



EXHIBIT A
Lake County Special Districts
Replacement of Four Redwood Water Tanks in Soda Bay CSA-20
Phase 1 - Design Bid Lump-Sum Cost
July 23, 2018

WORK TASK	PACE ENGINEERING									Category Subtotal
	T. Warnock Project Manager	R. Bowser Project Engineer	T. Jones Senior Engineer	J. Brunemeier Structural Engineer	T. Bowser Electrical Engineer	J. Lenaker Survey Manager	Two-Man PW Survey Team	Drafting	Office Staff	
PHASE 1 - DESIGN BID	Workdays									
Task 1 - Prepare Preliminary Design Report & Survey										
a. Manage PACE staff	1.00								1.00	\$2,072
b. Obtain and review Record Drawings for four tank sites		0.50								\$712
c. Coordinate geotechnical investigation of four tank sites		1.00								\$1,424
d. Survey four existing tank locations						1.00	4.00			\$13,136
e. Produce topographic maps of four existing tank sites		1.00	2.00							\$4,272
f. Determine seismic requirements for each tank site				1.00						\$1,544
g. Site visit to review topographic map and determine temporary tank locations and misc.		1.00								\$1,424
h. Determine temporary and permanent piping plans at each site		2.00								\$2,848
i. Determine electrical requirements		0.50			1.00					\$2,136
j. Identify utility conflicts		0.50								\$712
k. Review geotechnical report of each tank site	0.25	0.25		0.25						\$1,128
l. Develop cost alternatives for each tank site	0.50	1.00								\$2,196
m. Develop alternatives analysis	0.50	1.00								\$2,196
n. Estimate construction schedule	0.25	0.25								\$742
o. Prepare draft Preliminary Design Report and issue electronic copy to team for review	1.00	2.00							1.00	\$4,920
p. Receive and incorporate comments on draft Preliminary Design Report		0.50	0.50	0.50	0.50					\$2,908
q. Issue copies of final Preliminary Design Report			0.50						0.50	\$976
Subtotal	3.50	11.50	3.00	1.75	1.50	1.00	4.00	0.00	2.50	\$45,346
Task 2 - Prepare Contract Documents										
a. Prepare construction contract documents (90% plans and specifications)	5.00	20.00	5.00	10.00	4.00	1.00		10.00	2.00	\$76,520
b. Issue 90% contract documents to District & SWRCB DDW for review		0.50							1.00	\$1,240
c. Receive and incorporate 90% comments from District & DDW	1.00	2.00							0.50	\$4,656
Subtotal	6.00	22.50	5.00	10.00	4.00	1.00	0.00	10.00	3.50	\$82,416
Task 3 - Services During Bidding										
a. Distribute contract documents to three preselected contractors for bidding	1.00	1.00							1.00	\$3,496
b. Address questions and issue addendum during two-week bid period		3.00		2.00	1.00					\$8,784
c. Review bids received and make recommendation to District	1.00									\$1,544
Subtotal	2.00	4.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	\$13,824
TOTAL PERSON-DAYS	11.50	38.00	8.00	13.75	6.50	2.00	4.00	10.00	7.00	
LABOR \$/DAY	\$1,544	\$1,424	\$1,424	\$1,544	\$1,424	\$1,328	\$2,952	\$968	\$528	
LABOR COST PER CLASSIFICATION	\$17,756	\$54,112	\$11,392	\$21,230	\$9,256	\$2,656	\$11,808	\$9,680	\$3,696	
TOTAL PACE ENGINEERING LABOR COSTS										\$141,586
KC ENGINEERING GEOTECHNICAL REPORT										\$17,656
SUBCONSULTANT MARKUP										\$1,766
TOTAL ENGINEERING SERVICES COST ESTIMATE										\$161,000