

RESOLUTION NO. 2022-44 RESOLUTION NO. PFA-02 ORDINANCE NO. 2022-02

#### <u>AGENDA</u>

#### **OUR MISSION**

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

Regular Board Meeting Wednesday, May 11, 2022 1:00 p.m. Calaveras County Water District 120 Toma Court San Andreas, California 95249

Board Chambers are open to the public and the following alternative is available to members of the public who wish to participate in the meeting virtually:

## Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

**Or call in (audio only)** +1 323-647-8603,,992667616#

Phone Conference ID: 992 667 616#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at 209-754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility to this meeting. Any documents that are made available to the Board before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for review by the public.

#### **ORDER OF BUSINESS**

#### CALL TO ORDER / PLEDGE OF ALLEGIANCE

#### 1. ROLL CALL

#### 2. PUBLIC COMMENT

At this time, members of the public may address the Board on any non-agendized item. The public is encouraged to work through staff to place items on the agenda for Board consideration. No action can be taken on matters not listed on the agenda. Comments are limited to three minutes per person.

#### **BOARD OF DIRECTORS**

#### 3. CONSENT AGENDA

The following items are expected to be routine / non-controversial. Items will be acted upon by the Board at one time without discussion. Any Board member may request that any item be removed for later discussion.

- 3a Approval of Minutes for the Board Meeting of April 13, 2022 (Rebecca Hitchcock, Clerk to the Board)
- 3b Review Board of Directors Monthly Time Sheets for April 2022 (Rebecca Hitchcock, Clerk to the Board)
- 3c Ratify Claim Summary #602 Secretarial Fund in the Amount of \$1,780,919.60 for April 2022 (Jeffrey Meyer, Senior Vice President Hilltop Securities Inc)
- Re-Authorizing Remote Teleconference Meetings of the Board of Directors of The Calaveras County Water District for the Period of May 11 through June 10, 2022, Pursuant to AB 361 (Rebecca Hitchcock, Clerk to the Board)

  RES 2022-\_\_\_\_

#### 4. **NEW BUSINESS**

- 4a Discussion/Direction Regarding Commercial Water and Sewer Policies (Damon Wyckoff, Director of Operations)
- 4b Discussion/Presentation of AMI Water Meter Videos (Jessica Self, External Affairs Manager)
- 4c Discussion/Presentation of District Accomplishments (Jessica Self, External Affairs Manager)
- Discussion/Action regarding the Award of Construction Contract for the West Point Water Supply Reliability Project, CIP 11106 RES 2022-\_\_\_\_\_ (Charles Palmer, District Engineer)
- 4e Discussion/Action Regarding Award of a Design Services Contract for Copper Cove Water System Improvements

  (John Griffin, Senior Civil Engineer)

  RES 2022-\_\_\_\_

#### 5. REPORTS

- 5a Report on the April 2022 Operations and Engineering Departments (Damon Wyckoff, Director of Operations)
- 5b\* General Manager's Report (Michael Minkler)

#### 6.\* BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

#### 7. <u>NEXT BOARD MEETINGS</u>

- Wednesday, May 25, 2022, 1:00 p.m., Regular Board Meeting
- Wednesday, June 8, 2022, 1:00 p.m., Regular Board Meeting

#### 8. <u>CLOSED SESSION</u>

8a Conference with Legal Counsel-Anticipated Litigation
Significant Exposure to Potential Litigation-Government Code Section 54956.9(d)(2)-2
cases.

8b Conference with Real Property Negotiators Gov. Code § 54956.8

Property: APN 012-011-011, West Point

Agency negotiators: M. Minkler

Negotiating parties: Calaveras Healthy Impact Prod Solutions (CHIPS)

Under negotiation: Price and/or terms of payment

8c Public Employee Performance Evaluation-Government Code §54957 General Manager

#### 9. REPORTABLE ACTION FROM CLOSED SESSION

#### 10. <u>ADJOURNMENT</u>



## CALAVERAS COUNTY WATER DISTRICT

#### **Board of Directors**

#### **Legal Counsel**

District 1 Scott Ratterman Matthew Weber, Esq. Downey Brand, LLP

District 2 Cindy Secada

District 3 Bertha Underhill

District 4 Russ Thomas

District 5 Jeff Davidson

Financial Services

Umpqua Bank US Bank Wells Fargo Bank **Auditor** 

Richardson & Company, LLP

**CCWD Committees** 

\*Engineering Committee

\*Finance Committee

\*Legal Affairs Committee

Membership\*\*

Thomas / Davidson (alt. Secada) Underhill / Secada (alt. Thomas) Davidson / Ratterman (alt. Thomas)

#### **Joint Power Authorities**

ACWA / JPIA

**CCWD Public Financing Authority** 

Calaveras-Amador Mokelumne River Authority (CAMRA)

Calaveras Public Power Agency (CPPA)
Eastern San Joaquin Groundwater Authority

Tuolumne-Stanislaus Integrated Regional Water

Management Joint Powers Authority (T-Stan JPA)

Upper Mokelumne River Watershed Authority (UMRWA)

Ratterman (alt. Michael Minkler)

All Board Members

Ratterman / Underhill (alt. Secada) Michael Minkler (Alt. Brad Arnold)

**Thomas** 

Secada (alt. Thomas)

Davidson (alt. Ratterman)

Other Regional Organizations of Note

Calaveras County Parks and Recreation

Committee

Highway 4 Corridor Working Group Mountain Counties Water Resources

Association (MCWRA)

Mokelumne River Association (MRA)

Tuolumne-Stanislaus Integrated Regional Water Mgt. JPA Watershed Advisory Committee (WAC)

Eastern San Joaquin Groundwater Authority-Technical

Advisory Committee

Thomas (alt. Ratterman)

Thomas / Underhill All Board Members

All Board Members

Brad Arnold

**Brad Arnold** 

<sup>\*</sup> Standing committees, meetings of which require agendas & public notice 72 hours in advance of meeting.

<sup>\*\*</sup> The 1st name listed is the committee chairperson.



#### **MINUTES**

## CALAVERAS COUNTY WATER DISTRICT REGULAR BOARD MEETING

**APRIL 13, 2022** 

Directors Present: Cindy Secada, President

Bertha Underhill, Director Russ Thomas, Director Jeff Davidson, Director

Directors Absent: Scott Ratterman, Vice-President

Staff Present: Michael Minkler, General Manager

Matt Weber Esq, General Counsel Rebecca Hitchcock, Clerk to the Board Jesse Hampton, Plant Operations Manager

Pat Burkhardt, Construction and Maintenance Manager

Jessica Self, External Affairs Manager Charles Palmer, District Engineer John Griffin, Senior Civil Engineer Kate Jesus, Engineering Coordinator Sam Singh, Engineering Technician

Kelly Richards, Customer Service Supervisor Carol Bowen, Customer Service Representative

Others Present: Jeffrey Meyer, Hilltop Securities

Julio Morales, Urban Futures Inc.

Jeff Land, Oppenheimer

#### **ORDER OF BUSINESS**

#### **CALL TO ORDER / PLEDGE OF ALLEGIANCE**

#### 1. ROLL CALL

President Secada called the Regular Board Meeting to order at 1:00 p.m. and led the Pledge of Allegiance. Director Ratterman was absent.

#### 2. PUBLIC COMMENT

There was no public comment.

#### 3. CONSENT AGENDA

## MOTION: Directors Davidson/Thomas-Approved Consent Agenda Items: 3a. 3b. 3d. 3e. and 3f as presented

- 3a Approval of Minutes for the Board Meeting of March 9, 2022 (Rebecca Hitchcock, Clerk to the Board)
- 3b Review Board of Directors Monthly Time Sheets for March 2022 (Rebecca Hitchcock, Clerk to the Board)

#### Director Underhill pulled Item 3c from the Consent Agenda

- Ratify Claim Summary #601 Secretarial Fund in the Amount of \$4,433,132.62 for March 2022

  (Jeffrey Meyer, Hilltop Securities)

  RES 2022-
- Re-Authorizing Remote Teleconference Meetings of the Board of Directors of The Calaveras County Water District for the Period of April 13 through May 13, 2022, Pursuant to AB 361 (Rebecca Hitchcock, Clerk to the Board)

  RES 2022-37
- 3e Action regarding Calling the 2022 General District Election (Rebecca Hitchcock, Clerk to the Board) RES 2022-38
- 3f Authorize a Waterline Easement from Safdari/Desario to CCWD 7260 O'Byrnes Ferry Road, APN 064-029-036, APN 064-029-038 (Damon Wyckoff, Director of Operations) RES 2022-39

AYES: Directors Davidson, Thomas, Underhill, and Secada

NOES: None ABSTAIN: None

ABSENT: Director Ratterman

#### **OFF CONSENT AGENDA**

#### Director Underhill pulled Item 3c from the Consent Agenda

3c Ratify Claim Summary #601 Secretarial Fund in the Amount of \$4,433,132.62 for March 2022
(Jeffrey Meyer, Hilltop Securities)

RES 2022-40

MOTION: Directors Davidson/Underhill-Approved Res 2022-40- Ratifying Claim Summary #601 Secretarial Fund in the Amount of \$4,433,132.62 for March 2022

<u>DISCUSSION</u>: Director Underhill asked about a payment for Water Rights, the application fee for the dam enlargement, a payment to EUCI conference for Women in Engineering, a payment for I&I Sensors, the large payment to Mueller, and the payment for site work for the onsite warehouse building. Director Secada asked about payments to Calaveras County Department of Health, Downey Brand, Global Pay, Hilltop Securities, LCW, Mission Square, Springbrook, Wagner Bonsignore, Tyler Mueller Integration services, Western Hydrology, and a CTO Payout. Director Thomas asked about payments to CMMS, Peteiro Hills Bio-Solids, and the City of Angels. Staff responded to all the questions from the Board.

**PUBLIC COMMENT:** There was no public comment.

AYES: Directors Davidson, Underhill, Thomas, and Secada

NOES: None ABSTAIN: None

ABSENT: Director Ratterman

#### 4. <u>NEW BUSINESS</u>

Discussion/Action Regarding Authorizing the General Manager to Proceed with Issuance of Tax-Exempt Bonds to Finance Various Water and Wastewater Capital Projects and Appoint a Financing Team; and Approve a Reimbursement Resolution

 Authorizing the General Manager to Proceed with Planning for the Issuance of Certain Obligations to Finance Water and Wastewater System Improvements and Appoint a Financing Team.

RES 2022-41

MOTION:

Directors Davidson/Underhill-Approved Res 2022-41- Authorizing the General Manager to Proceed with Planning for the Issuance of Certain Obligations to Finance Water and Wastewater System Improvements and Appoint a Financing Team

<u>DISCUSSION</u>: Mr. Meyer from Hilltop Securities presented both items included in the financing package. He recapped the Finance Committee meeting and Board meeting that previously approved moving forward with the Private Placement Financing. Julio Morales addressed the Board on the specifics of the bids received for two separate 20-year loans, \$19.8 million for the Water Fund and \$11.1 million for the Wastewater Fund.

- 2.94% Water Fund (Webster Bank) the District can generate \$17,832,000 in bond proceeds based on the previously modeled \$1,200,000 in annual debt service payments, which will provide 1.25X in debt service coverage and approximately \$335,000 in annual unrestricted R&R revenues.
- 3.20% for Wastewater Fund (First Foundation Bank) the District can generate \$11,155,000 in bond proceeds using the annual debt service model of \$772,000, which will provide 1.25X in debt service coverage and approximately \$193,000 in annual unrestricted R&R revenues.

There was discussion about the District's debt to income ratio and on the rising cost of construction and over the past several months. There is a risk to completing the planned projects within the budgets presented. The Board expressed concerns regarding the project list and the priority of the projects. The recommendation is to authorize the General Manager to proceed with the funding and appoint the Financing Team.

**PUBLIC COMMENT:** There was no public comment.

AYES: Directors Davidson, Thomas, Underhill, and Secada

NOES: None ABSTAIN: None

ABSENT: Director Ratterman

 Declaring Its Official Intent to Reimburse Itself with the Proceeds of a Tax-Exempt Financing for Certain Expenditures Undertaken or to be Undertaken by the District

RES 2022-42 MOTION: Directors Davidson/Underhill-Approved Res 2022-42- Declaring Its

Official Intent to Reimburse Itself with the Proceeds of a Tax-Exempt Financing for Certain Expenditures Undertaken or to be Undertaken by

the District

<u>DISCUSSION</u>: Mr. Meyer stated the Board is also being asked to approve a separate Reimbursement Resolution that will allow the District to declare its intent to reimburse itself from proceeds of the proposed tax-exempt financing for projects funded entirely or in part by the loan. These project related expenditures, such as planning, design, and other pre-construction work, must be completed within the past 60 days and up to the date of loan closing.

**PUBLIC COMMENT:** There was no public comment.

AYES: Directors Davidson, Thomas, Underhill, and Secada

NOES: None ABSTAIN: None

ABSENT: Director Ratterman

4b Discussion and Demonstration of New AMI Meters

(Jessica Self, External Affairs Manager)

<u>DISCUSSION</u>: Jessica Self provided the Board with a demonstration of water meters and how they function with water running through them. This demonstration was to show the Board how to read the new meters that are being installed district wide.

**PUBLIC COMMENT:** There was no public comment.

#### 5. REPORTS

Report on the March 2022 Operations and Engineering Departments (Damon Wyckoff, Director of Operations)

<u>DISCUSSION:</u> Jesse Hampton and Pat Burkhardt presented the March 2022 Monthly Operations and Engineering reports. They reviewed items of interest and answered questions from the Board.

**PUBLIC COMMENT:** There was no public comment.

5b General Manager's Report (Michael Minkler)

<u>DISCUSSION:</u> Mr. Minkler reported on the following activities: 1) the new meters and the benefits of the data they are providing; 2) the Legal Affairs Committee Meeting; 3) a site visit with Congressman McClintock on May 9<sup>th</sup>; 4) the all-employee meeting and chili cook off; 5) a site visit at Hunters with Ebbetts Pass Fire and with Summer Nicotero from UPUD; and 6) the Mokelumne Battery Project had a town hall meeting.

#### 6. BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

Director Thomas had nothing to report.

Director Davidson had nothing to report.

<u>Director Underhill</u> had nothing to report.

<u>Director Secada</u> reported there will not be no IRWM meetings this month, and the District will hold a Town Hall meeting in District 2 in West Point on May 17, 2022 at 5:00 p.m.

#### 7. <u>NEXT BOARD MEETINGS</u>

- Wednesday, April 27, 2022, 1:00 p.m., Regular Board Meeting
- Wednesday, May 11, 2022, 1:00 p.m., Regular Board Meeting

#### 8. <u>CLOSED SESSION</u>

The meeting adjourned into Closed Session at approximately 2:47 p.m. Those present were Board Members: Cindy Secada, Russ Thomas, Bertha Underhill, and Jeff Davidson; staff members Michael Minkler, General Manager; and General Counsel, Matt Weber.

- 8a Conference with Legal Counsel-Anticipated Litigation Significant Exposure to Potential Litigation-Government Code Section 54956.9(d)(2)-2 cases.
- 8b Public Employee Performance Evaluation-Government Code §54957 General Manager

#### 9. REPORTABLE ACTION FROM CLOSED SESSION

The Board reconvened into Open Session at approximately 3:53 p.m. There was no reportable action.

#### 11. ADJOURNMENT

With no further business, th	e meeting ad	journed at 3:53	p.m.
------------------------------	--------------	-----------------	------

Respectfully Submitted:	ATTEST:	
Michael Minkler	Rebecca Hitchcock	_
General Manager	Clerk to the Board	

# Agenda Item

DATE: May 11, 2022

TO: Michael Minkler, General Manager

FROM: Rebecca Hitchcock, Clerk to the Board

SUBJECT: Review Board of Directors Time Sheets for April 2022

#### **RECOMMENDED ACTION:**

For information only.

#### SUMMARY:

Pursuant to direction from the Board of Directors, copies of the Board's monthly time sheets from which the Board is compensated from, are included in the monthly agenda package for information. Attached are copies of the Board's time sheets for the month of April 2022.

Board Members can be reimbursed for mileage cost to travel to meetings/conferences and are paid at the current IRS rate.

#### FINANCIAL CONSIDERATIONS:

Monthly compensation and mileage reimbursement costs are included in the FY 21-22 budget.

Attachments: Board of Directors Time Sheets for April 2022

For Admin	Payroll	Month/Yr April 2022	
Use	Expense	Name S. Ratterman	

Activity Date	Meeting or Other Expense Description	The same of the sa	ated Rep.	Associa	ntion List	Prior A	pproval	Co	st	Total
4-1		Yes	No	Yes	No	Yes	No	Meeting	Expense	Miles
4-5								\$ 120		152
4-18	ACWA Local Gov't Work Comm. Mtg.	<u> </u>						120		-
4-20	ACWA Local Gov't Work group						10 -	120		1-
4-27	Mtg. W/ Director Seconda - GM EVL	process	н					120	Transition in the	3
1.61	CCWO Reg Mtg							120		7
								·		
							Strict Control of the			
		-								
						excle- European		x p(xxx y, xy y, -y		
······································										
otal	For Totals line, multiply miles by the IRS rate:	1/1/2022	\$0.585							162
Pursuant	to Board Policy 4030, receipts required; report /materials	required		Totals	(use IRS i	miloogo m	da)	A		1
ne undersi	gned, under penalty of perjury states. This claim and the	o itoma and	(f - 1) L					\$600.		\$94.7
ac and con	icul, tiidt expelises incliffed meetings affonded and hiv	inaaa	J	3	Signatur	e of Clain	iant:			-
CC33diy (C	USUICI dildirs: that this claim is proper and within the		re							
ode Sectio	n 20200 et seq, and District Ordinance 2015-02; that the	e service w	as actually	/			3			
			· · ·		-	-	_		_	
dored, ar	d that the amount(s) herein are justly true.									
ainioteati.	e Review: MMMuss				///		***************************************			

For Admin	Payroll	х	Month/	Υr	April	
Use	Expense		Name	Cindy	Secada	

Activity		Designs	ited Rep.	Associa	ation List	Deion A				
Date	Meeting or Other Expense Description	Yes	No	Yes	No	Yes	pproval No	Cos Meeting		Total
13-Apr	CCWD Regular Meeting in person			1.55	1.0	103	NO	120	Expense	Miles
19-Apr	CCWD Finance Committee Remote							120		38.7 38.7
27-Apr	CCWD Regular Meeting in Person							120		38.7
ab Apr.	Exec. M/a w/ Raterman							120		30.7
•								100		
Total	For Totals line and Calendary			TEN THE WORLD	Andrew Company and the Company	Aug Committee age on				
Total	For Totals line, multiply miles by the IRS rate:	1/1/2022	\$0.585		\$ 1 kg	W. B.	1 100	480	0	116.1
	to Board Policy 4030, receipts required; report/material			Totals	(use IRS	mileage r	ate)	\$360.00	\$0.00	\$67.92
The undersi	gned, under penalty of perjury states: This claim and t	he items se	et forth her	ein are	Signatu	re of Clair	mant:			, , , , ,
true and cor	rect; that expenses incurred, meetings attended and but a District official that this claim is presented within the	usiness cor	nducted ar	e						
	District affairs; that this claim is proper and within the						0.	15	/	
Code Section	on 20200 et seq, and District Ordinance 2015-02; that the	ne service	was actual	ly			Cin	dy Secaa	la	
rendered; ar	nd that the amount(s) herein are justly true.				١.			0		
Administrativ	ve Review: <u>M. M. M</u>			- /	1/2/	111				
- dillilli Sti dtiv	TE LEVIEW		ı, :	Date:	1/24/			(	Orig to Finance	Dept.

For Admin	Payroll	0	Month/	Υr	Apr-22		
Use	Expense		Name	Bertha	Underhill	··· · · · · · · · · · · · · · · · · ·	

Activity		Designa	ited Rep.	Associa	tion List	Prior A	pproval	Cos	*	Total
Date	Meeting or Other Expense Description	Yes	No	Yes	No	Yes	No	Meeting	Expense	Miles
										miles
13-Apr	CCWD Regular Board Meeting			1000				120		64
27-Apr	CCWD Regular Board Meeting							120		64
										<u> </u>
<u> </u>										
		<u> </u>								
								***		
		<b></b>								
Total	For Totale line, multiple with the U. 100									
	For Totals line, multiply miles by the IRS rate:	1/1/2022	\$0.585				1.0		0	128
	t to Board Policy 4030, receipts required; report /material			Totals	(use IRS	mileage ra	ate)	\$240.00	\$0.00	\$74.88
The undersi	igned, under penalty of perjury states: This claim and t	he items se	et forth here	ein are	Signatu	re of Clair	nant:			
true and cor	rrect; that expenses incurred, meetings attended and bu	usiness cor	iducted are	)						
Code Section	o District affairs; that this claim is proper and within the on 20200 et seq, and District Ordinance 2015-02; that the	scope of C	alifornia W	ater						
0000 0000	that the property of the prope	ie service	was actuali	У			Bertha?	Underhill		
rendered; a	nd that the amount(s) herein are justly true.									
Administrativ	ve Review:				1/22 /-					
Aummoudu	ve neview. 1000000		•	Date: L	121e/2	r C		(	Orig to Finance	Dept.

For Admin	Payroll	X	Month/	Υr	April 2022	
Use	Expense		Name	Russ	Thomas	

Activity		Designa	ted Rep.	Associa	tion List	Prior A	pproval	Co	st	Total
Date	Meeting or Other Expense Description	Yes	No	Yes	No	Yes	No	Meeting	Expense	Miles
4/13/2022	CCWD Regular Meeting							120		44
4/18/2022	Copperopolis Area Business Association							120		10
4/21/2022	Calaveras County Parks & Recreation Commission							120	4	44
4/26/2022	Engineering Committee							120		44
4/27/2022	CCWD Regular Meeting							120		44
<del></del>										
Total	For Totals line, multiply miles by the IRS rate:	1/1/22	\$0.585					\$ 600.00	0	186
Pursuan	t to Board Policy 4030, receipts required; report/materials re	quired.		Totals	(use IRS	S mileage I	rate)			\$ 108.81
true and co necessary Code Secti	igned, under penalty of perjury states: This claim and the rrect; that expenses incurred, meetings attended and busi to District affairs; that this claim is proper and within the so no 20200 et seq, and District Ordinance 2015-02; that the and that the amount(s) herein are justly true.	ness condu	icted are fornia Wat	are		ıre of Cla	mant:	Thomas	s	
Administrati	ve Review: MUM			Date: 4	27/22			-	Orig to Final	nce Dept.

