

February 26, 2021

Mr. Steve Ledbetter, Vice President  
TKE Engineering  
2305 Chicago Avenue  
Riverside, CA 92507

Re: MSWD Water/Sewer Master Plan Scope

Dear Steve:

The MSWD requested the assessment of the acceptable fee reduction and a revised fee estimate on or before March 1st. The original contract value included in the Michael Baker proposal is \$591,456. The savings could be realized in:

- Calibration/flow measurement scope and
- Modeling tasks based on our discussions
- Workshop scope

After reviewing available data, we recommend a reduced calibration scope by \$50,567, reduced modeling effort by \$3,500, and removal of \$38,362 workshop scope. The proposed Contract scope would remain as is except for these three items. The total contract fee will be reduced to \$499,027

**Table 1:** Alternatives for the scope and fee reduction for the MSWD Combined Water and Sewer Master Plan

Alternative	Description	Fee Reduction	Total Fee
		(\$)	(\$)
1	Reduced Calibration/Workshops Optional	92,429	499,027
2	Calibration/Workshops Optional	130,056	461,400
3	Reduced Calibration	54,067	537,389
4	Calibration Optional	91,694	499,762

Note: Modelling savings is estimated at \$3,500 for all alternatives

Based on feedback from Calibration sub-consultants, Michael Baker was able to offer the below savings:

1. Water sub-consultant calibration measurement scope is three pressure loggers (originally 50) and seven days (initially 14 days) of testing for a total fee of \$20,302.
2. Sewer sub-consultant calibration measurement scope includes the three monitoring locations (originally five) and 14 days of testing (initially 60 days) for a total fee of \$17,325.

3. Reduced calibration and flow monitoring scope and fee provided savings of \$50,567.
4. The proposed monitoring scope is standard in the industry, and it is not expected to have a detrimental effect on successful project execution.
5. Also, Michael Baker will work closely with the District to assess available SCADA information for the model calibration.
6. The existing SCADA utilization savings potential is \$37,627

Michael Baker has reviewed the GIS information provided in the "View only" mode. After review, we concluded that creating a new model would be robust and cost-effective and provide additional \$3,500 savings/benefits to the District.

To better understand the available data and assess the ability to create a new model, the District provided access to the GIS database to Michael Baker. However, the ability for a deeper dive into modeling task savings was limited. An effective effort would require the review of the GIS file to determine compliance with Esri standards.

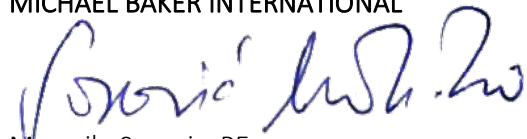
A total of six (6) workshops for a cost of \$38,362 are included in the proposal scope. Due to the COVID pandemic, 2021 may remain under the "work from home" order. Therefore, the workshops may have to be "online"; it may be more effective if they were planned and customized as a part of regular meetings and included in the existing administration scope. The workshops could be delivered through the administration's scope of work in the form of regular meetings. This approach would, in return, provide savings of \$38,362.

## RECOMMENDATION

Michael Baker recommends Alternative 1 with a reduced calibration scope of \$50,567, reduced modeling fee by \$3,500, and optional/alternative workshop scope based on available data review. The proposed Contract scope would remain as is except for these three items, and the reduced fee will be \$499,027. Table 1 summarizes a list of alternatives to offer the District better insight into possible cost savings with minimal impact on the requested service quality. Recommended Alternative 1 offers savings by optimizing calibration effort, customizing the workshop delivery to COVID condition, and blending the effort with administration meetings' scope. Other Alternatives are similarly looking to address calibration and workshop scope to various degrees. All alternatives include the new model development savings.

