNATE - NORTI	H PLANT					
43	Demolition of existing blower piping, and associated blower equipment and disassembly and removal of existing blowers in the North Plant Gallery.	2	EA	\$	8,500.00	\$	17,000.00
44	Disposal/Salvage value of the existing blowers in the North Plant Gallery. (add or deduct)	2	EA	\$	5,565.00	\$	11,130.0
45	Demolition and repair of all concrete pads and other miscellaneous items in the North Plant Gallery.	2	EA	\$	6,500.00	\$	13,000.0
46	Removal of, and installation of, new baffle supports at top of the 20 walls at North aeration basin.	20	EA WALL	\$	1,050.00	\$	21,000.0
47	Installation of new closure plate at bottom of 10 walls at North aeration basin wall openings.	10	EA WALL	\$	1,056.00	\$	10,560.0
48	Purchase of new High Efficiency Turbo blowers at North plant, control panels, control equipment, and warranties from Neuros. Pre-negotiated price with manufacturer. Does not include TAX. (No alternate allowed).	1	LS	\$	132,342.00	\$	132,342.0
49	Tax, markup, assembly and installation of new High Efficiency Turbo blowers at North Plant.	1	EA	\$	19,500.00	\$	19,500.0
50	Piping modifications to aeration basin header, installation of new piping, valves, fittings, and supports in the North plant gallery.	1	LS	\$	27,800.00	\$	27,800.0
51	Cladding and insulation of aeration air piping in North plant gallery.	1	LS	\$	62,000.00	\$	62,000.0
52	Coatings at all new equipment, piping, and all other miscellaneous coatings for North plant gallery.	1	LS	\$	1,000.00	\$	1,000.0
53	Modifications to existing MCC and electrical panels, and all electrical work and testing in the North plant gallery	1	LS	\$	62,000.00	\$	62,000.0
54	Programming of existing PLCs in North plant.	1	LS	\$	25,000.00	\$	25,000.00
55	Installation of all IFIX SCADA programming to support the North plant blower.	1	LS	\$	25,000.00	\$	25,000.0
56	Preparation of North plant interconnects and loop drawings, and As-built drawings.	1	LS	\$	5,000.00	\$	5,000.0
	Startup and testing of blower equipment in North plant systems, and Owner			_	0.000.00	_	C 000 0
57	training.	1	LS	\$	6,000.00	\$	6,000.00