For Admin	Payroll	0	Month/	Υr	Apr-22	
Use	Expense		Name	Jeff	Davidson	

Activity Date	Mosting on Other Town		ated Rep.		tion List	Prior A	pproval	Cos	t	Total
Date	Meeting or Other Expense Description	Yes	No	Yes	No	Yes	No	Meeting	Expense	Miles
13-Apr	CCWD Regular Board Meeting		<u> </u>					120		2
26-Apr	Engineering Committee - Virtual							120	*****	_2
								***************************************		
· · · · · · · · · · · · · · · · · · ·										
otal	For Totals line, multiply miles by the IRS rate:	1/1/2022	\$0.585						0	28 5
	t to Board Policy 4030, receipts required; report /material			Totals	use IRS	mileage ra	ate)	\$240.00	\$0.00	\$32.76
rue and co	igned, under penalty of perjury states: This claim and t rrect; that expenses incurred, meetings attended and but to District affairs; that this claim is proper and within the	usiness cor	nducted are	•	Signatu	re of Clair	nant:		Ó	16.38
Code Section	on 20200 et seq, and District Ordinance 2015-02; that the	he service	was actual	ly	,	Jett Di	avidsoi	r		
endered; a	and that the amount(s) herein are justly true.				4	<i>.</i>				
ministrati	ve Review: /////////			Date: 1	1/26/	777.		(	Orig to Finance	Dont

# Calaveras County Water District Claim Summary #602 March 2022 vs April 2022

	March 2022	April 2022
CCWD Operating Expenditures	927,148.35	833,695.99
Expenditures to be reimbursed/Fiduciary Payments	14,428.76	3,470.82
Capital Improvement Program Projects	2,981,828.29	266,665.71
Capital Outlay	-	52,624.40
Sub-Total Vendor Payments	3,923,405.40	1,156,456.92
Payroll Disbursed	503,123.84	622,111.96
Other EFT Payments	6,603.38	2,350.72
Total Disbursements	4,433,132.62	1,780,919.60

Vendor	Description	Date	Ref	Amount
AT&T	Leased Lines 04/22	04/21/2022	139838	204.96
AT&T	Acct#9391064579 SA Shop	04/29/2022	139874	124.51
AT&T	Long Distance - Arnold L/S	04/29/2022	139873	41.92
AT&T	Acct#9391064579 SA Shop	04/29/2022	139874	70.03
A T & T CALNET 3	Acct#939067346 Phone Camp Connell Radio Tower 03/22	04/14/2022	139771	130.66
A T & T CALNET 3	Acct#939067346 Phone Camp Connell Radio Tower 03/22	04/14/2022	139771	73.49
A T & T CALNET3	Acct#9391029195 OP HQ Back Up	04/21/2022	139842	301.63
A T & T CALNET3	Acct#9391032215 T1 Line	04/21/2022	139843	121.97
A T & T CALNET3	Acct#9391069409 SA Shop	04/21/2022	139839	55.75
A T & T CALNET3	Acct#9391029200 Dorington P/S	04/21/2022	139840	22.43
A T & T CALNET3	Acct#9391029201 District Wide	04/21/2022	139841	1,648.05
A T & T CALNET3	Acct#9391029195 OP HQ Back Up	04/21/2022	139842	111.55
A T & T CALNET3	Acct#9391032215 T1 Line	04/21/2022	139843	45.11
A T & T CALNET3	Acct#9391069409 SA Shop	04/21/2022	139839	31.36
A T & T CALNET3	Acct#9391029201 District Wide	04/21/2022	139841	927.02
A T & T CALNET3	Acct#9391029194 OP HQ Long Distance	04/29/2022	139876	274.58
A T & T CALNET3	Acct#9391032214 JLTC	04/29/2022	139875	71.62
A T & T CALNET3	Acct#9391029198 Hunters	04/29/2022	139877	22.72
A T & T CALNET3	Acct#9391029197 CC WHSE	04/29/2022	139879	0.86
A T & T CALNET3	Acct#9391029199 JLTC	04/29/2022	139880	14.35
A T & T CALNET3	Acct#9391029194 OP HQ Long Distance	04/29/2022	139876	101.55
A T & T CALNET3	Acct#9391032214 JLTC	04/29/2022	139875	40.28
A T & T CALNET3	Acct#9391032216 Azalea L/S	04/29/2022	139878	20.75
A T & T CALNET3	Acct#9391029199 JLTC	04/29/2022	139880	8.07
A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Saw Repair - Construction Crew	04/14/2022	139772	296.45
A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Tires - V 131	04/14/2022	139772	1,381.76
A-1 SHARPENING & SMALL ENGINE REPAIR, LLC	Saw Repair - Construction Crew	04/14/2022	139772	231.90
ACWA/JPIA	EAP 05/22	04/14/2022	139773	114.94
ACWA/JPIA	Dental 05/22	04/14/2022	139773	4,611.59
ACWA/JPIA	Vision 05/22	04/14/2022	139773	907.77
ACWA/JPIA	Retiree Dental 05/22	04/14/2022	139773	2,052.85
ACWA/JPIA	Retiree Vision 05/22	04/14/2022	139773	636.79
ACWA/JPIA	Dental 05/22	04/14/2022	139773	1,705.65
ACWA/JPIA	EAP 05/22	04/14/2022	139773	27.86
ACWA/JPIA	Vision 05/22	04/14/2022	139773	335.75
ACWA/JPIA	Workers Comp 01/01/22 - 03/31/2022	04/29/2022	139881	21,113.06
ACWA/JPIA	Workers Comp 01/01/22 - 03/31/2022	04/29/2022	139881	10,876.43
AMERICAN AVK COMPANY	Hydrants - Utility Crew (Tax Only - Orignal Inv Already Paid)	04/21/2022	139844	1,168.66

AMERICAN AVK COMPANY	Vendor	Description	Date	Ref	Amount
BEARD, ROGER & JENNIFER         UB Refund 2532 Danaher Drive         04/29/2022         19882         1.62           BIG VALLEY FORD LINCOLN MERCURY         Engine Repair - V 592         04/14/2022         19776         3,762.21           BIG VALLEY FORD LINCOLN MERCURY         Engine Repair - V 736         04/14/2022         19776         2,512.91           BIG VALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         19776         2,512.91           BIG VALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         193846         8,155.00           BLACKWATER CONSULTING ENGINEERS INC.         Design/fineering Services - EP Hunters Raw Water Pumps         04/21/2022         193847         78.81           BNN, LLC         CPUD (Water) Merchanics Shop 780 Industrial Way 03/22         04/21/2022         193847         78.81           BNN, LLC         SASD (Sewer) Merchanics Shop 780 Industrial Way 03/22         04/21/2022         193847         100.41           BNN, LLC         SASD (Sewer) Merchanics Shop 780 Industrial Way 03/22         04/21/2022         193847         120.00           BNN, LLC         SASD (Sewer) Merchanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Merchanics Shop 780 Industrial Way 03/22         04/21/2022         139847	AMERICAN AVK COMPANY	Hydrants - Utility Crew (Tax Only - Orignal Inv Already Paid)	04/21/2022	139844	312.49
BIG VALLEY FORD LINCOLN MERCURY         Engine Repair - V 592         04/14/2022         139776         3,762.21           BIG VALLEY FORD LINCOLN MERCURY         Engine Repair - V 716         04/14/2022         139776         2,512.91           BIG VALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         139776         (529.42)           BIG VALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         139776         (529.42)           BIACKWATER CONSULTING ENGINEERS INC.         Design/Engineering Services - EP Hunters Raw Water Pumps         04/21/2022         139847         78.81           BINN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BINN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BINN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         14.22           BINN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BINN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         65.89           BINN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         1	ARNOLD AUTO SUPPLY	Repair Parts - EP	04/14/2022	139774	173.97
BIG WALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         139776         2,512.91           BIG WALLEY FORD LINCOLN MERCURY         Core Credit         04/14/202         13976         529.42           BLACKWATER CONSULTING ENGINEERS INC.         Design/Engineering Services - EP Hunters Raw Water Pumps         04/21/2022         139847         78.81           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         10.04           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         110.44           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Shol 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         <	BEARD, ROGER & JENNIFER	UB Refund 2532 Danaher Drive	04/29/2022	139882	1.62
BIG VALLEY FORD LINCOLN MERCURY         Core Credit         04/14/2022         13976         (529.42)           BLACKWATER CONSULTING ENGINEERS INC.         Design/Engineering Services - EP Hunters Raw Water Pumps         04/21/2022         139846         8.215.50           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         46.36           BNN, LLC         SASD (Sewer) Mechanics Shulding A & B Industrial Way 03/22         04/21/2022	BIG VALLEY FORD LINCOLN MERCURY	Engine Repair - V 592	04/14/2022	139776	3,762.21
BLACKWATER CONSULTING ENGINEERS INC.         Design/Engineering Services - EP Hunters Raw Water Pumps         04/21/2022         139845         8,215.50           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         100.44           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1,220.00           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1,220.00           BNN, LLC         CPUD (Water) Marchouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         Mechanics Sullding A & B Industrial Way 03/22         04/21/2022	BIG VALLEY FORD LINCOLN MERCURY	Engine Repair - V716	04/14/2022	139776	2,512.91
BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         100.44           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Buliding A & B Industrial Way 03/22         04/21/2022         139847         1,920.00           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         65.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         65.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         65.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         65.49 </td <td>BIG VALLEY FORD LINCOLN MERCURY</td> <td>Core Credit</td> <td>04/14/2022</td> <td>139776</td> <td>(529.42)</td>	BIG VALLEY FORD LINCOLN MERCURY	Core Credit	04/14/2022	139776	(529.42)
BNN, LLC         CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         78.81           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         100.44           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         100.44           BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,920.00           BNN, LLC         CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD ( Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.89           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Shop 580 Industrial Way 03/22         04/21/2022         139847         56.49	BLACKWATER CONSULTING ENGINEERS INC.	Design/Engineering Services - EP Hunters Raw Water Pumps	04/21/2022	139846	8,215.50
BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         100.42           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         14.20           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         1,080.00           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         1,080.00           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         1,080.00	BNN, LLC	CPUD (Water) Warehouse 780 Industrial Way 03/22	04/21/2022	139847	78.81
BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         124.22           BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,920.00           BNN, LLC         CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         McChanics Shop Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         1,080.00           BURS (AS CALLA CALL	BNN, LLC	CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22	04/21/2022	139847	78.81
BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,920.00           BNN, LLC         CPUD (Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.89           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.89           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         56.89           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1.080           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1.080           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1.080           BND LC         Sa50 (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139777         3,571.12      <	BNN, LLC	SASD (Sewer) Warehouse 780 Industrial Way 03/22	04/21/2022	139847	100.44
BNN, LLC         CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 03/22         04/21/2022         139847         1,080.00           BNRLE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139778         3,571.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         72.00           CALAVERAS AUTO SUPPLY         Engine Oil - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.86           CALAVERAS AUTO SUPPLY	BNN, LLC	SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22	04/21/2022	139847	124.22
BNN, LLC         CPUD (Water) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         44.33           BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,080.00           BURKE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139777         3,571.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         72.00           CALAVERAS AUTO SUPPLY         Engine 01 - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.86           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         190.13           CALAVERAS AUTO SU	BNN, LLC	Mechanics Building A & B Industrial Way 05/22	04/21/2022	139847	1,920.00
BNN, LLC         SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22         04/21/2022         139847         69.86           BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,680.00           BURKE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139778         3,571.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         72.00           CALAVERAS AUTO SUPPLY         Engine Oil -SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.66           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         12.66           CALAVERAS AUTO SUPPLY         Fan Clutch, Oil, Air Filter - V 134         04/14/2022         139779         136.80           CALAVERAS AUTO S	BNN, LLC	CPUD ( Water) Mechanics Shop 780 Industrial Way 03/22	04/21/2022	139847	44.33
BNN, LLC         SASD (Sewer) Warehouse 780 Industrial Way 03/22         04/21/2022         139847         56.49           BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,080.00           BURKE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139777         3,751.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         128.00           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         72.00           CALAVERAS AUTO SUPPLY         Engine Oil - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         80.05)           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         10.36           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         10.31           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         369.80           CAL	BNN, LLC	CPUD (Water) Warehouse 780 Industrial Way 03/22	04/21/2022	139847	44.33
BNN, LLC         Mechanics Building A & B Industrial Way 05/22         04/21/2022         139847         1,080.00           BURKE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139777         3,571.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         128.00           CALAVERAS AUTO SUPPLY         Engine Oil - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.86           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         19.013           CALAVERAS AUTO SUPPLY         Fan Clutch, Oil, Air Filter - V 134         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         DEF, Fuel Cleaner - V 747         04/14/2022         139779         30.84           CALAVERAS AUTO SUPPLY	BNN, LLC	SASD (Sewer) Mechanics Shop 780 Industrial Way 03/22	04/21/2022	139847	69.86
BURKE, DEBORAH         UB Refund 6807 Mitchell Lane         04/14/2022         139777         3,571.12           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         128.00           BYOUS, DAVID         Safety Boot Reimbursement 2022         04/14/2022         139778         72.00           CALAVERAS AUTO SUPPLY         Engine Oil - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         180.05)           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.86           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         136.98           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         136.98           CALAVERAS AUTO SUPPLY         Fan Clutch, Oil, Air Filter - V 134         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         DEF, Fuel Cleaner - V 747         04/14/2022         139779         369.80           CALAVER	BNN, LLC	SASD (Sewer) Warehouse 780 Industrial Way 03/22	04/21/2022	139847	56.49
BYOUS, DAVID       Safety Boot Reimbursement 2022       04/14/2022       139778       128.00         BYOUS, DAVID       Safety Boot Reimbursement 2022       04/14/2022       139778       72.00         CALAVERAS AUTO SUPPLY       Engine Oil - SA Shop       04/14/2022       139779       1,093.52         CALAVERAS AUTO SUPPLY       Glow Plugs, Socket - V 131       04/14/2022       139779       (80.05)         CALAVERAS AUTO SUPPLY       Glow Plugs Credit - V 131       04/14/2022       139779       (80.05)         CALAVERAS AUTO SUPPLY       Fuel Cleaner - V 747       04/14/2022       139779       12.86         CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       190.13         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       18.81         CALAVERAS AUTO SUPPLY       Rear Brakes Pilugs, Wire Kir, Filters - V 142       04/14/2022       139779       18.81         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779	BNN, LLC	Mechanics Building A & B Industrial Way 05/22	04/21/2022	139847	1,080.00
BYOUS, DAVID       Safety Boot Reimbursement 2022       04/14/2022       139778       72.00         CALAVERAS AUTO SUPPLY       Engine Oil - SA Shop       04/14/2022       139779       1,093.52         CALAVERAS AUTO SUPPLY       Glow Plugs, Socket - V 131       04/14/2022       139779       87.52         CALAVERAS AUTO SUPPLY       Glow Plugs Credit - V 131       04/14/2022       139779       (80.05)         CALAVERAS AUTO SUPPLY       Fuel Cleaner - V 747       04/14/2022       139779       12.86         CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       18.81         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/1	BURKE, DEBORAH	UB Refund 6807 Mitchell Lane	04/14/2022	139777	3,571.12
CALAVERAS AUTO SUPPLY         Engine Oil - SA Shop         04/14/2022         139779         1,093.52           CALAVERAS AUTO SUPPLY         Glow Plugs, Socket - V 131         04/14/2022         139779         87.52           CALAVERAS AUTO SUPPLY         Glow Plugs Credit - V 131         04/14/2022         139779         (80.05)           CALAVERAS AUTO SUPPLY         Fuel Cleaner - V 747         04/14/2022         139779         12.86           CALAVERAS AUTO SUPPLY         Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         Fan Clutch, Oil, Air Filter - V 134         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         DEF, Fuel Cleaner - V 747         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         DEF, Fuel Cleaner - V 747         04/14/2022         139779         369.80           CALAVERAS AUTO SUPPLY         Spark Plugs, Wire Kit, Filters - V 142         04/14/2022         139779         118.81           CALAVERAS AUTO SUPPLY         Rear Brakes - V 723         04/14/2022         139779         308.84           CALAVERAS AUTO SUPPLY         Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi         04/14/2022         139779         557.66	BYOUS, DAVID	Safety Boot Reimbursement 2022	04/14/2022	139778	128.00
CALAVERAS AUTO SUPPLY       Glow Plugs, Socket - V 131       04/14/2022       139779       87.52         CALAVERAS AUTO SUPPLY       Glow Plugs Credit - V 131       04/14/2022       139779       (80.05)         CALAVERAS AUTO SUPPLY       Fuel Cleaner - V 747       04/14/2022       139779       12.86         CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       190.13         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       60.03         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Gi Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       20.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022	BYOUS, DAVID	Safety Boot Reimbursement 2022	04/14/2022	139778	72.00
CALAVERAS AUTO SUPPLY       Glow Plugs Credit - V 131       04/14/2022       139779       (80.05)         CALAVERAS AUTO SUPPLY       Fuel Cleaner - V 747       04/14/2022       139779       12.86         CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       190.13         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       60.03         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       282.89         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/1	CALAVERAS AUTO SUPPLY	Engine Oil - SA Shop	04/14/2022	139779	1,093.52
CALAVERAS AUTO SUPPLY       Fuel Cleaner - V 747       04/14/2022       139779       12.86         CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       190.13         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       60.03         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528 <t< td=""><td>CALAVERAS AUTO SUPPLY</td><td>Glow Plugs, Socket - V 131</td><td>04/14/2022</td><td>139779</td><td>87.52</td></t<>	CALAVERAS AUTO SUPPLY	Glow Plugs, Socket - V 131	04/14/2022	139779	87.52
CALAVERAS AUTO SUPPLY       Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121       04/14/2022       139779       190.13         CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       60.03         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       282.89         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       30.102         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/	CALAVERAS AUTO SUPPLY	Glow Plugs Credit - V 131	04/14/2022	139779	(80.05)
CALAVERAS AUTO SUPPLY       Fan Clutch, Oil, Air Filter - V 134       04/14/2022       139779       369.80         CALAVERAS AUTO SUPPLY       DEF, Fuel Cleaner - V 747       04/14/2022       139779       60.03         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Gil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       132.12         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139	CALAVERAS AUTO SUPPLY	Fuel Cleaner - V 747	04/14/2022	139779	12.86
CALAVERAS AUTO SUPPLY         DEF, Fuel Cleaner - V 747         04/14/2022         139779         60.03           CALAVERAS AUTO SUPPLY         Spark Plugs, Wire Kit, Filters - V 142         04/14/2022         139779         118.81           CALAVERAS AUTO SUPPLY         Rear Brakes - V 723         04/14/2022         139779         308.84           CALAVERAS AUTO SUPPLY         Rear Brakes, Rotars, Seals - V 723         04/14/2022         139779         282.89           CALAVERAS AUTO SUPPLY         Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi         04/14/2022         139779         557.66           CALAVERAS AUTO SUPPLY         Oil Filter - V 538         04/14/2022         139779         30.80           CALAVERAS AUTO SUPPLY         Water Pump, Coolant - V 134         04/14/2022         139779         201.02           CALAVERAS AUTO SUPPLY         Spark Plugs, Wire Kit - V 613         04/14/2022         139779         85.39           CALAVERAS AUTO SUPPLY         Filters, Spark Plugs, Oil - V 528         04/14/2022         139779         200.34           CALAVERAS AUTO SUPPLY         ATF - V 131         04/14/2022         139779         122.14           CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Battery, Antifreeze, Wiper Blades, Armorall, Wiper Fluid - V 121	04/14/2022	139779	190.13
CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit, Filters - V 142       04/14/2022       139779       118.81         CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       282.89         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       122.14         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139779       132.12	CALAVERAS AUTO SUPPLY	Fan Clutch, Oil, Air Filter - V 134	04/14/2022	139779	369.80
CALAVERAS AUTO SUPPLY       Rear Brakes - V 723       04/14/2022       139779       308.84         CALAVERAS AUTO SUPPLY       Rear Brakes, Rotars, Seals - V 723       04/14/2022       139779       282.89         CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       122.14         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139779       132.12	CALAVERAS AUTO SUPPLY	DEF, Fuel Cleaner - V 747	04/14/2022	139779	60.03
CALAVERAS AUTO SUPPLY         Rear Brakes, Rotars, Seals - V 723         04/14/2022         139779         282.89           CALAVERAS AUTO SUPPLY         Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi         04/14/2022         139779         557.66           CALAVERAS AUTO SUPPLY         Oil Filter - V 538         04/14/2022         139779         30.80           CALAVERAS AUTO SUPPLY         Water Pump, Coolant - V 134         04/14/2022         139779         201.02           CALAVERAS AUTO SUPPLY         Spark Plugs, Wire Kit - V 613         04/14/2022         139779         85.39           CALAVERAS AUTO SUPPLY         Filters, Spark Plugs, Oil - V 528         04/14/2022         139779         200.34           CALAVERAS AUTO SUPPLY         ATF - V 131         04/14/2022         139779         122.14           CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Spark Plugs, Wire Kit, Filters - V 142	04/14/2022	139779	118.81
CALAVERAS AUTO SUPPLY       Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi       04/14/2022       139779       557.66         CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       122.14         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139779       132.12	CALAVERAS AUTO SUPPLY	Rear Brakes - V 723	04/14/2022	139779	308.84
CALAVERAS AUTO SUPPLY       Oil Filter - V 538       04/14/2022       139779       30.80         CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       122.14         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139779       132.12	CALAVERAS AUTO SUPPLY	Rear Brakes, Rotars, Seals - V 723	04/14/2022	139779	282.89
CALAVERAS AUTO SUPPLY       Water Pump, Coolant - V 134       04/14/2022       139779       201.02         CALAVERAS AUTO SUPPLY       Spark Plugs, Wire Kit - V 613       04/14/2022       139779       85.39         CALAVERAS AUTO SUPPLY       Filters, Spark Plugs, Oil - V 528       04/14/2022       139779       200.34         CALAVERAS AUTO SUPPLY       ATF - V 131       04/14/2022       139779       122.14         CALAVERAS AUTO SUPPLY       Thermostat, Glow Plugs, Oil Filter - V 131       04/14/2022       139779       132.12	CALAVERAS AUTO SUPPLY	Gasket, Spark Plugs, Rotors, Filters, Fan Clutch, Brake Pads, Oi	04/14/2022	139779	557.66
CALAVERAS AUTO SUPPLY         Spark Plugs, Wire Kit - V 613         04/14/2022         139779         85.39           CALAVERAS AUTO SUPPLY         Filters, Spark Plugs, Oil - V 528         04/14/2022         139779         200.34           CALAVERAS AUTO SUPPLY         ATF - V 131         04/14/2022         139779         122.14           CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Oil Filter - V 538	04/14/2022	139779	30.80
CALAVERAS AUTO SUPPLY         Filters, Spark Plugs, Oil - V 528         04/14/2022         139779         200.34           CALAVERAS AUTO SUPPLY         ATF - V 131         04/14/2022         139779         122.14           CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Water Pump, Coolant - V 134	04/14/2022	139779	201.02
CALAVERAS AUTO SUPPLY         ATF - V 131         04/14/2022         139779         122.14           CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Spark Plugs, Wire Kit - V 613	04/14/2022	139779	85.39
CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	Filters, Spark Plugs, Oil - V 528	04/14/2022	139779	200.34
CALAVERAS AUTO SUPPLY         Thermostat, Glow Plugs, Oil Filter - V 131         04/14/2022         139779         132.12	CALAVERAS AUTO SUPPLY	ATF - V 131	04/14/2022	139779	122.14
CALAVERAS AUTO SUPPLY Filters, Spark Plugs - V 528 04/14/2022 139779 106.78	CALAVERAS AUTO SUPPLY	Thermostat, Glow Plugs, Oil Filter - V 131			132.12
	CALAVERAS AUTO SUPPLY	Filters, Spark Plugs - V 528	04/14/2022	139779	106.78