Sincerely,

**MICHAEL BAKER INTERNATIONAL**



Momcilo Savovic, PE  
Project Manager

Enclosure: Revised Fee Proposal

FEE PROPOSAL  
MSWD COMBINED MASTER PLAN

	Water					Support Services				Total Estimated Hours	Labor Cost	Direct/Repro Subcontract Costs MSC	Total Estimated Fee
	Principal/ QA/QC	Project Manager	Senior Engineer	Project Engineer CAD	ADMINISTRATION	Specialist	Support	EIT	Admin				
	\$ 300.00	\$ 245.00	\$ 195.00	\$ 165.00	\$ 134.00	\$ 195.00	\$ 154.00	\$ 136.00	\$ 140.00				
TASKW1: WATER AND WASTEWATER PLAN UPDATES - PROJECT MANAGMENT													
a PROJECT EXECUTION PLAN (PXP)		12	6							18	\$ 4,110	\$ -	\$ 4,110.00
b PROJECT ADMINISTRATION (SCHEDULING, INVOICING, ETC.)		4	8	4	8					24	\$ 4,272	\$ -	\$ 4,272.00
c PROJECT COMMUNICATION UPDATES	1	4	2							7	\$ 1,670	\$ -	\$ 1,670.00
d PROJECT CLOSEOUT		16	8	8						32	\$ 6,800	\$ -	\$ 6,800.00
BI WEEKLY MEETINGS NOT INCLUDED ELSEWHERE		24		4						28	\$ 6,540	\$ 2,332	\$ 8,872.00
BI-WEEKLY TELEPHONE UPDATES (ASSUME 30 MINUTES)	4	4	4	4	4					20	\$ 4,156	\$ -	\$ 4,156.00
TOTAL AMOUNT (TASK 1):	5	64	28	20	12	0	0	0	0	129	\$ 27,548	\$ 2,332.00	\$ 29,880.00
TASK W2: WATER AND WASTWATER MASTER PLAN UPDATES - PROJECT INITIATION													
a PROJECT INITIATION WORKSHOP	6	24	6	6	8					50			\$ -
RECORDS RESEARCH INCLUDING WATER AND SEWER GERNERAL OBJECTIVES		16	87	87						190	\$ 35,240		\$ 35,240.00
c DESIGN CRITERIA AND LEVEL OF SERVICE TM		8	16	20						44	\$ 8,380		\$ 8,380.00
TOTAL AMOUNT (TASK 2):	6	48	109	113	8	0	0	0	0	284	\$ 43,620	\$ -	\$ 43,620.00
TASK W3: WATER SYSTEM EVALUATION AND MODEL UPDATE													
a BASE MODEL UPDATE		12	114	122						249	\$ 45,479	\$ -	\$ 45,478.56
MARKET ASSESSMENT OF AVAILABLE MODELS		4	8	16						28	\$ 5,180	\$ -	\$ 5,180.00
EXISTING SYSTEM DEFFICIENCIES EVALUATION		8	16	16						40	\$ 7,720	\$ -	\$ 7,720.00
b EXISTING DEMAND DEVELOPMENT AND ALLOCATION		4	12	24						40	\$ 7,280	\$ -	\$ 7,280.00
c FLOW MONITORING AND CALLIBRATION										0	\$ -	\$ 20,301.60	\$ 20,301.60
d FIRE FLOW DEMAND ALLOCATION		4	8	24						36	\$ 6,500	\$ -	\$ 6,500.00
e FUTURE DEMAND DEVELOPMENT ALLOCATION		4	8	24						36	\$ 6,500	\$ -	\$ 6,500.00
f EXISTING SYSTEM EVALUATION		8	8	24						40	\$ 7,480	\$ -	\$ 7,480.00
g SEISMIC EVALUATION OF TYPICAL CONCRETE 1 STEEL RESERVOIR		12	40	40						92	\$ 17,340	\$ -	\$ 17,340.00
h WATER AGE EVALUATION		8	16	24						48	\$ 9,040	\$ -	\$ 9,040.00
i EXISTING SYSTEM EVALUATION WORKSHOP		16	8	8						32		\$ -	\$ -
j PROPOSED RECOMMENDATIONS AND 2X12 HR TRAINING		8	28	20						56	\$ 10,720	\$ -	\$ 10,720.00
k PROPOSED IMPROVEMENTS RECOMMENDATRION WORKSHOP		16	8	8						32		\$ -	\$ -
l FUTURE SYSTEM EVALUATION		8	16	24						48	\$ 9,040	\$ -	\$ 9,040.00
m WATER QUALITY ANALYSIS		8	8	12						28	\$ 5,500	\$ -	\$ 5,500.00
n QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)	8	4								12	\$ 3,380	\$ 300.00	\$ 3,680.00
TOTAL AMOUNT (TASK 3):	8	124	298	386	0	0	0	0	0	817	\$ 141,159	\$ 20,601.60	\$ 161,760.16
TASK W4: WATER MASTER PLAN UPDATE													
a DRAFT	6	24	36	40	16					122	\$ 23,444	\$ 500.00	\$ 23,944.00
b DRAFT FINAL	2	24	24	40	12					102	\$ 19,368	\$ -	\$ 19,368.00