Vendor	Description	Date	Ref	Amount
CALAVERAS AUTO SUPPLY	DEF, Funnel - SA Shop	04/14/2022	139779	104.04
CALAVERAS AUTO SUPPLY	Filters, Engine Treatments - V 614	04/14/2022	139779	325.30
CALAVERAS AUTO SUPPLY	Elbow Kit - V 614	04/14/2022	139779	23.43
CALAVERAS COUNTY	Preliminary Encroachment Permit for Flume Court for Redwood Tank	04/14/2022	139780	3,000.00
CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Responde/CUPA Mechanic Shop AR0002152	04/14/2022	139781	205.44
CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Responde/CUPA Mechanic Shop AR0002152	04/14/2022	139781	115.56
CALAVERAS FIRST COMPANY INC	Recruiting - Collections Worker	04/29/2022	139883	103.68
CALAVERAS LUMBER CO INC	Finance Charge	04/14/2022	139782	19.30
CALAVERAS LUMBER CO INC	Lumber, Fittings, Screws, Bits - Construction Crew	04/14/2022	139782	1,128.23
CALAVERAS LUMBER CO INC	Materials & Supplies - EP WW Plants	04/14/2022	139782	237.71
CALAVERAS LUMBER CO INC	Leak Repair Supplies - AWWTP Spray Fields	04/14/2022	139782	128.31
CALDWELL, STEVE	UB Refund 740 Roan Way	04/29/2022	139884	133.15
CALIFORNIA RURAL WATER ASSOC	CRWA Conference 2022 for Pat B, Kelly G, and Jason K.	04/14/2022	139783	1,725.00
CALIFORNIA RURAL WATER ASSOC	CRWA Conference 2022 for Jared G.	04/14/2022	139783	575.00
CALIFORNIA WELDING SUPPLY CO	Welding Gloves - SA Shop	04/29/2022	139885	28.12
CALPELRA	CALPELRA Online Education - Howarth	04/21/2022	139848	310.25
CALPELRA	CALPELRA Online Education - Howarth	04/21/2022	139848	114.75
CALPERS - RETIREMENT	Retirement 03/31/2022 PR	04/15/2022	EFT	35,006.96
CALPERS - RETIREMENT	Retirement 04/15/2022 Payroll	04/15/2022	EFT	35,555.05
CALPERS - RETIREMENT	Retirement 03/31/2022 PR	04/15/2022	EFT	12,947.78
CALPERS - RETIREMENT	Retirement 04/15/2022 Payroll	04/15/2022	EFT	13,150.50
CALPERS (Def Comp)	Def Comp Loan Repay 03/31/2022 PR	04/15/2022	EFT	1,035.80
CALPERS (Def Comp)	Def Comp Loan Repay 04/15/2022 Payroll	04/15/2022	EFT	1,035.80
CALPERS (Def Comp)	Def Comp 03/31/2022 PR	04/15/2022	EFT	2,737.47
CALPERS (Def Comp)	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	2,909.44
CALPERS (Def Comp)	Def Comp Loan Repay 03/31/2022 PR	04/15/2022	EFT	383.11
CALPERS (Def Comp)	Def Comp Loan Repay 04/15/2022 Payroll	04/15/2022	EFT	383.11
CALPERS (Def Comp)	Def Comp 03/31/2022 PR	04/15/2022	EFT	2,193.84
CALPERS (Def Comp)	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	1,850.35
CALPERS (Health Ins)	Health Insurance Employees 04/2022	04/15/2022	EFT	106,597.43
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	157.79
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	20.84
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	28.44
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	34.20
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	6.32
CALPERS (Health Ins)	Health Insurance Employees 04/2022	04/15/2022	EFT	39,426.44
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	82.63
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	7.71

/endor	Description	Date	Ref	Amount
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	12.14
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	12.65
CALPERS (Health Ins)	Health Insurance Admin Fee 04/2022	04/15/2022	EFT	2.34
CANEPA, CRAIG	Safety Boot Reimbursement 2022	04/29/2022	139886	128.00
CANEPA, CRAIG	Safety Boot Reimbursement 2022	04/29/2022	139886	72.00
CAPITAL RUBBER & GASKET INC.	Gaskets - Utility Crew	04/14/2022	139785	84.32
CARBON COPY INC	Copies, Copier Toner 04/22	04/14/2022	139786	101.52
CARBON COPY INC	Copies, Copier Toner 04/22	04/14/2022	139786	113.53
CARBON COPY INC	Copies, Copier Toner 04/22	04/14/2022	139786	41.98
CARBON COPY INC	Copies, Copier Toner 04/22	04/14/2022	139786	37.54
CDK SUPPLY	Electrical Parts - OP HQ	04/14/2022	139787	116.98
CDK SUPPLY	Lugs, Cable Ties - Hunters WTP	04/14/2022	139787	64.68
CHECK PROCESSING INC	Lockbox Porcessing 03/22	04/14/2022	139788	651.93
CHECK PROCESSING INC	Lockbox Porcessing 10/21	04/14/2022	139788	476.07
CHECK PROCESSING INC	Lockbox Porcessing 02/22	04/14/2022	139788	626.86
CHECK PROCESSING INC	Lockbox Porcessing 11/21	04/14/2022	139788	623.13
CHECK PROCESSING INC	Lockbox Porcessing 09/21	04/14/2022	139788	661.75
CHECK PROCESSING INC	Lockbox Porcessing 10/21	04/14/2022	139788	176.08
CHECK PROCESSING INC	Lockbox Porcessing 09/21	04/14/2022	139788	244.75
CHECK PROCESSING INC	Lockbox Porcessing 11/21	04/14/2022	139788	230.47
CHECK PROCESSING INC	Lockbox Porcessing 02/22	04/14/2022	139788	231.84
CHECK PROCESSING INC	Lockbox Porcessing 03/22	04/14/2022	139788	241.12
CITY OF ANGELS	Sewer Six Mile Village 03/22	04/14/2022	139789	3,664.14
CLARK PEST CONTROL	Pest Control Hunter Dam #1505308	04/14/2022	139790	100.00
CLARK PEST CONTROL	Pest Control JLWTP #807549	04/14/2022	139790	66.00
CLARK PEST CONTROL	Pest Control La Contenta Warehouse #807402	04/14/2022	139790	68.00
CLARK PEST CONTROL	Pest Control Copper Cove #730179	04/14/2022	139790	61.44
CLARK PEST CONTROL	Pest Control La Contenta #807360	04/14/2022	139790	87.00
CLARK PEST CONTROL	Pest Control Wallace #2120969	04/14/2022	139790	127.00
CLARK PEST CONTROL	Pest Control Copper Cove #730179	04/14/2022	139790	34.56
CLARK PEST CONTROL	Pest Control 1505308 Hunter Dam	04/21/2022	139850	100.00
CLARK PEST CONTROL	Pest Control OP HQ Acct#9328727	04/29/2022	139887	94.90
CLARK PEST CONTROL	Pest Control Copper Cove #730179	04/29/2022	139887	61.44
CLARK PEST CONTROL	Pest Control OP HQ Acct#9328727	04/29/2022	139887	35.10
CLARK PEST CONTROL	Pest Control Copper Cove #730179	04/29/2022	139887	34.56
COLUMBIA COMMUNICATIONS	Vehicle Cloud Service 04/22	04/14/2022	139791	499.20
COLUMBIA COMMUNICATIONS	Vehicle Cloud Service 04/22	04/14/2022		280.80
COLUMBIA COMMUNICATIONS	Voice Radio Install Parts - Vehicles	04/29/2022	139888	1,446.59

Vendor	Description	Date	Ref	Amount
COLUMBIA COMMUNICATIONS	Voice Radio Install Parts - Vehicles	04/29/2022	139888	813.70
CONDOR EARTH TECHNOLOGIES INC	Materials Testing /Special Inspections - Redwood Tanks	04/14/2022	139792	101.25
CONDOR EARTH TECHNOLOGIES INC	Groundwater Monitoring - District Wide	04/21/2022	139851	3,409.50
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139794	170.05
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139775	911.84
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139793	448.86
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139825	170.05
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139806	170.05
CONFIDENTIAL	Retiree Dental 05/22	04/14/2022	139773	759.27
CONFIDENTIAL	Retiree Vision 05/22	04/14/2022	139773	235.53
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139794	62.89
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139775	337.25
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139793	166.02
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139825	62.89
CONFIDENTIAL	Retiree Medical Reimbursement 04/22	04/14/2022	139806	62.89
CONFIDENTIAL	Health Insurance Admin Fee Retirees 04/2022	04/15/2022	EFT	103.62
CONFIDENTIAL	Health Insurance Retirees 04/2022	04/15/2022	EFT	6,526.20
CONFIDENTIAL	Health Insurance Admin Fee Retirees 04/2022	04/15/2022	EFT	38.32
CONFIDENTIAL	Health Insurance Retirees 04/2022	04/15/2022	EFT	2,413.80
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139853	170.05
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139845	911.84
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139852	448.86
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139869	170.05
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139856	170.05
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139853	62.89
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139845	337.25
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139852	166.02
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139869	62.89
CONFIDENTIAL	Retiree Medical Reimbursement 05/22	04/21/2022	139856	62.89
СРРА	Power OP HQ 03/22	04/14/2022	139795	444.43
СРРА	Power District Wide 03/22	04/14/2022	139795	45,621.14
СРРА	Power OP HQ 03/22	04/14/2022	139795	164.37
СРРА	Power District Wide 03/22	04/14/2022		25,661.88
CPUD	92.1987 Acre Feet Water Purchased Middle Fork	04/14/2022		5,070.93
CPUD	Water Service OP HQ 03/22	04/30/2022	EFT	248.38
CPUD	Water Service OP HQ Corp 03/22	04/30/2022	EFT	63.65
CPUD	Water Service OP HQ 03/22	04/30/2022	EFT	91.86
CPUD	Water Service OP HQ Corp 03/22	04/30/2022	EFT	35.80

Vendor	Description	Date	Ref	Amount
CWEA	CWEA Membership Renewal - Burkhardt	04/14/2022	139797	122.88
CWEA	CWEA Membership Renewal - Burkhardt	04/14/2022	139797	69.12
CWEA	CSM Cert Application - Byous	04/29/2022	139889	372.00
DATAPROSE	UB Statement Procesisng	04/14/2022	139798	6,227.79
DATAPROSE	UB Statement Procesisng	04/14/2022	139798	2,303.43
DAVIDSON, JEFF	Travel 04/22	04/29/2022	139890	11.96
DAVIDSON, JEFF	Travel 04/22	04/29/2022	139890	4.42
DE LAGE LANDEN FINANCIAL SRVC INC	Copier Lease 03/22	04/30/2022	EFT	188.61
DE LAGE LANDEN FINANCIAL SRVC INC	Copier Lease 03/22	04/30/2022	EFT	106.10
DEVICH, JARED	Safety Boot Reimbursement 2022	04/29/2022	139891	113.25
DEVICH, JARED	Safety Boot Reimbursement 2022	04/29/2022	139891	63.70
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00043 12/21	04/21/2022	139854	11,501.88
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00043 12/21	04/21/2022	139854	4,254.12
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00000 03/22	04/29/2022	139892	1,538.84
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00003 03/22	04/29/2022	139892	2,531.28
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00042 03/22	04/29/2022	139892	1,197.20
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00003 03/22	04/29/2022	139892	936.22
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00000 03/22	04/29/2022	139892	569.16
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00042 03/22	04/29/2022	139892	442.80
DUNCAN, MATHEW	DMV Tanker Endrsement Test Reimbursement	04/29/2022	139893	65.48
DUNCAN, MATHEW	DMV Tanker Endrsement Test Reimbursement	04/29/2022	139893	36.82
EBBETTS PASS GAS SERVICE	Fuel 03/22	04/29/2022	139894	2,570.65
EBBETTS PASS GAS SERVICE	Fuel 03/22	04/29/2022	139894	1,445.99
EBBETTS PASS LUMBER	Concrete Tools - Construction Crew	04/14/2022	139799	95.57
EDGES ELECTRICAL GROUP, LLC	Credit Pull Boxes for District Corp Yard (CIP 11101)	04/29/2022	139895	(530.24)
EDGES ELECTRICAL GROUP, LLC	Pull Boxes for District Corp Yard (CIP 11101)	04/29/2022	139895	643.53
EDGES ELECTRICAL GROUP, LLC	Service Charge	04/29/2022	139895	5.00
EMPLOYMENT DEVELOPMENT DEPT	Acct# ID#932-0252-01 Unemployment Claim	04/14/2022	139800	2,983.37
EMPLOYMENT DEVELOPMENT DEPT	Acct# ID#932-0252-01 Unemployment Claim	04/14/2022	139800	1,103.43
ENVIRONMENTAL OPERATING SOLUTIONS	MicroC - DF VCTO	04/29/2022	139896	6,349.20
FASTENAL	Materials/Supplies - Slurry Line Project	04/14/2022	139801	194.52
FEDERAL ENERGY REGULATORY COMM	FERC Use of Government Lands	04/07/2022	EFT	12,259.96
FEDERAL ENERGY REGULATORY COMM	FERC Use of Government Lands	04/07/2022	EFT	36,779.88
FEDERAL ENERGY REGULATORY COMM	FERC Use of Government Lands	04/07/2022	EFT	4,534.51
FEDERAL ENERGY REGULATORY COMM	FERC Use of Government Lands	04/07/2022	EFT	13,603.52
FEDERAL EXPRESS	Acct#119229243 Shipping Wek End 03/23/22	04/14/2022	139802	219.20
FEDERAL EXPRESS	Acct#119229243 Shipping Wek End 03/23/22	04/14/2022	139802	81.07
FEDERAL EXPRESS	Acct#119229243 Shipping Week End 04/11/2022	04/29/2022	139897	12.25

Vendor	Description	Date	Ref	Amount
FEDERAL EXPRESS	Acct#119229243 Shipping Week End 04/11/2022	04/29/2022	139897	4.52
FGL ENVIRONMENTAL	Water Testing 03/01 - 03/22	04/29/2022	139898	8,414.00
FGL ENVIRONMENTAL	Water Testing 03/23 - 04/20	04/29/2022	139898	4,751.00
FGL ENVIRONMENTAL	Waste Water Testing 03/01 - 03/22	04/29/2022	139898	4,734.00
FGL ENVIRONMENTAL	Waste Water Testing 03/23 - 04/20	04/29/2022	139898	2,673.00
FINANCIAL PACIFIC LEASING	VacCon Loan Interest Payment 04/22	04/30/2022	EFT	1,738.28
FINANCIAL PACIFIC LEASING	VacCon Loan Payment 04/22	04/30/2022	EFT	18,091.21
FINANCIAL PACIFIC LEASING	VacCon Loan Interest Payment 04/22	04/30/2022	EFT	977.78
FINANCIAL PACIFIC LEASING	VacCon Loan Payment 04/22	04/30/2022	EFT	10,176.30
FOOTHILL MATERIALS	Base Rock - Utility Crew Crosel Court	04/14/2022	139803	371.62
FOOTHILL MATERIALS	Base Rock - Utility Crew Crosel Court	04/14/2022	139803	562.92
FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 03/29/22 - 04/25/22 SR	04/29/2022	139899	124.50
FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 03/29/22 - 04/25/22 Wallace	04/29/2022	139899	124.50
FOOTHILL PRINTING & GRAPHICS	PO Forms - District Use	04/21/2022	139855	719.65
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Silver Rapids) Jenny Lind	04/14/2022	139804	430.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Mesquite) Copperopolis	04/14/2022	139804	184.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Shoreline) Copperopolis	04/14/2022	139804	70.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Arrowhead) Copper	04/14/2022	139804	128.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Little John) Copper	04/14/2022	139804	1,440.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Charles Street) West Point	04/14/2022	139804	177.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Forest Meadow Drive) FM	04/14/2022	139804	960.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control (Pond) Wilseyville	04/14/2022	139804	630.00
FOOTHILL SIERRA PEST CONTROL	Pest/Weed Control WPWWTP	04/14/2022	139804	2,122.00
GAMBI DISPOSAL INC.	Bio-Solids Removal - March 2022	04/14/2022	139805	4,121.25
GATEWAY PRESS, INC	Decals - Fleet	04/29/2022	139900	21.45
GENERAL SUPPLY COMPANY	Tools - Electrical Crew	04/14/2022	139807	422.37
GENERAL SUPPLY COMPANY	SCH 40 Conduit and Elbows for Sheep Ranch Tank Project	04/21/2022	139857	3,608.78
GLOBAL PAY	Merchant Service 7167 03/22	04/30/2022	EFT	1,206.33
GLOBAL PAY	Merchant Service 24728 03/22	04/30/2022	EFT	7,589.76
GLOBAL PAY	Merchant Service 24728 03/22	04/30/2022	EFT	2,807.17
GLOBAL PAY	Merchant Service 7167 03/22	04/30/2022	EFT	446.18
GOLD ELECTRIC	Installation of Solar Panels at Flume Ct Tank for AMI/AMR Projec	04/14/2022	139808	1,506.57
GRAINGER	Fittings, Pressure Gauges - Slurry Line	04/14/2022	139809	114.02
GRAINGER	Fittings - Slurry Line	04/14/2022	139809	96.99
GRAINGER	Tube Bender - SA Shop	04/14/2022	139809	248.97
GRAINGER	FMCSR Handbooks - District Wide	04/21/2022	139858	141.57
GS 03 SERVICES, LLC	UV Lamp - CCWTP	04/14/2022	139810	453.00
HABITAT FOR HUMANITY	Warehouse Rent 05/22	04/21/2022	139859	1,664.00

Vendor	Description	Date	Ref	Amount
HABITAT FOR HUMANITY	Warehouse Rent 05/22	04/21/2022	139859	936.00
HACH COMPANY	Membranes - CCWTP	04/29/2022	139901	169.37
HACH COMPANY	Ice-Pic Calibration - CC	04/29/2022	139901	377.51
HAUSE, CHRISTOPHER & PAMELA	UB Refund 7204 Ospital Road	04/14/2022	139811	1,044.42
HILLTOP SECURTIES INC	Finance Department Assitance 03/22	04/21/2022	139860	19,884.68
HILLTOP SECURTIES INC	Finance Department Assitance 03/22	04/21/2022	139860	7,354.60
HOBGOODS CLEANING	Janitorial Service OP HQ 04/22	04/21/2022	139861	1,412.55
HOBGOODS CLEANING	Janitorial Service JLTC 04/22	04/21/2022	139861	18.00
HOBGOODS CLEANING	Janitorial Service OP HQ 04/22	04/21/2022	139861	522.45
HOBGOODS CLEANING	Janitorial Service JLTC 04/22	04/21/2022	139861	32.00
HOLT OF CALIFORNIA	Dump Truck - Utility Crew	04/21/2022	139862	16,839.68
HOLT OF CALIFORNIA	Dump Truck - Utility Crew	04/21/2022	139862	16,839.68
HOLT OF CALIFORNIA	Dump Truck - Utility Crew	04/21/2022	139862	9,472.52
HOLT OF CALIFORNIA	Dump Truck - Utility Crew	04/21/2022	139862	9,472.52
HOLT, JIM	Dozer and Excavator Rental for Collections System Improvements (	04/29/2022	139902	4,068.39
HUNT & SONS, INC	Fuel - JL	04/14/2022	139812	3,053.77
HUNT & SONS, INC	Fuel - JL	04/29/2022	139903	2,537.45
HUNT & SONS, INC	Fuel - CC	04/29/2022	139903	1,197.13
HYDROSCIENCE ENGINEERS INC	Engineering and Design Services for the Arnold Wastewater Treatm	04/21/2022	139863	45,160.00
INDUSTRIAL ELECTRICAL CO	Effluent Pump Motor Rebuild - Hunters WTP	04/14/2022	139813	12,943.15
JELIGHT COMPANY, INC	UV Lamps - JLWTP	04/29/2022	139904	347.50
JS WEST PROPANE GAS	Propane - JLTC	04/29/2022	139905	173.01
JS WEST PROPANE GAS	Propane - JLTC	04/29/2022	139905	97.31
KANNAL, SCOTT & KELLY	UB Refund 8415 Hautly Lane	04/29/2022	139906	122.14
MARK LOWE	Welding Service - Slurry Line	04/29/2022	139907	1,200.00
MIRAMONT HOMES INC	UB Refund 316 Mesquite Drive	04/29/2022	139908	608.34
MIRAMONT HOMES INC	UB Refund 330 Mesquite Drive	04/29/2022	139908	608.34
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	719.05
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	777.45
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	116.80
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	116.80
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	120.45
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	120.45
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	215.35
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	10.95
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	215.35
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	10.95
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	265.95

Vendor	Description	Date	Ref	Amount
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	287.55
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	43.20
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	43.20
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	44.55
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	44.55
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	79.65
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	79.65
Mission Square	RHI 04/15/2022 Payroll	04/15/2022	EFT	4.05
Mission Square	RHI 03/31/2022 Payroll	04/15/2022	EFT	4.05
MODESTO AIRCO GAS & GEAR	Cylinder Rental 04/22	04/14/2022	139814	58.24
MODESTO AIRCO GAS & GEAR	Cylinder Rental 04/22	04/14/2022	139814	32.76
MOTHER LODE ANSWERING SERVICE	Answering Service 04/22	04/29/2022	139909	529.25
MOTHER LODE ANSWERING SERVICE	Answering Service 04/22	04/29/2022	139909	195.75
MOUNTAIN OASIS PURIFIED WATER	Water Cooler & Supplies 03/22	04/14/2022	139815	132.13
MOUNTAIN OASIS PURIFIED WATER	Water Cooler & Supplies 03/22	04/14/2022	139815	74.32
MUNICIPAL CODE CORP	Proof Fee	04/21/2022	139864	2,518.50
MUNICIPAL CODE CORP	Proof Fee	04/21/2022	139864	931.50
MUNICIPAL MAINTENANCE EQUIP	Control Valve - V 126	04/14/2022	139816	608.82
MUTUAL OF OMAHA	Life, AD&D Acct#G000AWXB 04/22	04/29/2022	139910	4,801.05
MUTUAL OF OMAHA	Life, AD&D Acct#G000AWXB 05/22	04/29/2022	139910	4,947.35
MUTUAL OF OMAHA	Life, AD&D Acct#G000AWXB 05/22	04/29/2022	139910	1,829.84
MUTUAL OF OMAHA	Life, AD&D Acct#G000AWXB 04/22	04/29/2022	139910	1,775.72
NEW YORK LIFE	Life Insurance 03/22	04/21/2022	139865	606.50
NEW YORK LIFE	Life Insurance 03/22	04/21/2022	139865	224.32
NTU TECHNOLOGIES INC	Protek 301 - JLWTP	04/29/2022	139911	4,152.75
NTU TECHNOLOGIES INC	Protek 301 - CCWTP	04/29/2022	139911	5,827.50
OCCU-MED, LTD	Pre Employment Screening	04/29/2022	139912	1,042.08
OCCU-MED, LTD	Pre Employment Screening	04/29/2022	139912	385.42
O'CONNELL, JIM & KAREN	UB Refund 4871 Bay View Drive	04/29/2022	139913	670.89
O'REILLY AUTO PARTS	Wiper Blades, License Plate Frame - V 551	04/14/2022	139817	42.11
O'REILLY AUTO PARTS	Spark Plugs, Socket - V 130	04/14/2022	139817	34.24
O'REILLY AUTO PARTS	Wiper Blades - V 735	04/14/2022	139817	25.11
O'REILLY AUTO PARTS	DEF - V 723	04/14/2022		18.22
PG&E	Power OP HQ 03/22	04/30/2022	EFT	180.36
PG&E	Power District Wide 03/22	04/30/2022	EFT	2,039.93
PG&E	Power CC Water Tank 03/22	04/30/2022	EFT	23.17
PG&E	Power JLTC 03/22	04/30/2022	EFT	84.24
PG&E	Power SA Whse 03/22	04/30/2022	EFT	117.33

Vendor	Description	Date	Ref	Amount
PG&E	Power SA Shop 03/22	04/30/2022	EFT	306.55
PG&E	Power VS House 03/22	04/30/2022	EFT	22.35
PG&E	Power OP HQ 03/22	04/30/2022	EFT	66.71
PG&E	Power District Wide 03/22	04/30/2022	EFT	1,147.46
PG&E	Power JLTC 03/22	04/30/2022	EFT	47.39
PG&E	Power Wallace Spray Fields 03/22	04/30/2022	EFT	29.35
PG&E	Power Warmwood LS 03/22	04/30/2022	EFT	14.17
PG&E	Power Woodgate LS 03/22	04/30/2022	EFT	26.10
PG&E	Power SA Whse 03/22	04/30/2022	EFT	43.39
PG&E	Power SA Shop 03/22	04/30/2022	EFT	172.44
PG&E	Power VS House 03/22	04/30/2022	EFT	12.57
PAC MACHINE CO INC.	ARV Rebuild Kits - LS 22	04/14/2022	139818	2,411.59
PAC MACHINE CO INC.	Pump - FMWWTP	04/21/2022	139866	2,564.50
PACE SUPPLY CORP	Ball Valves and Couplings for Utility Crew (CIP 10083)	04/14/2022	139819	3,828.29
PACE SUPPLY CORP	Ball Valves and Couplings for Utility Crew (CIP 10083)	04/14/2022	139819	2,231.34
PACE SUPPLY CORP	Repair Couplings - District Use	04/14/2022	139819	618.66
PACE SUPPLY CORP	Saddles and Pipe Lube for Utility Crew (CIP 10083)	04/21/2022	139867	2,100.92
PACE SUPPLY CORP	Fittings - District Use	04/21/2022	139867	224.81
PACE SUPPLY CORP	Couplings - District Use	04/21/2022	139867	618.66
PACE SUPPLY CORP	Hydrant Break Kits - EP Barn	04/21/2022	139867	390.65
PACE SUPPLY CORP	Bolt Kits - Sheep Ranch Tank	04/29/2022	139914	288.97
PACE SUPPLY CORP	Temp Tanks for EP Redwood Tanks Project (CIP 11095)	04/29/2022	139914	9,550.37
PACE SUPPLY CORP	Meter Parts - AMR/AMI 10096	04/29/2022	139914	992.49
PACE SUPPLY CORP	Fittings - District Wide	04/29/2022	139914	1,131.74
PACE SUPPLY CORP	Fittings - LC Whse	04/29/2022	139914	2,708.06
PACE SUPPLY CORP	Service Charge	04/29/2022	139914	5.61
PETERSON BRUSTAD INC	Engineering and Design Services for the West Point Water Supply	04/21/2022	139868	30,472.50
POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	04/29/2022	139915	417.83
POTRERO HILLS LANDFILL	Bio-Solids Disposal - FMWWTP	04/29/2022	139915	532.70
POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	04/29/2022	139915	475.02
POTRERO HILLS LANDFILL	Bio-Solids Disposal - AWWTP	04/29/2022	139915	472.51
POWERPLAN	Fuel Pump, Gasket - P-30	04/14/2022	139820	256.86
QUADIENT FINANCE INC	Postage 03/22	04/30/2022	EFT	640.00
QUADIENT FINANCE INC	Postage 03/22	04/30/2022	EFT	360.00
QUADIENT LEASING INC	Mail Equip Lease 2/7-5/6	04/30/2022	EFT	801.16
QUADIENT LEASING INC	Mail Equip Lease 2/7-5/6	04/30/2022	EFT	296.32
RATTERMAN, SCOTT	CSOA Leadership Academy	04/29/2022	139916	675.00
RATTERMAN, SCOTT	Travel 04/22	04/29/2022	139916	69.19

Vendor	Description	Date	Ref	Amount
RATTERMAN, SCOTT	Travel 04/22	04/29/2022	139916	25.58
RAYO PROPERTIES	UB Refund 7912 Baldwin Street	04/29/2022	139917	174.14
ROBERTS, JENNIFER	UB Refund 3305 Botfuher Road	04/29/2022	139918	191.23
ROLAND, JENNIFER DUTTON	UB Refund 1705 Second Street	04/29/2022	139919	65.21
RYAN GLEASON WYDNER	Road Base - LC Whse	04/14/2022	139837	5,030.86
SAFE T LITE	Locating Paint - District Use	04/14/2022	139821	367.63
SANFILIPPO, DENNIS	UB Refund 313 Deer Field Circle	04/14/2022	139822	1,092.42
SCHICK, JOHN	UB Refund 4901 Wylderidge Drive	04/29/2022	139920	96.21
SECADA, CINDY	Travel 04/22	04/29/2022	139921	49.59
SECADA, CINDY	Travel 04/22	04/29/2022	139921	18.33
SEIU LOCAL 1021	COPE Donation 03/22	04/14/2022	139823	29.20
SEIU LOCAL 1021	Union Dues 03/22	04/14/2022	139823	1,898.00
SEIU LOCAL 1021	Union Dues 03/22	04/14/2022	139823	702.00
SEIU LOCAL 1021	COPE Donation 03/22	04/14/2022	139823	10.80
SENDERS MARKET INC	PRV Parts - Slurry Line	04/14/2022	139824	69.29
SENDERS MARKET INC	Fasteners - Construction Crew	04/14/2022	139824	45.08
SENDERS MARKET INC	Tools - Bucket Truck	04/14/2022	139824	113.51
SENDERS MARKET INC	Screws, Lumber - Collection System Rehab Project	04/14/2022	139824	589.37
SENDERS MARKET INC	Drive Guides, Fittings - JLWTP	04/14/2022	139824	26.00
SENDERS MARKET INC	Cable - LC Whse	04/14/2022	139824	192.09
SENDERS MARKET INC	Chain Coil, Quick Link - JLWTP	04/14/2022	139824	31.18
SENDERS MARKET INC	PRV Parts	04/14/2022	139824	559.81
SENDERS MARKET INC	Push Broom - LC Whse	04/14/2022	139824	71.41
SENDERS MARKET INC	Tubing, Fittings, Primer, Cement - LCWWTP	04/14/2022	139824	64.18
SENDERS MARKET INC	Fittings - LCWWTP	04/14/2022	139824	12.72
SENDERS MARKET INC	Rope - LCWWTP	04/14/2022	139824	113.90
SENDERS MARKET INC	Steel Stakes - LCWWTP	04/14/2022	139824	16.50
SENDERS MARKET INC	Fasteners, Galvanizing Compound - LCWWTP	04/14/2022	139824	82.05
SPRINGBROOK NATIONAL USER GROUP	Professional Services for Migration project	04/29/2022	139922	2,215.13
SPRINGBROOK NATIONAL USER GROUP	Professional Services for Migration project	04/29/2022	139922	2,215.12
STAPLES CREDIT PLAN	Office Supplies - HQ	04/29/2022	139923	226.88
STAPLES CREDIT PLAN	Office Supplies - HQ	04/29/2022	139923	83.91
SUTTON ENTERPRISES	Excavator Rental, Move In and Out, Pilot Car Permits for Collect	04/29/2022	139924	13,980.00
THOMAS, RUSS	Travel 04/22	04/29/2022	139925	79.44
THOMAS, RUSS	Travel 04/22	04/29/2022	139925	29.37
TIFCO INDUSTRIES	Air Hose Reel - SA Shop	04/14/2022	139826	139.43
TIFCO INDUSTRIES	Wrench - SA Shop	04/14/2022	139826	25.69

Vendor	Description	Date Ref	Amount
TURNER, DARRYL	UB Refund 161 Eagle Point Court	04/14/2022 13982	7 329.98
TYLER TECHNOLOGIES, INC.	Financials Scope Meeting	04/14/2022 13982	8 118.63
TYLER TECHNOLOGIES, INC.	Financials Scope Meeting	04/14/2022 13982	8 43.87
U.S. BANK	Pipe Cutter - Utility Crew	04/27/2022 EFT	(53.25)
U.S. BANK	Industrial Construction Vacuum - Utility Crew	04/27/2022 EFT	(86.64)
U.S. BANK	Strapping Tape - District Warehouse	04/27/2022 EFT	11.99
U.S. BANK	Industrial Construction Vacuum - Utility Crew	04/27/2022 EFT	1,281.64
U.S. BANK	Pipe Cutter - Utility Crew	04/27/2022 EFT	787.64
U.S. BANK	Grinder, Sawzall - V747	04/27/2022 EFT	664.82
U.S. BANK	DEF - V747	04/27/2022 EFT	28.00
U.S. BANK	Meals - Crank	04/27/2022 EFT	19.91
U.S. BANK	Cal Tel Leased Lines	04/27/2022 EFT	258.10
U.S. BANK	Cal Tel	04/27/2022 EFT	779.66
U.S. BANK	Comcast	04/27/2022 EFT	437.74
U.S. BANK	AT&T	04/27/2022 EFT	294.42
U.S. BANK	Ring Central	04/27/2022 EFT	858.19
U.S. BANK	Verizon	04/27/2022 EFT	1,790.02
U.S. BANK	Cal .Net	04/27/2022 EFT	37.07
U.S. BANK	Volcano	04/27/2022 EFT	360.82
U.S. BANK	Cal Waste	04/27/2022 EFT	1,067.54
U.S. BANK	Amazon -Supplies - JLWTP	04/27/2022 EFT	22.52
U.S. BANK	Printer	04/27/2022 EFT	350.06
U.S. BANK	Alhambra	04/27/2022 EFT	162.67
U.S. BANK	Velcro, White Board Tape, Glue	04/27/2022 EFT	106.31
U.S. BANK	USA Bluebook - 1/2 HP Sump Pump, 2" Coupler- JLWTP	04/27/2022 EFT	449.96
U.S. BANK	Grainger - Lids, Spray Bottles, Nails, CFE Pump Parts - JLWTP	04/27/2022 EFT	569.05
U.S. BANK	Contactor - Hunters WTP	04/27/2022 EFT	(187.69)
U.S. BANK	Amazon - USB Converters, Phone Battery	04/27/2022 EFT	128.72
U.S. BANK	Amazon - Laptop Power Supply	04/27/2022 EFT	9.55
U.S. BANK	Aramark	04/27/2022 EFT	1,536.93
U.S. BANK	File, Hose - Hunters	04/27/2022 EFT	31.22
U.S. BANK	Septic Treatment Materials - Hunters	04/27/2022 EFT	21.54
U.S. BANK	Underground Crew Encroachment Permit	04/27/2022 EFT	327.20
U.S. BANK	Amazon Business Account - District Use	04/27/2022 EFT	891.64
U.S. BANK	Apple Storage	04/27/2022 EFT	0.99
U.S. BANK	Supplies - Training	04/27/2022 EFT	37.01
U.S. BANK	Distribution Study Materials	04/27/2022 EFT	100.00
U.S. BANK	CA-NV Conference Registration - Cardinal	04/27/2022 EFT	275.00

Vendor	Description	Date Ref	Amount
U.S. BANK	CWEA Renewal E/I 4 - Crumpacker	04/27/2022 EFT	106.00
U.S. BANK	Hunter WTP Tabletop Training Supplies	04/27/2022 EFT	201.49
U.S. BANK	O&M Water Distribution System Study Material - Sage	04/27/2022 EFT	151.90
U.S. BANK	Backflow Prevention Assembly Tester App - Edens	04/27/2022 EFT	285.00
U.S. BANK	After Hours Meal - Mechanics/Electricians	04/27/2022 EFT	63.13
U.S. BANK	Office Supplies	04/27/2022 EFT	1,501.42
U.S. BANK	Supplies	04/27/2022 EFT	104.69
U.S. BANK	Recruitment - DAS Position	04/27/2022 EFT	292.00
U.S. BANK	BOD Supplies	04/27/2022 EFT	22.68
U.S. BANK	Effective Communication and Human Relation Course (Charles)	04/27/2022 EFT	1,602.35
U.S. BANK	Time Lapse Camera	04/27/2022 EFT	471.64
U.S. BANK	Amazon - Computer Supplies	04/27/2022 EFT	3,182.83
U.S. BANK	Microsoft	04/27/2022 EFT	769.91
U.S. BANK	Adobe	04/27/2022 EFT	45.97
U.S. BANK	Computer Lic/Security	04/27/2022 EFT	1,906.06
U.S. BANK	Termination of Service Recording	04/27/2022 EFT	23.00
U.S. BANK	Fencing - LS 3 Arnold	04/27/2022 EFT	(303.05)
U.S. BANK	UPUD	04/27/2022 EFT	201.00
U.S. BANK	Cal Tel	04/27/2022 EFT	438.55
U.S. BANK	Comcast	04/27/2022 EFT	246.22
U.S. BANK	AT&T	04/27/2022 EFT	165.61
U.S. BANK	Cal .Net	04/27/2022 EFT	20.85
U.S. BANK	Volcano	04/27/2022 EFT	202.96
U.S. BANK	Verizon	04/27/2022 EFT	1,006.88
U.S. BANK	Ring Central	04/27/2022 EFT	482.73
U.S. BANK	Cal Waste	04/27/2022 EFT	600.48
U.S. BANK	Velcro, White Board Tape, Glue	04/27/2022 EFT	39.32
U.S. BANK	Alhambra	04/27/2022 EFT	91.49
U.S. BANK	Printer	04/27/2022 EFT	196.90
U.S. BANK	Eye Wash Ball Valves - WPWTP	04/27/2022 EFT	270.36
U.S. BANK	Amazon - Hardware LCWWTP	04/27/2022 EFT	72.40
U.S. BANK	Amazon - Laptop Power Supply	04/27/2022 EFT	5.36
U.S. BANK	Pump Cylinder Repair - LCWWTP	04/27/2022 EFT	262.23
U.S. BANK	Aramark	04/27/2022 EFT	864.51
U.S. BANK	Service Parts - V 712	04/27/2022 EFT	124.34
U.S. BANK	Underground Crew Encroachment Permit	04/27/2022 EFT	184.05
U.S. BANK	Amazon Business Account - District Use	04/27/2022 EFT	501.54
	7.11.102011.2007.100041110.2000	0 1/ = 7/ = 0 = 1	

Vendor	Description	Date	Ref	Amount
U.S. BANK	O&M of Watewater Collections Systems Study Materials - Duncan	04/27/2022	EFT	63.63
U.S. BANK	After Hours Meal - Mechanics/Electricians	04/27/2022	EFT	35.50
U.S. BANK	Fencing - LS 3 Arnold	04/27/2022	EFT	4,483.05
U.S. BANK	Office Supplies	04/27/2022	EFT	555.31
U.S. BANK	Supplies	04/27/2022	EFT	38.72
U.S. BANK	Recruitment - DAS Position	04/27/2022	EFT	108.00
U.S. BANK	BOD Supplies	04/27/2022	EFT	8.38
U.S. BANK	Effective Communication and Human Relation Course (Charles)	04/27/2022	EFT	592.65
U.S. BANK	Time Lapse Camera	04/27/2022	EFT	174.44
U.S. BANK	Amazon - Computer Supplies	04/27/2022	EFT	1,177.20
U.S. BANK	Adobe	04/27/2022	EFT	17.00
U.S. BANK	Computer Lic/Security	04/27/2022	EFT	704.98
U.S. BANK	Microsoft	04/27/2022	EFT	284.76
UNDERHILL, BERTHA	Travel 4/22	04/29/2022	139927	54.67
UNDERHILL, BERTHA	Travel 4/22	04/29/2022	139927	20.21
UNITED PARCEL SERVICE	Shipping Week End 03/19	04/14/2022	139829	51.95
UNITED PARCEL SERVICE	Shipping Week End 04/02	04/14/2022	139829	14.60
UNITED PARCEL SERVICE	Shipping Week End 03/26	04/14/2022	139829	14.60
UNITED PARCEL SERVICE	Shipping Week End 03/26	04/14/2022	139829	5.40
UNITED PARCEL SERVICE	Shipping Week End 04/02	04/14/2022	139829	5.40
UNITED PARCEL SERVICE	Shipping Week End 03/19	04/14/2022	139829	19.21
UNITED PARCEL SERVICE	Shipping Week End 04/09	04/21/2022	139870	14.60
UNITED PARCEL SERVICE	Shipping Week End 04/09	04/21/2022	139870	5.40
UNITED RENTALS NORTHWEST, INC	Rammer Repair - Copperopolis	04/29/2022	139928	788.08
USA BLUE BOOK	Filters - AWWTP & DF VCTO	04/14/2022	139830	746.53
USA BLUE BOOK	Sprayer - AWWTP	04/14/2022	139830	70.73
USA BLUE BOOK	Replacement Sprayer - AWWTP	04/14/2022	139830	70.73
USA BLUE BOOK	Transmitters - Electricians	04/21/2022	139871	1,115.83
USA BLUE BOOK	Hydrant Paint, Hydrant Gaskets - Copper	04/21/2022	139871	295.83
USA BLUE BOOK	Reagents - CCWTP	04/29/2022	139929	292.43
USA BLUE BOOK	Lab Supplies - Wallace WWTP & Southworth WWTP	04/29/2022	139929	55.72
VALIC	Def Comp 03/31/2022 PR	04/15/2022	EFT	1,234.78
VALIC	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	1,234.78
VALIC	Def Comp 03/31/2022 PR	04/15/2022	EFT	456.70
VALIC	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	456.70
VICTOR, ALAN & DEBORAH	UB Refund 8827 Montero Rd	04/29/2022	139930	72.92
VOYA FINANCIAL	Def Comp 03/31/2022 PR	04/15/2022	EFT	1,915.02
VOYA FINANCIAL	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	1,223.99

Vendor	Description	Date	Ref	Amount
VOYA FINANCIAL	Def Comp 03/31/2022 PR	04/15/2022	EFT	708.30
VOYA FINANCIAL	Def Comp 04/15/2022 Payroll	04/15/2022	EFT	452.71
WAGEWORKS	FSA Admin 04/22	04/29/2022	139931	116.80
WAGEWORKS	FSA Admin 04/22	04/29/2022	139931	43.20
WAGNER & BONSIGNORE	Professional Services Agreement - Engineering Services for Cop	04/14/2022	139831	1,325.00
WECO INDUSTRIES	Extension Kit - V 133	04/14/2022	139832	2,891.69
WECO INDUSTRIES	Hose Reel Site Glass - V 736	04/14/2022	139832	76.88
WEST POINT LIONS CLUB	Town Hall Meeting Cleaning Deposit	04/29/2022	139932	146.00
WEST POINT LIONS CLUB	Town Hall Meeting Cleaning Deposit	04/29/2022	139932	54.00
WEST POINT LUMBER INC	Materials & Supplies - WP	04/14/2022	139833	67.54
WESTECH ENGINEERING, INC	Pre-Purchase Contract - Filter for West Point Water Su	04/14/2022	139834	133,857.01
WEX BANK	Re-Activation Fee	04/14/2022	139835	50.00
WEX BANK	Fuel 03/2022	04/30/2022	EFT	16,492.90
WEX BANK	Fuel 03/2022	04/30/2022	EFT	9,277.25
WIENHOFF DRUG TESTING	Drug Screening	04/21/2022	139872	233.60
WIENHOFF DRUG TESTING	Drug Screening	04/21/2022	139872	86.40
WILLDAN	Local Improvement District AD 9S4 (Arnold)	04/14/2022	139836	1,069.96
WILLDAN	Local Improvement District AD Da Lee/Cassidy RAD 2021	04/14/2022	139836	474.76
WILLDAN	Local Improvement District AD Fly In Acres RAD 2021	04/14/2022	139836	657.46
WILLDAN	Local Improvement District AD Wallace CSD	04/14/2022	139836	651.16

TOTAL VENDOR PAYMENTS: 1,156,456.92

#### **RESOLUTION NO. 2022-**

## A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

#### **RATIFYING CLAIM SUMMARY NO. 602**

**WHEREAS**, the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT has reviewed and considered Claim Summary Number 602 at the Regular Meeting held on May 11, 2022; and

**WHEREAS,** Board Members have resolved questions, issues, or concerns by consultation with District staff during said meeting.

**NOW, THEREFORE, BE IT RESOLVED** that the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby ratifies Claim Summary Number 602 in the amount of \$1,780,919.60 for the month of April 2022.