c FINAL	1	24	19	48	8					100.2	\$ 18,916		\$ 18,916.00
TOTAL AMOUNT (TASK 4):	9	72	79	128	36	0	0	0	0	324	\$ 61,728	\$ 500.00	\$ 62,228.00
TASKS1: WASTE WATER PLAN UPDATES - PROJECT MANAGEMENT INCLUDED IN W1 SCHEDULE													
a PROJECT EXECUTION PLAN (PXP)	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
b PROJECT ADMINISTRATION (SCHEDULING, INVOICING, ETC.)	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
c PROJECT COMMUNICATION UPDATES	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
d PROJECT CLOSEOUT	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
BI WEEKLY MEETINGS NOT INCLUDED ELSEWHERE	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
BI-WEEKLY TELEPHONE UPDATES (ASSUME 30 MINUTES)	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
										0	\$ -	\$ -	\$ -
										0	\$ -	\$ -	\$ -
TOTAL AMOUNT (TASK 1):	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -
TASK S2: WASTWATER MASTER PLAN UPDATES - PROJECT INITIATION													
a PROJECT INITIATION WORKSHOP	INCLUDED IN W1 SCHEDULE									0	\$ -		\$ -
SEWER RECORDS RESEARCH INCLUDING WATER AND SEWER GERNERAL OBJECTIVES		24	71	71						166	\$ 31,440	\$ -	\$ 31,440
c DESIGN CRITERIA AND LEVEL OF SERVICE TM	8	12	16	24						60	\$ 12,420	\$ -	\$ 12,420
TOTAL AMOUNT (TASK 1):	8	36	87	95	0	0	0	0	0	226	\$ 43,860	\$ -	\$ 43,860
TASK S3: WASTEWATER SYSTEM EVALUATION AND MODEL UPDATE													
a BASE MODEL UPDATE										0	\$ -	\$ 200	\$ 200
MARKET ASSESSMENT OF AVAIALBLE MODELS	INCLUDED IN W1 SCHEDULE									0	\$ -	\$ -	\$ -
EXISTING SYSTEM DEFFICIENCIES EVALUATION AND MODEL UPDATES		24	80	106						210	\$ 38,904	\$ -	\$ 38,904
b EXISTING FLOWS DEVELOPMENT AND ALLOCATION		16	16	16						48	\$ 9,680	\$ -	\$ 9,680
c FLOW MONITORING AND CALIBRATION 3 PORTABLE FLOW MONITORS FOR 14 DAYS										0	\$ -	\$ 17,325	\$ 17,325
d FUTURE FLOWS DEVELOPMENT ALLOCATION		8	4	12						24	\$ 4,720		\$ 4,720
e EXISTING SYSTEM EVALUATION		8	8	12						28	\$ 5,500		\$ 5,500
f EXISTING SYSTEM EVALUATION WORKSHOP		16	8	8						32			\$ -
g PROPOSE RECOMMENDATION		8	8	8						24	\$ 4,840		\$ 4,840
h PROPOSE RECOMMENDATION WORKSHOP		16	8	8						32			\$ -
i FUTURE SYSTEM EVALUATION		8	4	12						24	\$ 4,720		\$ 4,720
j WASTEWATER QUALITY ANALYSIS		16	4							20	\$ 4,700		\$ 4,700
k QUALITY ASSURANCE AND QUALITY CONTROL QA/QC	12	2								14	\$ 4,090	\$ -	\$ 4,090
TOTAL AMOUNT (TASK 5):	12	122	140	182	0	0	0	0	0	456	\$ 77,154	\$ 17,525	\$ 94,679
TASK S4: WASTEWATER MASTERPLAN UPDATES													
a DRAFT		40	44	63	16					162	\$ 30,788	\$ 400	\$ 31,188
b DRAFT FINAL		32	18	18	12					79	\$ 15,748	\$ 100	\$ 15,848
c FINAL	20	26	7	7	8					68	\$ 15,864	\$ 100	\$ 15,964
TOTAL AMOUNT (TASK 8):	20	98	68	87	36	0	0	0	0	309	\$ 62,400	\$ 600	\$ 63,000
TOTAL	68	564	810	1,011	92	0	0	0	0	2,545	\$ 457,468	\$ 41,559	\$ 499,027
TOTAL FEE (BASE SERVICES EXCLUDING OPTIONAL TASKS)													\$ 499,027

	Principal/ QA/QC	Project Manager	Senior Engineer	Project Engineer CAD	Grant Writing	Regulatory Specialist	Regulatory Support	Graphics Support	Admin	Total Hrs
Total Labor Hours per Staff	68	564	810	1011	92	0	0	0	0	2545