**PASSED AND ADOPTED** this 11th day of May 2022 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:	
	CALAVERAS COUNTY WATER DISTRICT
	Cindy Secada, President Board of Directors
ATTEST:	
Rebecca Hitchcock Clerk to the Board	<u></u>

# Agenda Item

DATE: May 11, 2022

TO: Board of Directors

FROM: Rebecca Hitchcock, Clerk to the Board

SUBJECT: Re-Authorizing Remote Teleconference Meetings of the Board of Directors

of The Calaveras County Water District for the Period of May 11 through

June 10, 2022, Pursuant to AB 361

#### **RECOMMENDED ACTION:**

Motion: \_\_\_\_\_/\_\_ adopting Resolution No.2022-\_\_\_\_Re-authorizing Remote Teleconference Meetings of the Board of Directors of The Calaveras County Water District for the Period of May 11, 2022 through June 10, 2022, Pursuant to AB 361.

#### SUMMARY:

On October 26, 2021, the Board of Directors adopted Resolution 2021-79 ratifying the proclamation of a state of emergency on March 4, 2020 and authorizing remote teleconference meetings of the Board of Directors for the period of October 26 thru November 25, 2021 pursuant to AB 361.

After 30 days, the District is required to renew its resolution effecting the transition to the modified Brown Act requirements if it desires to continue meeting under those modified requirements.

Importantly, the ability to renew the resolution is subject to certain requirements and conditions. In order to renew the resolution, a local agency must:

- 1. Reconsider the circumstances of the state of emergency
- 2. Having reconsidered the state of emergency, determine that either
  - a. The state of emergency continues to directly impact the ability of the members to meet safely in person, or
  - b. State or local officials continue to impose or recommend measures to promote social distancing

#### FINANCIAL CONSIDERATIONS:

None at this time.

Attachments:

a) Resolution 2022-\_\_ Ratifying the Proclamation of a State of Emergency on March 4, 2020 and Authorizing Remote Teleconference Meetings of The Board of Directors of the Calaveras County Water District for the Pursuant to Brown Act Provisions

#### **RESOLUTION NO. 2022-**

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT PROCLAIMING A LOCAL EMERGENCY PERSISTS, RERATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY ON MARCH 4, 2020, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT FOR THE PERIOD MAY 11 THROUGH JUNE 10, 2022 PURSUANT TO BROWN ACT PROVISIONS.

**WHEREAS**, the Calaveras County Water District committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

**WHEREAS**, all meetings of Calaveras County Water District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

**WHEREAS**, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a Board of Directors, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

**WHEREAS**, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

**WHEREAS,** a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

**WHEREAS**, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the Board of Directors meeting in person would present imminent risks to the health and safety of attendees; and

**WHEREAS**, the Board of Directors previously adopted a Resolution, 2021-79 on October 26, 2021, finding that the requisite conditions exist for the legislative bodies of Calaveras County Water District to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

**WHEREAS,** as a condition of extending the use of the provisions found in section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in the District, and the Board of Directors has done so; and

**WHEREAS**, such conditions now exist in the District, specifically, the State of Emergency declared by Governor Newsom on March 4, 2020, due to COVID-19; and

WHEREAS, the Board of Directors does hereby find that the rise in SARS-CoV-2 Delta Variant has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District, and desires to proclaim a local emergency and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Board of Directors does hereby find that the legislative bodies of Calaveras County Water District shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, The regular meetings of the Board, and any and all other meetings of the District's legislative bodies that are subject to the Brown Act, may be held via teleconference or other electronic means, in the manner set forth in the Virtual Public Meeting Protocols to this Declaration, which may be updated, from time to time, in the actual agenda notice for the meeting of the legislative body. All members of the public seeking to observe and/or to address the local legislative body may participate in the meeting telephonically or otherwise electronically in the manner set forth in the Virtual Public Meeting Protocols attached to this Declaration which may be updated, from time to time, in the actual agenda notice for the meeting of the legislative body.

**NOW**, **THEREFORE**, The Board Of Directors OF CALAVERAS COUNTY WATER DISTRICT does hereby resolve as follows:

Section 1. <u>Recitals</u>. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. <u>Proclamation of Local Emergency</u>. The Board hereby proclaims that a local emergency now exists throughout the District, and COVID-19 has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District.

Section 3. <u>Ratification of Governor's Proclamation of a State of Emergency</u>. The Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020

Section 4. Remote Teleconference Meetings. The General Manager and legislative bodies of Calaveras County Water District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including,

conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of June 10, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of Calaveras County Water District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED, this 11th day of May 2022, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

CALAVERAS COUNTY WATER DISTRICT

Cindy Secada, President
Board of Directors

ATTEST:

Rebecca Hitchcock
Clerk to the Board

DATE: May 11, 2022

TO: Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

SUBJECT: Discussion/Direction Regarding Routine Fees for Commercial Water and

**Sewer Accounts** 

# **RECOMMENDED ACTION:**

Review and discuss commercial water and sewer policies.

### SUMMARY:

Recently, CCWD has received multiple requests to review commercial water and wastewater accounts to optimize cost-savings for the Customer. Although somewhat different, all requests keyed into aspects of how commercial account capacity fees are calculated, periodically reviewed, and billed. Consequently, CCWD staff have completed a detailed review of how other water and wastewater purveyors work to ensure commercial water and sewer customers are receiving the most efficient, equitable, and cost-effective service.

First, District staff worked to develop four basic questions in order to get at the root of what the District's recent requests have in common. These questions are:

- Do agencies allow payment of capacity fees in increments for W and WW?
- Do agencies allow for incremental payment of monthly service charges for W and WW?
- Do agencies provide a mechanism for commercial accounts to temporarily pause service for issues such as commercial vacancies?
- Provide a general overview of the process for evaluating commercial accounts.

Staff then worked to identify like-sized and regional water and wastewater service providers as good candidates for comparison. Staff also reviewed a couple urban water and wastewater service providers in recognition of the fact that they are more apt to encounter a greater variety of issues associated with commercial accounts.

Of the six service providers' policies analyzed, staff found that while some small provisions to accommodate common commercial account requests do exist, agencies

generally don't allow significant flexibility. Staff also did not find examples where agencies allow for the temporary suspension of commercial meter accounts or the consolidation of meters, however, staff continue to research these points. In some cases, requests made by commercial accounts to optimize cost-savings are presented to the Boards of Directors as a variance or special circumstance accommodation. Moreover, staff found the District's own policies associated with capacity fee development and billing are consistent with industry standards in many ways.

Some of the service providers polled may in fact have provisions that were not made available to District staff that may more accurately address direct concerns of commercial customers. Some policies or practices may not be available on the agency's website or provided when documents were requested. CCWD staff will continue to reach out to other agencies to understand all available options.

Please see the attached Question and Answer Matrix to help provide an understanding of how District policies compare to other water and sewer service providers, specifically within the topics of commercial accounts and capacity fees, rates, monthly billing, etc. District staff will be prepared to discuss policy options and the constraints that apply to revising rates or rate structures at the upcoming Board meeting.

# FINANCIAL CONSIDERATIONS:

None at this time.

Attachments: Commercial Account Question and Answer Matrix

OHECTION			ANSWERS				
QUESTION	San Andreas Sanitary	Amador Water Agency	<b>Tuolumne Utility District</b>	El Dorado Irrigation District	City of Vallejo	EBMUD	CCWD
1. Do you allow payment of Capacity Fees in increments for W and WW?	WW Only – Capacity Fees are determined as per gallon (\$68.28/gallon specifically) multiplied by the estimated GPD of waste generated – for a commercial customer, a conventional restaurant for instance would be charged a rate of 10gpd/seat. If it's a 50-seat restaurant = 10gpd*\$68.28/gallon*50 seats = \$34,140 Capacity Fee Charge		For both W and WW- For commercial Accounts (must be a registered business entity with the State) may opt to deposit its capacity fee as calculated by TUD and then have actual water use monitored for at least one year (determined by TUD). If justified TUD will adjust the capacity fees in accordance with actual use post the monitoring period but will never drop the capacity fee below one EDU. For commercial accounts only Basis of cost for WW is demand flow, per occurrence, or per connection-various additional charges apply depending on subdivision	No Commercial Water Capacity Fees per EDU = \$23,292 Commercial Sewer Capacity Fees Per EDU = \$16,552	For WW, the terms capacity fees and connection fees are one in the same - a breakout of capacity fees is listed for different possibilities of commercial accounts. There is a fixed monthly charge. And a commercial rate in \$/HCF of Wintertime usage. There is also a Sanitary. Sewer Upper Service. Lateral Charge. All of these fees go to the tax rolls.	For Water - Have a Standard participation charge based on meter size and whether or not the service is in a "gravity" or "pumped" zone. There is also a standard capacity charge for non- residential service connections up to 1.5"s and there are different charges based on region- larger meter sizes a table is used to determine capacity fees One can receive credit on capacity fees paid based on actual water use, meter size, etc. Provisions to adjust capacity charges to public agencies who implement water- conserving landscaping Other than that – no allowance to pay incremental capacity fees Multiple additional charges based on location and service area For WW – Pay a monthly service charge – a Treatment Charge (per unit of sewage discharge) - and unit treatment rates for flow (per unit), COD (per pound of discharge), and for TSS (per pound of discharge) Also, an annual "wet weather charge" based on lot size (tax bill) For industrial accounts there is also a WW discharge permit, estimation permit and a limited term discharge permit There are also a host of "other" WW fees (Commercial pollution prevention fee, monitoring fees, etc.)	No - all capacity fees must be paid in full prior to service.  The District does offer a Capacity Charge Installment Payment Program for Conversion from Wells (Rules & Regs Section 34A)

2. Do you allow incremental payment of monthly service charges (based on capacity fees paid) for W and WW?	See above – you always pay full freight for capacity regardless of occupancy	F E A S S I lo	For Water – No For Wastewater Yes – based on EDUs, but not below one EDU – Also various connection ans special charges depending on the ocation of the request for service.	The Bi-Monthly base for a commercial water account with a 5/8 or 3/4 meter is \$71.67 and \$107.50 for a 1 inch. The commodity rate for commercial accounts is \$0.022186/cubic foot For WW Commercial Accounts, we pay a base rate fee and a volumetric charge based on sewer strength and monthly water use There is also a charge for commercial accounts called "commercial/Industrial Waste Discharge Permit Fee" which helps cover the Utilities permit costs for handling such waste For Categorical/Significant Industrial users the Bi-Monthly Fee = \$394.11  Bi-Monthly WW Costs for a commercial account with water service = \$69.76 for an account without water = \$125.87 Commodity Charges for commercial accounts (per CF) based on strength are - Low = \$0.04879 Medium Low = \$0.071851 Medium = \$0.105179 Medium High = \$0.165536 High = \$0.360608	monthly base rate is \$49.32 and depending on	Fixed monthly charge for both W and WW payment for use incremental	No – but the District does have a two-year Commercial Review Policy that allows CCWD to review use based on what was initially assessed for the business (based on fixture counts) in an effort to reduce the overall number of EDUs charged for monthly service
3. Do you provide a mechanism for Commercial Accounts to pause service for issues such as commercial vacancies?	No	No.	No	No. AR 9062 - "Services and billings may not be suspended or cancelled due to occupancy."	No	No	No – CCWD's Termination of Service Policy only applies to parcels with no structures or water usage.

QUESTION			ANSWERS				
QUESTION	San Andreas Sanitary	Amador Water Agency	Tuolumne Utility District	El Dorado Irrigation District	City of Vallejo	EBMUD	CCWD
4. General Overview of the Process for Commercial Accounts	There is a connection fee, connection permit, and associated capacity fees for commercial sewer accounts – capacity fees are calculated based on a gpd/unit based on the type of establishment - ex. 10 gal/seat for a conventional restaurant  Commercial accounts are broken up into seven categories based on sewer strength and charged a monthly rate that includes 1,000 gal of water usage – there is an additional incremental charge for each additional 1,000 gallons of water use also based on sewer strength.	Potable water meter size is determined by AWA Staff and based on an EDU assessment WW Accounts are charged based on an average two months of winter water use multiplied by sewer strength	Allow for a long term analysis of water and wastewater capacity charges vs actual use and can result in an adjustment to actual costs -  See the described above	For new commercial and industrial accounts, an Engineering Facility Plan Report (FPR) must be submitted to the District. The FPR provides a Registered PE's analysis of all proposed facilities and their impacts to District facilities and operations  A facility improvement letter is necessary to acknowledge there is W and S capacity available – they are good for two years  A facility Improvement letter informs the approval to construct the project.  No additional provisions exist relative to commercial accounts that are different than residential accounts		For Water — For Existing Accounts- Business accounts are billed monthly - There is a monthly service charge based on meter size. A monthly Charge for water delivered Based on Rate of flow (\$6.22/unit - unit is 748 gal.) A monthly Elevation rate surcharge per unit For New installations - You must apply for a connection and define the # of bedrooms, whether or not ADUs exist etc the District reviews whether or not service is available — Fees are calculated and presented to the Customer (similar to our cost to serve) - the customer pays the fees and the services are then installed. Multiple schedules of charges for water mains — public/private, extensions, etc. Pay Capacity Charges - For WW - Unit Treatment Rate - \$1.37/Unit COD Charge - \$/ lb = \$0.139 TSS Charge - \$/ lb = \$0.139 TSS Charge - \$/ lb = \$0.139 TSS Charge including flow processing/ unit of discharge based on business type Wet weather facilities charge based on commercial lot size Annual Permit fees based on WW characterization (industrial, etc.) Multiple other fees -	Water- Existing accounts are billed on bi-monthly basis with a predetermined base rate per meter size at the establishment plus consumption charges per 100 cu ft. Property owners are given the choice to have individual meter per suite (if such an establishment exists) or master meter.  Sewer- The sewer charges are determined based on the Drainage fixture count as adopted in the demand factor table of District Standards of Design and Construction. The demand factor table is developed from the Uniform Plumbing Code.  During business change customer shall provide details about the nature of business for the District to assess sewer needs.  Commercial accounts can be audited every two years for the water consumption to establish sewer discharge and billing can be adjusted accordingly.

DATE: May 11, 2022

TO: Michael Minkler, General Manager

FROM: Jessica Self, External Affairs Manager

SUBJECT: Discussion/Presentation of AMI Meter Videos

# **RECOMMENDED ACTION:**

For information only.

# **SUMMARY:**

District staff will present newly developed AMI meter videos aimed to inform and educate customers about their new meter.

# FINANCIAL CONSIDERATIONS:

No financial considerations.

DATE: May 11, 2022

TO: Michael Minkler, General Manager

FROM: Jessica Self, External Affairs Manager

SUBJECT: Discussion/Presentation of District Accomplishments

# **RECOMMENDED ACTION:**

For information only.

# **SUMMARY:**

District staff will present a summary of numerous District accomplishments achieved over the past two years, while navigating the challenges of Covid-19.

# FINANCIAL CONSIDERATIONS:

No financial considerations.

DATE: May 11, 2022

TO: Board of Directors, Calaveras County Water District

Michael Minkler, General Manager

FROM: Charles Palmer, P.E., District Engineer

RE: Discussion/Action Regarding the Award of Construction Contract for the

West Point Water Supply Reliability Project (CIP 11106)

R	FC	OM	ME	NDF	DΔ	CT	ION:
$\mathbf{r}$	டし			IVL	u P		IVIN.

Motion:		1	to adopt Re	esolution	No.202	22	A	warding a	Cons	struction
Contract	to K.W. E	merson	, Inc., the∃	lowest re	sponsi	ive and	d res	oonsible b	idde	r for the
West Po	int Water	Supply	Reliability	Project	CIP 1	1106	and	authorize	the	General
Manager	to enter ir	nto said (	Constructio	n Contra	ct.					

### SUMMARY:

A notice inviting bids for the West Point Water Supply Reliability Project was advertised on March 17, 2022. A public bid opening for the project was held on April 20, 2022 and the District received two (2) bids. One from K.W. Emerson, Inc. for a cost of \$1,852,357 and the other from Sierra Mountain Construction, Inc. for a cost of \$1,997,000. The engineer's estimate was \$1,639,000.

The work consists of the demolition of existing piping, equipment, and foundations; installation of a package treatment unit that has been pre-purchased by the District and installed; installation of piping associated with the package treatment unit; installation of a prefabricated metal building system; and installation of electrical, instrumentation and controls associated with the package treatment unit.

Staff, along with the design consultant, Peterson Brustad Inc., has found the bid of K.W. Emerson, Inc. to be responsive and recommends award of the construction contract to K.W. Emerson, Inc. in the amount of \$1,852,357.

### FINANCIAL CONSIDERATIONS:

The total project cost is estimated to be \$2.68 million which in addition to grant funds the District has obligated supplemental funding (water expansion and R&R funds) in its FY 2021-22 CIP budget and will obligate in FY 2022-23 to pay for project costs for the construction phase.

Attachments: Peterson Brustad, Inc. Memorandum

K.W. Emerson, Inc. Bid

Resolution No. 2022- Awarding Construction Contract for West Point Water Supply Reliability Project





**DATE:** April 25, 2022

**TO:** Calaveras County Water District (CCWD)

**FROM:** Brayden Leach

Karl Brustad

# **SUBJECT: West Point Water Supply Reliability Project Bid Review and Award Recommendation**

On Wednesday April 20, 2022, CCWD received bids for the construction of the West Point Water Supply Reliability Project.

The apparent low bidder was K.W. Emerson Inc. at \$1,852,357. K.W. Emerson Inc attended the mandatory pre-bid conference and responded with all of the required information with their bid including:

- Contractor's License Information
- Non-collusion Affidavit
- Bid Bond
- List of Bidder's Project References
- List of Subcontractors

After review of this documentation, no discrepancies were found in the information submitted.

Thus, we recommend award of the contract to K.W. Emerson Inc. for the construction of the West Point Water Supply Reliability Project Project.

# SECTION 00410 BID FORM

# CALAVERAS COUNTY WATER DISTRICT WEST POINT WATER TREATMENT FACILITY WATER SUPPLY RELIABILITY PROJECT

# TABLE OF ARTICLES

Article 1 – Bid Recipient

Article 2 – Bidder's Acknowledgments

Article 3 – Bidder's Representations

Article 4 – Bidder's Certification

Article 5 – Basis of Bid

Article 6 – Time of Completion

Article 7 – Attachments to Bid

Article 8 – Defined Terms

Article 9 – Bid Submittal

# **ARTICLE 1- BID RECIPIENT**

- 1.01 This Bid is submitted to: Calaveras County Water District at the main office at 120 Toma Court, San Andreas, California 95249, no later than 2:00 PM local time on April 20, 2022.
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

# **ARTICLE 2- BIDDERS ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

# ARTICLE 3- BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date
1	4/18/22

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site.
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Siterelated reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that any further examinations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- J. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the Project is located not later than the date of its execution of the Agreement.

# **ARTICLE 4- BIDDER'S CERTIFICATION**

# 4.01 Bidder further represents that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made to (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

# **ARTICLE 5- BASIS OF BID**

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) provided in the attached bid schedule (at the end of this section).
- 5.02 Unit Prices have been computed in accordance with Paragraph 11.04.B of the General Conditions
- 5.03 Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.
- 5.04 Bid Prices are for work that has been furnished and installed by the Contractor and is fully completed. The bid items as described and provided are for bidding and payment purposes and do not in any way limit the Contractor's responsibility to perform all work that may be reasonably inferred from the plans, specifications and other bid documents to produce the intended result.
- 5.05 All specified cash allowances are included in the price(s) set forth above and have been computed in accordance with Paragraph 13.02 of the General Conditions.
- 5.06 If "additive" or "deductive" Bid Items are included in the Bid- clearly identify the method for applying the alternates and the basis for award of the contract.

### ARTICLE 6- TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

# **ARTICLE 7- ATTACHMENTS TO THIS BID**

7.01 The following documents are attached to and made a condition of this Bid (Section 00 04 10):

# (ATTACH EACH DOCUMENT BELOW TO THE BID)

- A. Non-Collusion Affidavit (Section 00 04 20);
- B. Required Bid security in the form of a Bid Bond or Certified Check (Section 00 04 30):
- C. List of Subcontractors (Section 00 04 70); and
- D. List of References (Section 00 04 80).

# **ARTICLE 8- DEFINED TERMS**

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders (Section 00 02 00), General Conditions (Section 00 07 00), and Supplementary Conditions (Section 00 08 00).

# **ARTICLE 9 - BID SUBMITTAL**

9.01	This Bid is submitted by:	K.W. Emerson, Inc.	
	Bidder's Business address:	P.O. Box 549	
		San Andreas, CA 95249	
		Facsimile:	209-754-3930
	Submitted on4/20	/2022	, <del>2020</del> .
	State Contractor License No	. 225085	
	Employer's Tax ID No	94-1577582	
	DIR Registration No.	1000002385	
	If Bidder is:		
	<u>An Individu</u>	<u>al</u>	
	Name:		
	Ву:	(Individual's sign	ature)
	Doing busine	ess as:	
	<u>A Partnersh</u>	<u>lip</u>	
	Partnership N	Name:	
			(SEAL)
	By: (Signatu	re of general partner – attach	evidence of authority to sign)
	Name:		

# **A Corporation**

Corporation Name:	K.W. Emerson, Inc.	
		_(SEAL)
State of Incorporation:	CA	
Type (General Business	s, Professional, Service, Limited Liability):	General Business
Ву:	Tourson	
(Signature	e – attach evidence of authority to sign)	-
Name: Rusti Eme	erson	·
Title: Presiden		
Attest: Attest: (Signature)	gnature of Corporate Secretary)	
	do business is 5 / 24 / 1964	
A Joint Venture		
Name of Joint Venturer	•	
First Joint Venturer Na	me:	
		_(SEAL)
Bv:		
(Signature of first joint	venture partner – attach evidence of author	ity to sign)
Name:		
Title:		

Second Joint Venturer Name:
(SEAL)
By:(Signature of second joint venture partner – attach evidence of authority to sign)
Name (typed or printed):
Title:

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

# **BID SCHEDULE**

# CALAVERAS COUNTY WATER DISTRICT WEST POINT WATER RELIABILITY PROJECT

BID ITEM	DESCRIPTION	UNIT	EST QTY.	UNIT PRICE	BID AMOUNT
1	MOBILIZATION/ DEMOBILIZATION	LS	1	89,569	\$ 89,569
2	SHEETING, SHORING AND BRACING	LS	1	24, 889	\$ 24,889
3	SITE DEMOLITION	LS	1	115,861-	\$ 115,861
4	PACKAGE TREATMENT UNIT INSTALLATION	LS	1	120,345-	\$ 120,345
5	PREFABRICATED METAL BUILDING SYSTEM	LS	1	460, 215-	\$ 460,215
6	PIPING	LS	1	935,319-	\$ 535,319
7	ELECTRICAL, INSTRUMENTATION AND CONTROLS	LS	1	304, b45 <u>-</u>	\$ 304,645
8	REMAINING WORK: All remaining Work identified in the Contract Documents NOT INCLUDED in Bid Items 1-7.	LS	1	doi, 514 -	\$ 201,514

\$ / \$52,357 TOTAL BID AMOUNT ALL ITEMS (NUMERICAL)

one milion eight hudred fifty to though these hurded fifty every TOTAL BID AMOUNT ALL ITEMS (WRITTEN)

# **END OF SECTION 00 04 10**

# **SECTION 00 04 20** NON-COLLUSION AFFIDAVIT

# NON-COLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID (Public Contract Code Section 7106)

State of California County of Calaveras

The undersigned declares:

I am the _	President	of K.W. Emersor	on, Inc., the party making the foregoing bi	id.
company, associate the bidder has no sham bid. The bid any bidder or any any manner, directly anyone to fix the element of the bit true. The bidder thereof, or the compartnership, compartnership, compartnership, compartnership.	ation, organizate of directly or inder has not directly or ectly or indirectly or indirectly or of the directly or of the has not, directly tents thereof, or pany, associationate a collusive	ion, or corporation. The directly induced or so rectly or indirectly column time a sham bid, or to retly, sought by agreed bidder or any other bid hat of any other bidder or indirectly, submit or divulged information, organization, bid	half of, any undisclosed person, partnershifthe bid is genuine and not collusive or share olicited any other bidder to put in a false of lluded, conspired, connived, or agreed with refrain from bidding. The bidder has not sment, communication, or conference with older, or to fix any overhead, profit, or conference of the statements contained in the bid a litted his or her bid price or any breakdown or data relative thereto, to any corporation of depository, or to any member or agents not paid, and will not pay, any person of the side of the	m. or ith in ith ost are wn on, ent

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed:

Subscribed and sworn to before me on

(date)
(Notary Public)

**END OF SECTION 00 04 20** 

Calaveras County Water District West Point Water Supply Reliability Project

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.							
State of California  County of <u>Calaveras</u> On <u>April 19, 2022</u> before me, <u>Trace</u> Date  personally appeared <u>Rusti Emerson</u>	Here Insert Name and Title of the Officer  Name(s) of Signer(s)						
who proved to me on the basis of satisfactory evaluations subscribed to the within instrument and acknowled his/her/their authorized capacity(ies), and that by his/or the entity upon behalf of which the person(s) acte	Iged to me that he/she/they executed the same in her/their signature(s) on the instrument the person(s),						
TRACY ANN KVES Notary Public - California Calaveras County Commission # 2351537 My Comm. Expires Mar 15, 2025  Place Notary Seal Above	the State of California that the foregoing paragraph true and correct.  ITNESS my hand and official seal.  gnature						
Though this section is optional, completing this in fraudulent reattachment of this fo	formation can deter alteration of the document or						
Description of Attached Document  Title or Type of Document:  Document Date:  Signer(s) Other Than Named Above:	Number of Pages:						
Capacity(ies) Claimed by Signer(s)  Signer's Name:  Corporate Officer — Title(s):  Partner — Limited    General  Individual    Attorney in Fact  Trustee    Guardian or Conservator  Other:  Signer Is Representing:	Signer's Name: Corporate Officer — Title(s): Partner — Limited  General Individual Attorney in Fact  Guardian or Conservator  Other: Signer Is Representing:						

# SECTION 00 04 30 BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER				
Name and Address:	K.W. Emerson, Inc. C. O. Box 549, San Andreas, CA 95249			
SURETY	r. O. Box 349, Sall Alluleas, O	A 95249		
Name and Address:	The Ohio Casualty and Surety (175 Berkeley Street, Boston, M	Company A 02116		
OWNER	The Demoisy Street, Desten, III	102110		
Name and Address:		CALAVERAS COUNTY WATER DISTRICT 120 Toma Ct., San Andreas, CA 95249		
BID Bid Due Date: Apr	il 20, 2022			
Project Name:	West Point Water Suppl	y Reliabili	ity Project	
	Five Percent of Total Amount (W)	<i>'ords)</i> d hereby, s		
each cause this bid i	Solid to be duly executed by		fized officer, agent, of representative	
BIDDER (Name and of K.W. Emerson, Inc.	Corporate Seal)		Y (Name and Corporate Seal) Casualty Insurance Company	
Ariest:	Signature  Print Name  Title  Signature  Title	By: <	Signature  Dona Lisa Buschmann  Print Name  Attorney-In-Fact  Title  (See Attached)  Signature  Title	
Note: Above address	ses are to be used for giving	g any requ	ired notice. Provide execution by ar	
additional parties, si	uch as joint venturers, if ned	cessarv.		

additional parties, such as joint venturers, if necessary.

Calaveras County Water District West Point Water Supply Reliability Project

00 04 30 - 1

Bid Bond

- 1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
  - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2 All Bids are rejected by Owner, or
  - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
  - Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
- 7. Any suit or action under this Bond shall be commenced only in a court of-competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

**END OF SECTION 00 04 30** 

# ACKNOWLEDGMENT

certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California County of Placer

On April 12, 2022 before me, Alexis Estrada, Notary Public (insert name and title of the officer)

personally appeared Dona Lisa Buschmann

A notary public or other officer completing this

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature (Seal)

ALEXIS ESTRADA
Notary Public - California
Placer County
Commission # 2335353
My Comm. Expires Oct 13, 2024



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

> Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

Certificate No: 8205493-977442

#### POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, I								
Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint. Alexis								
								Estrada, Dona Lisa
Laux, Stephen D. E	Laux, Stephen D. Bender							
all of the city of	Sacramento	state of	CA	each individually if there be more than one named, its true and lawful attorney-in-fact to make,				
execute, seal, acknow	vledge and deliver, for and	d on its behalf as sure	ety and as its act	and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance				

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed April

of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper

INSU





Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

State of PENNSYLVANIA County of MONTGOMERY SS

Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company which resolutions are now in full force and effect reading as follows:

e of PENNSYLVANIA and you will be a personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes in contained by signing on behalf of the corporations by himself as a duly authorized officer.

WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

\*\*Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - Notary Seal Teresa Pastella, Notary Public Commonwealth of Perseyhenia - N

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the charman or the president, and subject to such limitations as the chairman or the president may prescribe shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surely any and all undertakings, bonds, recognizances and other surely

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 12th day of







LMS-12873 LMIC OCIC WAIC Multi Co 02/21

# SECTION 00 04 70 LIST OF SUBCONTRACTORS

BIDDER:	K.W. Emerson, Inc.	
---------	--------------------	--

Work to be Performed	Percent of Total Contract Price	Subcontractor's Name and Location of Place of Business, Contractor's License Number, and DIR Registration Number
ELECTRICAL	127.	GOLD ELECTRIC, INC. MURPHYS, CA 554744, 1000002998
METAL BUILDING	7%	ROLAND CONSTRUCTION, INC. STOCKTON, CA 487654, 1000003618
REBAR	1.5%	CAMBLIN STEEL POSEVILLE, CA 218839, 1000003852
MASONRY WALL	27.	ROBERT TAYLOR MASONRY SOULSBYUILLE, CA 1052965, 10000585759

(ADD ADDITIONAL SHEETS IF NECESSARY)

# **END OF SECTION 00 04 70**

# SECTION 00480 LIST OF REFERENCES

DID DUIL.		•	 			

K.W. Emerson, Inc.

BIDDER.

<u>Project References</u>: Provide project references for at least three similar to this Project within the last five (5) years.

	Project Name	Amount, \$	Contact Person	Phone Number
1.	Lower Drum Canal Completed 11/2021	\$841,000	Pacific Gas & Electric Co. Travis Conely	530-537-4083
2.	Ebbetts Pass Techite Water Main Replacement Completed 10/2022	\$1,900,000	CCWD Kevin Williams	209-419-3979
3.	Flume 38 to 40 Replacement Completed 3/2022	\$8,800,000	EL Dorado Irrigation District Cary Mutschler	530-642-4182
4.				
5.				

### **RESOLUTION NO. 2022-**

# A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

# AWARDING THE CONSTRUCTION CONTRACT FOR THE WEST POINT WATER SUPPLY RELIABILITY PROJECT, CIP 11106

**WHEREAS**, the District has identified as a critical need for water supply reliability to construct a second water treatment filter serving the community of West Point, CA, for which a Proposition 1, Round 1 MAC Region IRWM grant administered by DWR and UMRWA was obtained in the amount of \$527,287.00 to partly fund the project, and

**WHEREAS,** upon issuing a Request for Bids on March 17, 2022 for construction of a second water treatment filter and conducting a pre-bid job walk with prospective vendors interested in submitting proposals, the District received two (2) sealed bids as of the due date of April 20, 2022; and

**WHEREAS**, the lowest responsive and responsible bid was submitted by K.W. Emerson, Inc., in the amount of \$1,852,357.00 to complete the construction of a second water treatment filter.

**WHEREAS**, the total project cost is estimated to be \$2.68 million which in addition to grant funds the District has obligated supplemental funding (water expansion and R&R funds) in its FY 2021-22 CIP budget and will obligate in FY 2022-23 to pay for project costs for the construction phase.

**BE IT RESOLVED,** the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby approves the bid submitted by K.W. Emerson, Inc., attached hereto and made a part hereof, and authorizes the General Manager to enter into a Construction Contract with K.W. Emerson, Inc. in the amount of \$1,852,357.00 for construction of said project.

**PASSED AND ADOPTED** this 11<sup>th</sup> day of May, 2022 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:	CALAVERAS COUNTY WATER DISTRICT
	Cindy Secada, President Board of Directors
ATTEST:	
Rebecca Hitchcock Clerk to the Board	

DATE: May 11, 2022

TO: Board of Directors, Calaveras County Water District

Michael Minkler, General Manager

FROM: Charles Palmer, P.E., District Engineer

John Griffin, P.E., Senior Civil Engineer

RE: Discussion/Action Regarding Award of a Design Services Contract for

Copper Cove Water System Improvements

# **RECOMMENDED ACTION:**

Motion: \_\_\_\_/\_\_\_\_ to adopt Resolution No.2022-\_\_\_\_\_ awarding a contract for engineering services and authorizing General Manager to execute a professional services agreement with Peterson Brustad, Inc. in the amount of \$1,042,659 for the design of the Copper Cove Water System Improvements including Tank B/Clearwell Replacement (CIP #11083C), Tank B Pump Station Replacement (CIP #11111), Zone B-C Transmission Pipeline & Pump Station (CIP #11122), and Lake Tulloch Submerged Water Line Crossing (CIP #11104).

### SUMMARY:

This item was presented to the Engineering Committee for discussion on April 26, 2022. In summary, the District issued a Statement of Qualifications and Request for Proposals (SOQ & RFP) for engineering and design services for the project on February 18, 2022. A total of 28 firms were notified of this project and 20 firms registered on the project website to receive notices on the SOQ & RFP.

The scope of work consisted of several separate but interrelated improvements identified in the October 2018 Master Plan prepared by Peterson Brustad Inc. (PBI). The objectives of each of these four projects is as follows:

- Copper Cove Tank B/Clearwell Project (CIP #11083C): Install a new clearwell at the Copper Cove Water Treatment Plant (WTP), rehabilitate or demolish & replace existing clearwell at the WTP, demolish and replace (exact size to be determined) the existing redwood tank in the B Zone, and rehabilitate or demolish and replace the existing steel tank in B zone.
- 2. Lake Tulloch Submerged Water Line Crossing Project (CIP #11104): Install a new 12" main along O'Brynes Ferry Road (approximately 3.25 miles in length), as the sole source of water to the customers on the east side of Lake Tulloch is a single, 10" water main along the bottom of Lake Tulloch.

- 3. Copper Cove Tank B Pump Station Project (CIP #11111): Demolish and replace the B zone pump station, which is approximately 40 years old and in poor condition.
- 4. Copper Cove Zone B-C Transmission Pipeline & Pump Station Project (CIP #11122): Construct new 20" main from WTP effluent pump station to C zone tanks (approximately 2.1 miles in length) with intermediate pump station.

The current value of these four projects (design and construction) per the draft FY2022-27 Capital Improvement Program (CIP) is approximately \$20.6M.

These four projects were bundled together into one procurement with the goal of having engineering firms provide recommendations on phasing and conduct analysis to determine right sizing of all improvements, recognizing how one improvement has the potential to impact the other planned improvements. For example, demands are shifted from the B zone to the C zone once these improvements are constructed, which impacts the sizing of tanks and booster pump station in the B zone.

The District received seven proposals on April 1, 2022. The SOQ & RFP stated that the District may award to one or multiple firms or not move forward with all work identified in the SOQ & RFP. The selection process used was primarily qualification based. Table 1 presents the final technical ranking of the seven proposals received, based on assessment criteria outlined in the SOQ & RFP.

Technical Ranking

Dewberry Engineers Inc.

Peterson Brustad Inc.

Dudek

HydroScience Engineers

Bennett Engineering Services

Wood Rodgers

West Yost

Table 1 – Consultant Technical Ranking

After the District review committee completed their technical review of qualifications and proposals, the fee estimates for each consultant were opened. Table 2 presents a summary of the proposed fees.

Table 2 – Consultant Proposed Fees

Consultant Name	Proposed Fee
Dewberry Engineers Inc.	\$1,391,671
Peterson Brustad Inc.	\$1,042,659
Dudek	\$1,521,120
HydroScience Engineers	\$1,319,855
Bennett Engineering Services	\$1,661,570
Wood Rodgers	\$1,278,204
West Yost	\$1,771,889

Based on the results of the technical evaluation and proposed fees, staff recommends selecting PBI for all work. The anticipated phases are as follows:

- Update the hydraulic model and master plan.
- Prepare preliminary design report and design documents for the new clearwell and replacement of the B zone redwood tank.
- Conduct assessment of existing clearwell and B zone steel tank (once new clearwell & tank on-line).
- Prepare preliminary design report for existing clearwell and B zone steel tank.
- Prepare preliminary design report and design documents for the replacement of the B zone booster pump station.
- Prepare preliminary design report for new 12" water main along O'Byrnes Ferry Road and C Tank overflow.
- Prepare preliminary design report and design documents for the 20" water main from WTP effluent pump station to C zone tanks and pump station. PBI proposed an interesting concept to modify the existing effluent pump station, which eliminates the intermediate pump station, thereby reducing project costs. The feasibility of this approach will be fully vetted in the preliminary design report. Should this approach be deemed infeasible, or more expensive than the intermediate pump station, then the final design will reflect the intermediate pump station.

# FINANCIAL CONSIDERATIONS:

Staff recommends awarding a contract for engineering services to PBI, Inc. In accordance with PBI's fee estimate, total fees are \$1,042,659 including base fees and all optional tasks. Funding for design and construction for all four projects is within the five-year window of the CIP. The current budget for each project is sufficient to fully fund this agreement and associated project costs. Table 3 provides a breakdown of costs for this agreement by each CIP project. Staff will pursue grant funding opportunities for these projects.

Table 3 – Funding Breakdown by Project

PROJECT TITLE / CIP #	DESIGN FEE
Tank B / Clearwell Replacement (11083C)	\$ 347,786
Lake Tulloch Submerged Water Line Crossing (11104)	\$ 31,776
Tank B Pump Station Replacement (11111)	\$ 298,008
Zone B-C Transmission Pipeline & Pump Station (11122)	\$ 365,089
TOTAL	\$1,042,659

# Attachments:

- Resolution No. 2022 \_\_\_ Awarding a contract for engineering services and authorizing General Manager to execute a professional services agreement with Peterson Brustad, Inc. in the amount of \$1,042,659 for the design of the Copper Cove Water System Improvements including Tank B/Clearwell Replacement (CIP #11083C), Tank B Pump Station Replacement (CIP #11111), Zone B-C Transmission Pipeline & Pump Station (CIP #11122), and Lake Tulloch Submerged Water Line Crossing (CIP #11104)
  Peterson Brustad Inc. scope of work

# **RESOLUTION NO. 2022-**

# A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AWARDING A CONTRACT FOR ENGINEERING SERVICES AND AUTHORIZING GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH PETERSON BRUSTAD, INC. IN THE AMOUNT OF \$1,042,659 FOR THE DESIGN OF THE COPPER COVE WATER SYSTEM IMPROVEMENTS INCLUDING TANK B/CLEARWELL REPLACEMENT (CIP #11083C), TANK B PUMP STATION REPLACEMENT (CIP #11111), ZONE B-C TRANSMISSION PIPELINE & PUMP STATION (CIP #11122), AND LAKE TULLOCH SUBMERGED WATER LINE CROSSING (CIP #11104)

**WHEREAS,** upon issuing a Statement of Qualifications and Request for Proposals on February 18, 2022, for engineering and design services for the subject projects and conducting a job walk of the project area with prospective consulting firms interested in submitting proposals, the District received seven (7) proposals as of the due date of April 1, 2022; and

**WHEREAS,** the District staff reviewed all proposals considering experience and project examples, project team, project understanding and approach, scope of work, project schedule and phasing, level of effort, and other criteria; and

**WHEREAS,** out of the seven proposals received, staff recommends award of the contract for engineering and design services to Peterson Brustad Inc; and

**WHEREAS**, the total cost for these four projects is estimated to be approximately \$20.6M which the District has funding (Bond proceeds, Water Capital Reserves and Replacement Fund 125, and expansion funds) over the next five years as identified in the FY 2022-27 Capital Improvement Program and will obligate sufficient funds over the next five years to pay for the design and construction phase costs for these four projects.

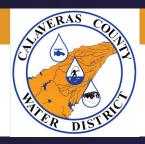
**BE IT RESOLVED**, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby awards a contract for engineering services and authorizing General Manager to execute a professional services agreement with Peterson Brustad, Inc. in the amount of \$1,042,659 for the design of the Copper Cove Water System Improvements including Tank B/Clearwell Replacement (CIP #11083C), Tank B Pump Station Replacement (CIP #11111), Zone B-C Transmission Pipeline & Pump Station (CIP #11122), and Lake Tulloch Submerged Water Line Crossing (CIP #11104) attached hereto and made a part hereof.

PASSED AND ADOPTED this 11th day of May, 2022 by the following vote:

AYES:	
NOES:	
ABSTAIN:	
ABSENT:	

# CALAVERAS COUNTY WATER DISTRICT

ATTEST:	Cindy Secada, President Board of Directors
Rebecca Hitchcock Clerk to the Board	



# **Calaveras County Water District**

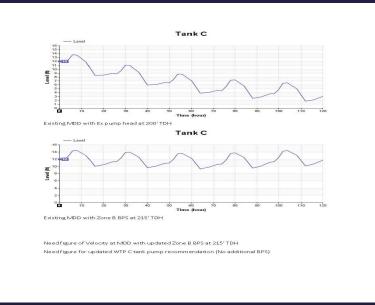
Request for Proposal for:

# Planning, Engineering, and Design Services for the Copper Cove Water System Improvements











April 1, 2022

Calaveras County Water District
Attn: Kate Jesus
120 Toma Court
San Andreas, CA 95249
Transmitted via email: katej@ccwd.org

Subject: Statement of Qualifications and Request for Proposal for Calaveras County Water District

for Planning, Engineering, and Design Services for the Copper Cover Water System

**Improvements** 

Dear Ms. Jesus,

We are pleased to provide you with our Statement of Qualifications and Request for Proposal for Calaveras County Water District (District) for Planning, Engineering, and Design Services for the Copper Cover Water System Improvements. Peterson Brustad Inc (PBI) recently completed the Copper Cove Water Master Plan, which is the foundation for most of the projects identified in this RFQ/RFP. This familiarity and understanding of the Copper Cove Water System is what makes PBI stand out as the preferred consultant to assist the District with these proposed improvements.

We understand that the District now wishes to undertake several high priority capital improvement projects that PBI identified in the Master Plan to improve system reliability and performance. We have assembled a team of highly qualified professionals to provide just such services. Our approach to these services is to provide you with **senior level** engineering professionals whose business, and only business, is with the water industry:

We have developed an approach focused on the highest priority projects from the RFQ/RFP. Our approach includes getting the highest priority projects, New Clearwell and B Tank (redwood) replacement, constructed prior to the end of June 2023. We have proposed an alternative approach to expediting the existing Clearwell and B Tank (steel) condition assessments. If we wait until we can take the tanks out of service, we will not be able to proceed with the assessment until Summer 2023 at the soonest. We have reviewed the prior inspection reports and talked to the Operations staff and have concluded that the structural members supporting the roof for both tanks are corroded beyond repair and must be replaced. Our approach allows the analysis to proceed with these conservative assumptions. We also understand that some improvements are not budget for construction in the near term and we have limited our focus on these projects to the development of the preliminary design reports and defined the remaining tasks as optional in our proposal.

As a <u>distinguishing factor</u> of our team, we have extensive experience working with the District and have unmatched familiarity with the District's Copper Cove Water System. Since our inception in 2005, PBI has worked on more than 30 projects with the District, including many within the Copper Cove Water System including: plan checking services, hydraulic review of the Copper Cove Water System model, rate study and capacity charge update for the Copper Cove Water System, and the development of an operations plan for Copper Cove WTP. Karl Brustad began supporting the District in 2000 and has been the author of several of the District's water system master plans including the District's Copper Cove

Page 2 April 1, 2022

water system in 2018. Our familiarity with the District's Copper Cove Water System makes PBI a perfect fit for the planning, engineering, and design for the high-profile capital improvements to Copper Cove Water System.

Experienced, highly qualified Project Managers that are committed to your projects. Karl Brustad, a Principal, at PBI will be the Project Manager for all services provided. Ashley Smith, P.E. a Senior Engineer/Project Manager will serve as deputy project manager under the guidance of Karl. Karl and Ashley have backgrounds that specialize in supporting the exact needs of CCWD: design of new water storage tanks; rehabilitation of existing water storage tanks; condition assessments; design of booster pump stations. The continuity, from the development of the water master plan to the design of the identified high priority projects, will result in a successful project for the District.

Project Team with Extensive Experience. We have assembled a team with extensive experience who we have worked together with on similar projects in the past including several with the District. Our team includes: ATEEM for electrical and instrumentation upgrades, Bender Rosenthal for Right-of-Way work, Compliance First to develop the Stormwater Pollution Prevention Plan, Condor Earth for geotechnical work, CSI Services for coating inspections, CYS Structural for structural design of the new BPS buildings and for the rehabilitation design of the existing tanks, Helix Environmental for environmental studies and documentation, PSOMAS for any needed topographic surveys, and V&A Consulting for cathodic protection design.

A proven approach gets the job done right. Successful approaches breed successful projects, and we bring proven techniques to every stage of project development. From project management techniques that optimize project performance to good relationships with regulators, we keep the project on-track at every stage, saving CCWD time and money in the short term, and delivering lasting value in the long-term.

We look forward to the opportunity to continue working with the District on these important projects. If you have any questions or require additional information, please do not hesitate to contact me at (916) 804-6671.

Sincerely,

Karl Brustad, PE, MBA Principal/CEO/President Peterson Brustad Inc.



#### INTRODUCTION

## Firm History and Background

Peterson Brustad Inc. (PBI) has over 16 years of extensive experience preparing designs for water infrastructure projects. PBI has supported numerous clients with the planning, design, and commissioning of water storage tanks, water treatment plants, pump stations, and transmission mains. Our staff of highly qualified professionals has the necessary technical knowledge and hands-on experience required to successfully support the Calaveras County Water District (District) with these critical capital improvement projects to allow the District to continue to reliably provide potable water services to the community. Three of our staff members are licensed water treatment plant operators with valuable field experience that provides our team with a strong understanding of a water system's day-to-day operations. This field and operations experience, coupled with our broad range of experience in water infrastructure projects and our familiarity with the Copper Cove Water System, will enable us to assist the District in both the shortand long-term with their identified water system improvements.

PBI was founded in September 2005 to provide engineering consulting services for the water industry. We develop innovative and cost-effective solutions for our clients' water resources, drinking water, wastewater, and recycled water projects. Our last active founding principal, Karl Brustad, has more than 25 years of experience in the water industry, and is actively involved in project delivery. He ensures that his clients receive expert attention, high quality products, and outstanding client service. Karl has worked extensively with District staff over the years and is committed to supporting the District on current and future projects.

PBI is a small and specialized engineering firm. We only design, manage and support water related projects. This focus allows us to support both large and small projects. In addition, our water focus ensures our clients receive quality design services at the utmost efficiency.



Karl Brustad founding principal

Karl is supported by a team of highly competent and qualified professionals that are focused on supporting water related projects. Our team includes over 12 full-time and part-time employees, which includes an efficient distribution of staff experience from Principal to Staff Engineers. Every one of our professionals is an outstanding performer, capable of leading complex tasks and delivering high value service. The success of our firm is based on the quality of our people. Our engineers have superior technical competence, strong leadership skills, and an obsession for quality.

# Firm History Supporting Similar Projects

PBI has been supporting Calaveras County Water District (District) projects since our inception. The Jenny Lind WTP was our first water treatment plant design project in 2005 and we have continued to support District projects since then, amassing a total of more than 30 projects including five projects relating to the Copper Cove water system. Additionally we are currently supporting the District's West Point Water Supply Reliability project and have just completed the Upper Mokelumne River Sanitary Survey Update.

This proposal presents why our team: Peterson Brustad Inc., ATEEM, Bender Rosenthal, Compliance First, Condor Earth, CSI Services, CYS Structural, Helix Environmental, PSOMAS, and V&A is the most qualified team to support the District's Copper Cove Water System Planning, Engineering, and Design Services Project. PBI has a successful history of providing similar services associated with designing water infrastructure systems. Our firm's project experience and past dedication to the District provides the foundation needed to allow staff and management to trust that this project will be a success. We have a highly-qualified project team, superior project management, a clear understanding of the project needs, an aggressive project schedule, and proven experience with numerous similar projects. The table on the next page presents a summary of PBI's experience that is relevant to this project.



Electric Street Tank   S.000,000 gal partially buried prestressed concrete tank	Client	Project	Description
Pilacer County Water District Arts WPP Storage Tanks B0,000 gal clarerwish and two 10,000 gal welded steel tanks B0,000 gal, sycloted steel tank Water Treatment Plant Clearwell 1,000,000 gal welded steel tank Tuolumne Irrigation District President Public Utility District Regional Surface Water Supply Project - Terminal Facilities Trank Condition Assessment and Rehabilitation Northern California Tribe Water Treatment Facility Water Treatment Facility Water Treatment Facility Anticolo Disks Tank California American Water District  Arts Official Control of Pass Tank California American Water District  California American Water Treatment Plant  Troub California American Water Troublin WPP Postal Register  Troublin WPP Postal Register  Troublin WPP Postal Register  Troublin WPP Postal Register  Troublin With Pressonation  Troublin With Pressonation  Troublin With		rioject	Description
Foresthill Public Utility District  Foresthill Public Utility Dist		Electric Street Tank	5,000,000 gal partially buried prestressed concrete tank
Foresthill Public Utility District Valua County Value County Value County Value County Value County Value County Value Presented Plant Clearwell  Value (Value Quality County) Regional Surface Water Supply Project — Trouburne Irrigation District  Regional Surface Water Supply Project — Trouburne Irrigation District  Regional Surface Water Supply Project — Trouburne Irrigation District  Regional Surface Water Supply Project — Trouburne Irrigation District  Regional Surface Water Supply Project — Trouburne Irrigation District  Water Treatment Flant Lincoln Oals Tank  Lincoln Oals	Placer County Water District	Alta WTP Storage Tanks	
Tuolume Irrigation District Tu		Zone 3 Improvements	80,000 gal, 50,000 gal and two 10,000 gal welded steel tanks
Tuolumne Irrigation District City of Folsom Archard California American Water Treatment Facility California American Water California American Water California American Water District City of Folsom  Archard California American Water California American Water District City of Folsom  City of Folsom  Archard California American Water District City of Folsom  City o	Foresthill Public Utility District	Water Treatment Plant Clearwell	1,000,000 gal welded steel tank
Terminal Facilities   Tank Condition Assessment and Rehabilitation of 13 water storage tanks   Two 650,000 gal Locarwells, one 200,000 gal break tank, and two 650,000 gal welded steel tank   Luncoln Daks Tank   2,000,000 gal partially buried prestressed concrete tank   March Tank   2,000,000 gal welded steel tank   March Tank   March Tank   2,000,000 gal welded steel tank   March Tank   2,000 gal byten tank design and construction support   East Reservoir No. 1   2,000 gal byten tank design and construction support   East Reservoir No. 2   2,000 gal byten tank design and construction support   East Reservoir No. 2   2,000 gal byten tank design and construction support   East Reservoir No. 2   2,000 gal byten tank design and construction support   East Reservoir No. 2   2,000 gal byten tank design and construction support   East Reservoir No. 2   2,000 gal byten tank design and construction support   2,000 gal byten tank design and gal byten tank design and gal seel have habilitation design and construction support   2,000 ga	Yuba County	ÿ	250,000 gal bolted steel tank
Northern California Tribe  Water Treatment Facility  Walega Road Tank  Locol, Rola T	Tuolumne Irrigation District	Terminal Facilities	
Water Freatment Facility   two 50,000 gal backwash recovery tranks	City of Folsom	Tank Condition Assessment and Rehabilitation	
California American Water  Cook Risolo Tank  Cook Risolo Tank  Cook Risolo Tank  Cook Risolo Tank  Enterprise-Northrop Reservoir and BPS  Antelope Reservoir  Antelope Reservoir  Antelope Reservoir  Antelope Reservoir  Watt-Eikhorn Reservoir Condition Assessment of SM gallon reservoir operational assessment and rehabilitation design along with operations plan update  Antelope Reservoir Condition Assessment  Condition assessment of SM gallon reservoir operational assessment and rehabilitation design along with operations plan update  East Reservoir No. 1  East Reservoir No. 2  East Reservoir No. 2  Charron Tank  Amador Water Agency  MATER TREATMENT PLANS  Calaveras County Water District  Placer County Water District  Antelope Reservoir Rough Papasion  Foreshill Public Viller Petratent Plant  Ione Water Treatment Plant  Ione Water Treatment Plant  Ione Water Treatment Plant  Ione Water Treatment Plant  Penny Lind WTP Expansion  In gld treatment capacity increase  Bowman WTP Solids Handling  Solids driving beds  Auburn WTP  Smg water treatment capacity increase  Bowman WTP Solids Handling  Backwash waste treatment capacity increase  Ione WTP Expansion	Northern California Tribe	-	two 50,000 gal backwash recovery tanks
Cook Riolo Tank   S.000,000 gal partially buried prestressed concerte tank			
Enterprise Northrop Reservoir and BPS   Selegia along with operations plan update   Antelope Reservoir   Condition Assessment   Selegia along with operations plan update   Condition assessment of SM gallon reservoir   Candition assessment of SM gallon reservoir   Condition assessment of SM gallon reservoir   Candition assessment of SM gallon reservoir   Condition assessment of SM gallon reservoir   Candition assessment of SM gallon reservoir   Condition assessment of SM gallon reservoir   Conditio	California American Water		
Sacramento Suburban Water District   Antelope Reservoir   Antelope Reser		Cook Riolo Tank	
District   Antelope Reservoir   SM gallon reservoir podate of design along with operations in update   Watt-Eikhorn Reservoir Condition Assessment   Condition assessment of SM gallon reservoir   La Collina BPS Hydro Tank Replacement   2.500 gal hydro tank design and construction support   East Reservoir No. 1   3mgd steel tank rehabilitation design and construction support   Cimarron Tank   3mgd steel tank rehabilitation design and construction support   1   1   1   1   1   1   1   1   1	Sacramento Suburban Water	Enterprise-Northrop Reservoir and BPS	design along with operations plan update
City of Folsom		Antelope Reservoir	
City of Folsom         East Reservoir No. 1         3mgd steet tank rehabilitation design and construction support Cimarron Tank           Amador Water Agency         Tanner Water Treatment Plant         Two 260,000 gal welded steel tanks and construction support Two 260,000 gal welded steel tanks and construction support Water Treatment Plant         90,000 gal welded steel tanks and construction support Water Treatment Plant           VATER TREATMENT PLANTS           Calaveras County Water District           Placer County Water Agency         Jenny Lind WTP Expansion         1 mgd treatment capacity increase           Alta WTP Expansion         150 gpm treatment capacity increase           Aburun WTP         8 mgd water treatment plant           Foothill WTP Filter Rehabilitation         15 mgd filter media and underdrains           1 one WTP Solids Handling         Solids drying beds           1 one WTP Solids Handling         Backwash waste treatment           1 one WTP Solids Handling         Solids drying beds           1 west Socramento         Bregional Surface Water Supply Project         65 mgd water treatment plant           Yuba City         Yuba City WTP Expansion         15 mgd treatment capacity increase           West Socramento         Bryte Bend WTP Expansion         15 mgd treatment capacity increase           West Socramento         Bryte Bend WTP Expansion         20 mgd treatment capacity increase <td></td> <td>Watt-Elkhorn Reservoir Condition Assessment</td> <td>Condition assessment of 5M gallon reservoir</td>		Watt-Elkhorn Reservoir Condition Assessment	Condition assessment of 5M gallon reservoir
East Reservoir No. 2   2mgd steet tank rehabilitation design and construction support climate and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation design and construction support to make the stank rehabilitation facility increase.    Placer County Water Agency		La Collina BPS Hydro Tank Replacement	
East Reservoir No. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	City of Folsom		
Amador Water Agency  WATER TREATMENT PLANTS  Calaveras County Water District  Beny Lind WTP Expansion  Amador Water Agency  Forbilli WTP Fixer Rehabilitation  Jone WTP Solids Handling  Buckbror WTP Solids Handling  B	5.5, 51 1 5.55111		
Ione Water Treatment Plant   90,000 gal welded steel tank		Cimarron Tank	
WATER TREATMENT PLANTS  Calaveras County Water District  Jenny Lind WTP Expansion  Jone WTP  Solids Handling  Jone WTP Solids Handling  Jone WTP Solids Handling  Jenny Lind WTP Expansion  Jenny Lind WTP Expansion  Jenny Lind WTP Expansion  Jenny Lind WTP Solids Handling  Jenny Lind Lind Lind Lind Lind Lind Lind Lind	Amador Water Agency	Tanner Water Treatment Plant	Two 260,000 gal welded steel tanks
Lark Float Polith Care   Lark Float Polith Care   Lark Fled WTP Expansion   1 mgd treatment capacity increase		Ione Water Treatment Plant	90,000 gal welded steel tank
Jenny Lind WTP Pretreatment   6 mgd clarification/sedimentation facility	WATER TREATMENT PLANTS		
Jenny Lind With Pretreatment   bing of carrication/sedimentation facility	Calaveras County Water District		
Placer County Water Agency   Auburn WTP   Solids Handling   Solids drying beds   Auburn WTP   Solids Handling   Solids drying beds   Auburn WTP   Foothill WTP Filter Rehabilitation   15 mgd filter media and underdrains   1,000 gpm treatment capacity increase   1,000 gpm treatment plant   1,000 gpm treatment capacity increase   1,000 gpm treatment capacity increase   1,000 gpm treatment   1,000 gpm tre	Calarenas county trate. Distinct	,	
Auburn WTP Foothill WTP Filter Rehabilitation Foothill WTP Filter Rehabilitation I 5mgd filter media and underdrains lone WTP Expansion I,000 gmm treatment capacity increase lone WTP Solids Handling Backwash waste treatment Bucknor WTP Solids Handling Bucknor WTP Solids Handling Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project Solids drying beds Solids drying			
Audum W 1 Filter Rehabilitation 1 5 mgd filter media and underdrains  Ione WTP Expansion 1,000 gpm treatment capacity increase  Ione WTP Solids Handling 8ackwash waste treatment  Tanner WTP Solids Handling 8ackwash waste treatment  Buckhorn WTP Solids Handling Solids drying beds  Tuolumne Irrigation District Regional Surface Water Supply Project 55 mgd water treatment plant  Yuba City Yuba City WTP Expansion 15 mgd treatment capacity increase  West Sacramento Bryte Bend WTP Expansion 20 mgd treatment capacity increase  West Sacramento Northeast Water Treatment Plant 30 mgd water treatment plant  Port of Stockton WTP Feasibility Study 8 mgd water treatment plant  Port of Stockton WTP Feasibility Study 3 mgd water treatment plant  California American Water WTP Feasibility Study 3 mgd water treatment plant  California American Water Larkfield WTP besibility Study 3 mgd water treatment plant  California American Water Larkfield Pipelines Design and CM for a new arsenic treatment system  PIPELINES  California American Water Larkfield Pipelines 15,500 feet of new water main in conjunction with bridge improvements  Elverta Road Bridge Pipeline 1,500 feet of new water main in conjunction with bridge improvements  Browns Valley Irrigation District Highway 20 Pipeline Replacement 13,500 feet of new water main  Foresthill Public Utility District Foresthill Road Pipeline Replacement 5,600 feet of pipeline including three cased highway crossings  Mosquito Road Pipeline Replacement 6,000 feet of pipeline including three cased highway crossings  Foresthill Road Pipeline Replacement 6,000 feet of pipeline including three cased highway crossings  Foresthill Road Pipeline Replacement 6,000 feet of pipeline including three cased highway crossings  Foresthill Road Pipeline Replacement 6,000 feet of pipeline including three cased highway crossings  Foresthill Road Pipeline Replacement 6,000 feet of pipeline including three cased highway crossings  Foresthill Road Pipeline Replacement 7,200 feet of cross-country pipeline  Dutch Flat	Placer County Water Agency		
Amador Water Agency    Ione WTP Expansion   1,000 gpm treatment capacity increase	, <u>,</u>		
Ione WTP Solids Handling   Backwash waste treatment			
Amador Water Agency Tanner WTP Solids Handling Buckhorn WTP Solids Handling Buckhorn WTP Solids Handling Buckhorn WTP Solids Handling Solids drying beds Solids drying beds Solids drying beds Tuolumne Irrigation District Yuba City Yuba City Wtb Expansion Bryte Bend WTP Expansion Solids drying beds Solids drying deather treatment plant Solids drying beds Solids drying beds Solids drying beds Solids drying deather treatment plant Solids drying deathers treatment plant Solids drying deat			
Buckhorn WTP Solids Handling   Solids drying beds	Amador Water Agency	-	
Tuolumne Irrigation District  Regional Surface Water Supply Project  Ges mgd water treatment plant  Yuba City WTP Expansion  Bryte Bend WTP Expansion  On Mortheast Water Treatment Plant  Port of Stockton  WTP Feasibility Study  Bryte Bend WTP Expansion  California American Water  PIPELINES  Zo21 Backyard Main Replacement  Elverta Road Bridge Pipeline  Bradshaw Road Pipeline  Browns Valley Irrigation District  Foresthill Public Utility District  Placer County Water Agency  Placer County Water Agency  Red Soan Water Supply Project  Yuba City WTP Expansion  Bryte Bend WTP Expansion  Songd water treatment plant  30 mgd water treatment plant  30 mgd water treatment plant  Browns Valley Irrigation District  Regional Surface Water Treatment Plant  30 mgd water treatment plant  30 mgd water treatment plant  30 mgd water treatment plant  40 mgd water treatment plant  41 mgd water treatment plant  42 mgd water treatment plant  43 mgd water treatment plant  44 mgd water treatment plant  45 mgd water treatment plant  46 mgd water treatment plant  47 mgd water treatment plant  48 mgd water treatment plant  49 mgd water treatment plant  40 mes mgd water treatment plant  41 pes mgd water treatment plant  42 mg water treatment plant  42 mg water treatment plant  43 mgd			
Yuba City         Yuba City WTP Expansion         15 mgd treatment capacity increase           West Sacramento         Bryte Bend WTP Expansion         20 mgd treatment capacity increase           City of Fresno         Northeast Water Treatment Plant         30 mgd water treatment plant           Port of Stockton         WTP Feasibility Study         8 mgd water treatment plant           Georgetown PUD         WTP Feasibility Study         3 mgd water treatment plant           California American Water         Larkfield WTP         Design and CM for a new arsenic treatment system           PIPELINES           California American Water         Larkfield Pipelines         Designed three water mains and 330 service laterals           Larkfield Pipelines         Designed three water main improvements to replace existing failing infrastructure           Bradshaw Road Pipeline         3,000 feet of new water main in conjunction with bridge improvements           Isleton Distribution System Improvements         Design of new pipelines and water service connections through levee           2020 Priority Mains Replacement         13,500 feet of new water mains           Browns Valley Irrigation District         Sicard Pipeline         10 miles of cross-country water main           Foresthill Public Utility District         Mosquito Road Pipeline Replacement Project         5,600 feet of pipeline including three cased highway crossings	Tuolumno Irrigation District		
West Sacramento         Bryte Bend WTP Expansion         20 mgd treatment capacity increase           City of Fresno         Northeast Water Treatment Plant         30 mgd water treatment plant           Port of Stockton         WTP Feasibility Study         8 mgd water treatment plant           Georgetown PUD         WTP Feasibility Study         3 mgd water treatment plant           California American Water         Larkfield WTP         Design and CM for a new arsenic treatment system           PIPELINES         2021 Backyard Main Replacement         15,500 feet of new water mains and 330 service laterals           Larkfield Pipelines         Designed three water main improvements to replace existing failing infrastructure           Bradshaw Road Pipeline         3,000 feet of new water main improvements to replace existing failing infrastructure           Bradshaw Road Pipeline         1,500 feet of new water main in conjunction with bridge improvements           Browns Valley Irrigation District         Isleton Distribution System Improvements         Design of new pipelines and water service connections through levee           Browns Valley Irrigation District         Sicard Pipeline         13,500 feet of new water main           Highway 20 Pipeline Realignment         5,600 feet of pipeline including three cased highway crossings           Foresthill Road Pipeline Replacement Project         6,200 feet of pipeline along major roadway           Flectric	-		
City of Fresno         Northeast Water Treatment Plant         30 mgd water treatment plant           Port of Stockton         WTP Feasibility Study         8 mgd water treatment plant           Georgetown PUD         WTP Feasibility Study         3 mgd water treatment plant           California American Water         Larkfield WTP         Design and CM for a new arsenic treatment system           PIPELINES         2021 Backyard Main Replacement         15,500 feet of new water mains and 330 service laterals           Bradshaw Road Pipelines         Designed three water main improvements to replace existing failing infrastructure           Bradshaw Road Pipeline         1,500 feet of new water main           Elverta Road Bridge Pipeline         1,500 feet of new water main in conjunction with bridge improvements           Isleton Distribution System Improvements         Design of new pipelines and water service connections through levee           2020 Priority Mains Replacement         13,500 feet of new water mains           Browns Valley Irrigation District         Sicard Pipeline         10 miles of cross-country water main           Foresthill Public Utility District         Mosquito Road Pipeline Replacement         5,600 feet of pipeline including three cased highway crossings           Foresthill Road Pipeline Replacement         6,000 feet of pipeline along major roadway           Electric Street Pipeline         3,500 feet of cross-country pipeline <td>•</td> <td></td> <td></td>	•		
Port of Stockton   WTP Feasibility Study   8 mgd water treatment plant			
Georgetown PUD WTP Feasibility Study 3 mgd water treatment plant California American Water Larkfield WTP Design and CM for a new arsenic treatment system  PIPELINES  2021 Backyard Main Replacement 15,500 feet of new water mains and 330 service laterals Larkfield Pipelines Designed three water main improvements to replace existing failing infrastructure Bradshaw Road Pipeline 3,000 feet of new water main in conjunction with bridge improvements  Elverta Road Bridge Pipeline 1,500 feet of new water main in conjunction with bridge improvements  Isleton Distribution System Improvements Design of new pipelines and water service connections through levee 2020 Priority Mains Replacement 13,500 feet of new water mains  Sicard Pipeline 10 miles of cross-country water main  Highway 20 Pipeline Realignment 5,600 feet of pipeline including three cased highway crossings Mosquito Road Pipeline Replacement Project 6,200 feet of pipeline replacement  Foresthill Public Utility District Foresthill Road Pipeline Replacement 6,000 feet of pipeline along major roadway  Electric Street Pipeline 3,500 feet of cross-country pipeline Dutch Flat Mutual Consolidation 2 miles of distribution pipe replacement  Keena Bell Pipeline 2,100 feet of cross-country pipeline Channel Hill Pipeline Improvements 1,200 feet of 6 inch water mains  Red Ravine Siphon Project 1,000 feet of 24 inch raw water main	•		
California American Water  PIPELINES  2021 Backyard Main Replacement Larkfield Pipelines Bradshaw Road Pipeline Bradshaw Road Pipeline  Elverta Road Bridge Pipeline  Isleton Distribution System Improvements 2020 Priority Mains Replacement 15,500 feet of new water main improvements to replace existing failing infrastructure Browns Valley Irrigation District  Foresthill Public Utility District  Placer County Water Agency  Earkfield WTP  Design and CM for a new arsenic treatment system  15,500 feet of new water main in provements to replace existing failing infrastructure  Browns Valley Irrigation District  Sicard Pipeline 10,500 feet of new water main in conjunction with bridge improvements  Design of new pipelines and water service connections through levee  13,500 feet of new water mains  10 miles of cross-country water main  Sicard Pipeline 10 miles of cross-country water main  Highway 20 Pipeline Replacement Project Foresthill Road Pipeline Replacement Foresthill Road Pipeline Replacement  Electric Street Pipeline 2,100 feet of pipeline along major roadway  Electric Street Pipeline 2,100 feet of cross-country pipeline  Channel Hill Pipeline Improvements Red Ravine Siphon Project 1,000 feet of 24 inch raw water mains  Red Ravine Siphon Project 1,000 feet of 24 inch raw water main			
PIPELINES  2021 Backyard Main Replacement 15,500 feet of new water mains and 330 service laterals Designed three water main improvements to replace existing failing infrastructure  Bradshaw Road Pipeline 3,000 feet of new water main in conjunction with bridge improvements  Elverta Road Bridge Pipeline 1,500 feet of new water main in conjunction with bridge improvements  Isleton Distribution System Improvements Design of new pipelines and water service connections through levee 2020 Priority Mains Replacement 13,500 feet of new water mains  Sicard Pipeline 10 miles of cross-country water main Highway 20 Pipeline Realignment 5,600 feet of pipeline including three cased highway crossings Mosquito Road Pipeline Replacement Project 6,200 feet of pipeline replacement Protect 10,000 feet of pipeline along major roadway Electric Street Pipeline 2,100 feet of cross-country pipeline Channel Hill Pipeline Improvements 1,200 feet of 6 inch water mains Red Ravine Siphon Project 1,000 feet of 24 inch raw water main	<del>-</del>		
California American Water   California American Water   Elverta Road Bridge Pipeline   Design of new water main improvements to replace existing failing infrastructure   3,000 feet of new water main improvements to replace existing failing infrastructure   3,000 feet of new water main   1,500 feet of new water main   1,500 feet of new water main in conjunction with bridge improvements   1,500 feet of new water main in conjunction with bridge improvements   1,500 feet of new pipelines and water service connections through levee   1,500 feet of new water mains   1,500 feet of pipelines   1,500 feet of pipeline including three cased highway crossings   1,500 feet of pipeline including three cased highway crossings   1,500 feet of pipeline along major roadway   1,500 feet of pipeline along major roadway   1,500 feet of cross-country pipeline   1,500 feet of cross-count		·	
California American Water  Elverta Road Bridge Pipeline  Elverta Road Bridge Pipeline  Isleton Distribution System Improvements  Isleton Distribution System Improvements  Design of new pipelines and water service connections through levee  2020 Priority Mains Replacement  3,500 feet of new water mains  Design of new pipelines and water service connections through levee  2020 Priority Mains Replacement  13,500 feet of new water mains  Sicard Pipeline  10 miles of cross-country water main  Highway 20 Pipeline Realignment  5,600 feet of pipeline including three cased highway crossings  Mosquito Road Pipeline Replacement Project  Foresthill Public Utility District  Foresthill Road Pipeline Replacement  Foresthill Road Pipeline  2,000 feet of pipeline along major roadway  Electric Street Pipeline  Dutch Flat Mutual Consolidation  2 miles of distribution pipe replacement  Keena Bell Pipeline  Channel Hill Pipeline Improvements  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main		2021 Backyard Main Replacement	15,500 feet of new water mains and 330 service laterals
California American Water  Elverta Road Bridge Pipeline  Elverta Road Bridge Pipeline  Isleton Distribution System Improvements  Isleton Distribution System Improvements  Design of new pipelines and water service connections through levee  2020 Priority Mains Replacement  13,500 feet of new water mains  Sicard Pipeline  10 miles of cross-country water main  Highway 20 Pipeline Realignment  5,600 feet of pipeline including three cased highway crossings  Mosquito Road Pipeline Replacement Project  Foresthill Public Utility District  Mosquito Road Pipeline Replacement Project  Foresthill Road Pipeline Replacement  Foresthill Road Pipeline  Dutch Flat Mutual Consolidation  Electric Street Pipeline  Dutch Flat Mutual Consolidation  Z miles of distribution pipe replacement  Keena Bell Pipeline  Channel Hill Pipeline Improvements  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main		Louisiald Dinations	Designed three water main improvements to replace existing
Elverta Road Bridge Pipeline  Isleton Distribution System Improvements  Isleton Distribution System Improvements  Design of new pipelines and water service connections through levee  2020 Priority Mains Replacement  13,500 feet of new water mains  Sicard Pipeline  10 miles of cross-country water main  Highway 20 Pipeline Realignment  5,600 feet of pipeline including three cased highway crossings  Mosquito Road Pipeline Replacement Project  Foresthill Public Utility District  Mosquito Road Pipeline Replacement  Foresthill Road Pipeline Replacement  Foresthill Road Pipeline  Blectric Street Pipeline  Dutch Flat Mutual Consolidation  Electric Street Pipeline  Dutch Flat Mutual Consol		Larkfield Pipelines	failing infrastructure
Isleton Distribution System Improvements   Design of new pipelines and water service connections through levee   2020 Priority Mains Replacement   13,500 feet of new water mains   Sicard Pipeline   10 miles of cross-country water main   Highway 20 Pipeline Realignment   5,600 feet of pipeline including three cased highway crossings   Mosquito Road Pipeline Replacement Project   6,200 feet of pipeline replacement   Foresthill Road Pipeline Replacement   6,000 feet of pipeline along major roadway   Electric Street Pipeline   3,500 feet of cross-country pipeline   Dutch Flat Mutual Consolidation   2 miles of distribution pipe replacement   Keena Bell Pipeline   Channel Hill Pipeline Improvements   1,200 feet of 6 inch water mains   Red Ravine Siphon Project   1,000 feet of 24 inch raw water main		Bradshaw Road Pipeline	3,000 feet of new water main
Browns Valley Irrigation District  Foresthill Public Utility District  Foresthill Road Pipeline Replacement Project Foresthill Road Pipeline Replacement Project Foresthill Road Pipeline Replacement Foresthill Road Pipeline Blectric Street Pipeline Dutch Flat Mutual Consolidation Dutch Flat Mutual Consolidation Dutch Flat Mutual Consolidation Evena Bell Pipeline Channel Hill Pipeline Improvements Red Ravine Siphon Project  1,000 feet of 24 inch raw water main	California American Water	Elverta Road Bridge Pipeline	
Browns Valley Irrigation District   Sicard Pipeline   10 miles of cross-country water mains		Isleton Distribution System Improvements	Design of new pipelines and water service connections
Sicard Pipeline   10 miles of cross-country water main		2020 Priority Mains Replacement	
Foresthill Public Utility District  Highway 20 Pipeline Realignment  Mosquito Road Pipeline Replacement Project  Foresthill Road Pipeline Replacement  S,500 feet of pipeline along major roadway  I will pipeline  Dutch Flat Mutual Consolidation  2 miles of distribution pipe replacement  Keena Bell Pipeline  Channel Hill Pipeline Improvements  1,200 feet of 6 inch water mains  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main	Browns Valley Irrigation District		·
Foresthill Public Utility District  Mosquito Road Pipeline Replacement Project  Foresthill Road Pipeline Replacement  Foresthill Road Pipeline Replacement  6,000 feet of pipeline along major roadway  Electric Street Pipeline  Dutch Flat Mutual Consolidation  2 miles of distribution pipe replacement  Keena Bell Pipeline  Channel Hill Pipeline Improvements  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main			,
Foresthill Public Utility District  Foresthill Road Pipeline Replacement  Electric Street Pipeline  Dutch Flat Mutual Consolidation  Ener County Water Agency  Placer County Water Agency  Placer County Water Agency  Red Ravine Siphon Project  Foresthill Road Pipeline Replacement  3,500 feet of pipeline along major roadway  2 miles of distribution pipe replacement  2,100 feet of cross-country pipeline  1,200 feet of 6 inch water mains  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main	Foresthill Public Utility District		
Placer County Water Agency  Electric Street Pipeline  Dutch Flat Mutual Consolidation  Z miles of distribution pipe replacement  Keena Bell Pipeline  Channel Hill Pipeline Improvements  Red Ravine Siphon Project  2,500 feet of cross-country pipeline  1,200 feet of 6 inch water mains  1,000 feet of 24 inch raw water main			
Placer County Water Agency  Dutch Flat Mutual Consolidation  Z miles of distribution pipe replacement  Keena Bell Pipeline  2,100 feet of cross-country pipeline  Channel Hill Pipeline Improvements  1,200 feet of 6 inch water mains  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main			
Placer County Water Agency  Keena Bell Pipeline  Channel Hill Pipeline Improvements  Red Ravine Siphon Project  Z,100 feet of cross-country pipeline  1,200 feet of 6 inch water mains  Red Ravine Siphon Project  1,000 feet of 24 inch raw water main			
Channel Hill Pipeline Improvements 1,200 feet of 6 inch water mains  Red Ravine Siphon Project 1,000 feet of 24 inch raw water main	Placer County Meter Assess		
Red Ravine Siphon Project 1,000 feet of 24 inch raw water main	riacer County water Agency	Channel Hill Pipeline Improvements	1,200 feet of 6 inch water mains
Ophir Pipeline Extension 2,200 feet of water transmission main		Red Ravine Siphon Project	
			2,200 feet of water transmission main



Client	Project	Description		
	Historic District Main Replacement	1.5 miles of 8 inch water and sewer main replacement		
City of Folsom	Oak Avenue Parallel Pipeline Project	2,400 feet of 10 inch sanitary sewer force main		
·	Crestridge Lane Water Main Replacement	2,000 feet of 8 inch water main		
	Ebbetts Pass Reach 3A	Peer review and construction phasing plan		
Calaveras County Water District	Highway 26 Transmission Line	7,300 feet of 12 inch water main		
Northern California Tribe	Water Supply Project	7 miles of cross country transmission mains		
	Water Line Relocation for I-80 Auxiliary Lanes	Design of relocation plans for 3 conflicting water lines		
City of Roseville	Transmission Mains Evaluation	Risk based condition assessment of all transmission mains within the City		
City of Sacramento	Tahoe Park and Little Pocket Area Backyard Main Replacement	9 miles of distribution pipe replacement		
City of Stockton	North Stockton Pipelines	Two parallel 5 mile cross-country mains – 30 inch water main and 42" sanitary sewer		
	South Stockton Transmission Main	5 miles of 42 inch water transmission main		
PUMP STATIONS				
City of Folsom	Glenborough Booster Pump Station	4,700 gpm pump station		
City of Foisoffi	GSWC Intertie Pump Station	2,000 gpm pump station		
Sacramento Suburban Water District	Antelope Booster Pump Station	Operational assessment and rehabilitation of 10,000 gpm pump station		
	Watt -Elkhorn Booster Pump Station	Operational assessment and rehabilitation of 8,000 gpm pump station		
	Enterprise-Northrop Booster Pump Station	Operational assessment and rehabilitation of 8,000 gpm pump station		
Yuba City				
	WTP Effluent Pump Station Expansion	Design to increase pump station capacity from 35 mgd to 45 mgd		
Foresthill Public Utility District	Hardrock Lane PRV Station	Design of new above grade PRV station		
California American Water	Cook Riolo Pump Station	3,000 gpm booster pump station		
	Arden Intertie Pump Station	1,800 gpm pump station for intertie with City of Sacramento		
	Roseville Rd Booster Pump Station	5,400 gpm pump station		
Calaveras County Water District	Highway 26 PRV Improvements	Design for 4 additional PRV stations		
Northern California Tribe	Water Supply Project	8,000 gpm high head raw water intake pump station		
Stockton East Water District	Effluent Pump Station Replacement	60 mgd pump station		
Edgewood Water Company	Edgewood/Kingsbury Intertie Pump Station	2,000 gpm pump station		

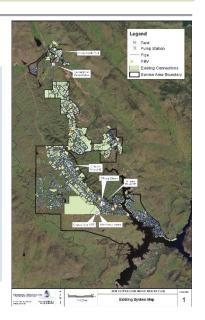
# **EXPERIENCE AND PROJECT EXAMPLES**

# Copper Cove Water Master Plan Calaveras County Water District (CCWD)

- Evaluated historical water demands and growth rates for the Copper Cove system
- Developed existing and build-out conditions water system models utilizing Innovyze InfoWater to assess the system in comparison to District design standards.
- Developed capital improvement projects including: storage tanks, treatment facilities, booster pump stations, & distribution system piping
- Updated water master plan and provided capacity charge updates
- Evaluated existing capacity charges and made recommendations for new updated charges
- Estimated costs for build-out conditions
- Updated water master plan



Client Reference: Charles Palmer, District Engineer, CCWD (209) 754-3174, charlesp@ccwd.org





#### **West Point Water Treatment Plant**

## Calaveras County Water District (CCWD)

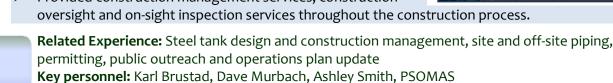
- Design services for 600 Gpm modular treatment plant. Facility incorporates single modular package treatment unit, chemical feed systems, SCADA controls, and backwash clarification.
- Provided construction management support services



**Related Experience:** Project experience with District staff **Key personnel:** Karl Brustad, Dave Murbach, Ashley Smith, Brayden Leach Client Reference: Sam Singh, Engineer, CCWD (209) 754-3179, sams@ccwd.org

# **1MG WTP Clearwell Siting Study Foresthill Public Utility District**

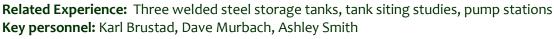
- Performed a siting study and design for a 1MG potable welded steel water storage tank and foundation
- Performed condition assessment of three existing bolted steel tanks
- Included geotechnical investigation
- Design included site grading, site piping, offsite piping and an access road
- Provided construction management services, construction



Client Reference: Hank White, General Manager, Foresthill Public Utility District, (530) 367-2511, GM@foresthillpud.com

# Ione, Buckhorn, and Tanner Water Treatment Plants Amador Water Agency (AWA)

- > Developed condition assessment and preliminary design reports
- Developed plans and specifications to eliminate backwash waste discharges from the WTPs
- ➤ Ione WTP Developed plans and specifications for expanding Ione packaged WTP capacity from 4 mgd to 6 mgd, included 90,000 gal welded steel backwash recovery tank and return pump station.
- ➤ Buckhorn WTP Design and Construction Management of backwash recovery system that included rapid sand drying beds (Deskins), plate settlers and return pump station.
- > Tanner WTP Design of WTP effluent pump station modifications, backwash recovery system that included two 260,000 gal backwash recovery tanks, solids separation filters, and return pump station.
- Developed updated operations plans



Client Reference: Erik Christeson, Supervising Engineer, AWA – currently General Manager at Kirkwood Meadows PUD (209) 256-0394







## Welded Steel Tank Rehabilitation Design and CM: East Reservoir No. 2, Reservoir No. 1, and Cimarron Tank **City of Folsom**

- Developed plans and specifications for rehabilitation of three existing welded steel tanks, including recoating and miscellaneous improvements to Reservoir No. 1 (3MG), East Reservoir No. 2 (3MG) and Cimarron Tank (3MG)
- Provided construction management services including on-site inspection, included NACE certified coating inspectors
- Project included seismic retrofit for inlet and outlet piping, new wrapped stairway, and interior and exterior recoating



Key personnel: Karl Brustad, Dave Murbach, Ashley Smith

Client Reference: Marcus Yasutake, Environmental and Water Resources Director, City of Folsom, (916)

351-3528, myasutake@folsom.ca.us



## Tank Master Plan, Inspection, Maintenance and Rehabilitation Program City of Folsom

- Program designed to inspect and repair the City's 13 aging water storage reservoirs
- Developed Tank Rehabilitation Master Plan Included condition assessments of each tank, identified necessary improvements, capital costs, and prioritized tanks for rehabilitation
- efforts for 2 and 3MG welded steel tanks

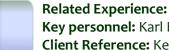
Related Experience: Tank Rehabilitation Master Plan, Tank coating design and construction

**Key personnel:** Karl Brustad, Dave Murbach, Ashley Smith

Client Reference: Marcus Yasutake, Environmental and Water Resources Director, City of Folsom, (916) 351-3528, myasutake@folsom.ca.us



- Performed a feasibility study that would identify a new, sustainable source of water to supplement the existing groundwater sources
- Design of new 250,000 gal bolted steel tank
- Condition assessment of existing bolted steel tank.
- Provided construction management services including on-site inspection



**Key personnel:** Karl Brustad, Ashley Smith

Client Reference: Kevin Perkins, Principal Planner, Yuba County (530) 749-5470, kperkins@co.yuba.ca.us





## Arden Intertie Booster Pump Station California American Water (Cal Am)

- Provided design services for 1,800 gpm intertie booster pump station to supply Cal Am with surface water from City of Sacramento in Cal Am's Arden system
- ➤ Included 1,500 feet of water distribution mains
- Included coordination with City of Sacramento Dept. of Utilities for communication and control of flow meter
- Project included development of plans, specs, and cost estimate
- Developed water supply permit amendment to incorporate surface water
- Included support during construction and start up



**Related Experience:** Pipeline Design, Booster Pump Station Design, Water Supply Permit Amendment **Key personnel:** Karl Brustad, Dave Murbach, Ashley Smith

Client Reference: Steven Dutch, Senior Project Manager, (916)568-4293, steven.dutch@amwater.com



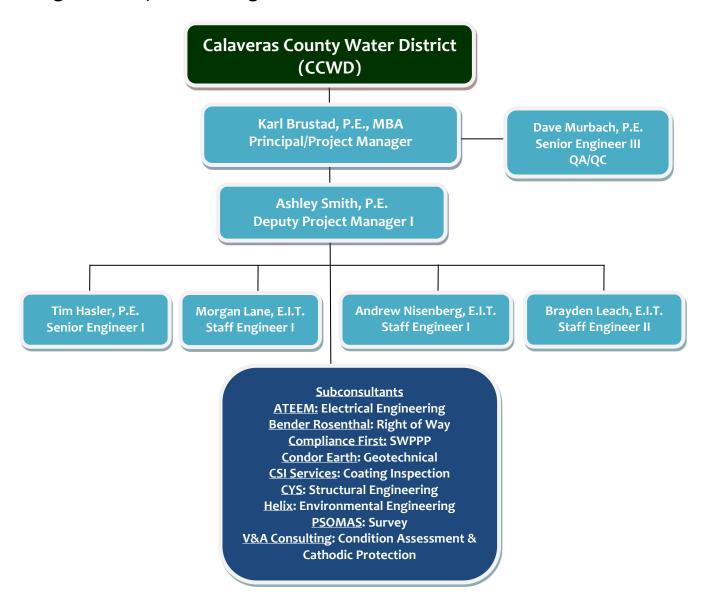


### PROJECT TEAM AND SUBCONSULTANTS

Our team will be led by Karl Brustad, founding principal at PBI, with extensive experience with all related project elements including over 21 years of direct experience supporting CCWD projects. Karl Brustad will serve as the overall project manager and will be CCWD's primary point of contact and will oversee all aspects of the project. Karl is an experienced, highly qualified Project Manager that is committed to your project. Ashley Smith will serve as Deputy Project Manager under the charge of Karl Brustad. Dave Murbach, Senior Engineer III will provide QA/QC. Tim Hasler, Senior Engineer 1 will provide support as needed and Brayden Leach, Andrew Nisenberg, and Morgan Lane will serve as staff engineers. We have supplemented our team with specialty consultants that we have worked with in the past. We are confident that our team of qualified engineers has the experience and expertise to make the project a success for the District.

Our team has extensive and directly relevant experience relating to the design and construction of water storage tanks, pump stations and pipelines. Figure 1 presents our project team organizational chart, which is followed by relevant experience of our key staff.

Figure 1 – Project Team Organizational Chart





## **Highly Qualified Principal-in-Charge**

# Karl Brustad, P.E. Principal-in-Charge/Project Manager





M.B.A. CSU, Sacramento
B.S. Civil Engineering, CSU Chico
Professional Civil Engineer, CA
CA Grade IV Water Treatment Operator
Over 50 Water Storage Tank Projects
Over 60 Pump Station Projects

## Technical Specialties

- Water/wastewater infrastructure planning, design and operation
- Water treatment planning and design
- Construction management
- ❖ Water/wastewater master planning

Karl started working for the District in 2001, on the West Point/Wilseyville/Bummerville System Improvements Feasibility Study. He has authored several water and wastewater master plans, designed improvements at multiple water treatment plants, and designed pipeline improvements for the District. Karl has successfully supported over 30 different projects for the District in the past 20+ years including multiple projects for the Copper Cove Water System; Copper Cove Water Master Plan, C Tank transmission main and pump station, and Copper Cover operations plan update:

#### **Project Highlights**

- West Point Water Supply Reliability Project CCWD Design of redundant water treatment unit.
- **Reservoir 1 Storage Analysis** EID utilized hydraulic model to recommend replacements for 3 reservoirs.
- **Jenny Lind WTP Pretreatment** –CCWD Design of pretreatment process for the Jenny Lind WTP
- **Jenny Lind WTP Expansion** CCWD Designed expansion of packaged WTP to 6MGD
- Regional Surface Water Supply Project Turlock Irrigation District (TID) –program manager for \$250M regional surface water supply project, 30 mgd WTP, 4 tanks and pump stations, and 17 miles of t-mains
- 1MG WTP Clearwell Tank Siting Study and Design Forest Hill Public Utility District – Design, and construction

management services for a 1 MG welded steel water storage tank.

- Bowman and Alta Water Treatment Plants Backwash Storage Tanks- Placer County Water Agency 2 new 100,000 gallon welded steel tanks and recoating of 1MG and 100,000 gallon welded steel tanks
- Tank Rehabilitation Master Plan City of Folsom Included: condition assessment and recommended prioritized improvements for 13 tanks
- Copper Cover Water Master Plan CCWD developed 2018 water master for the Copper Cove Water System.
- WTP Operations Plan Updates CCWD updated operations plans for Copper Cove, Jenny Lind and Hunters WTPs.

# Dave Murbach, P.E., Senior Engineer III





B.S. Chemical Engineering, UC - Davis Professional Civil Engineer, CA Over 40 Water Storage Tank Projects Over 30 Pump Station Projects

### Technical Specialty

- ❖ Water infrastructure planning and design
- ❖ Water Treatment Facilities
- Disinfection and Chemical Feed Facilities
- Water master planning

Dave will be the senior engineer in charge of QA/QC. Dave has more than 35 years of experience in the planning and design of potable water treatment facilities and associated infrastructure including pump stations, tanks, and pipelines. His specific areas of expertise include water treatment process design, distribution pump station and pipeline design, disinfection of water, chemical feed and storage systems, and drinking water regulations.

Dave has served as a senior engineer on more than 15 projects for CCWD over the years. He is intimately familiar with the District staff, organizational structure, and District methods and practices making him the ideal staff member to provide QA/QC on this project.

- Jenny Lind WTP Pretreatment -CCWD
- Regional Surface Water Supply Project TID
- 1MG WTP Clearwell Siting Study and Design FPUD
- WTP Operations Plan Updates CCWD



# Ashley Smith, P.E., Deputy Project Manager I





B.S. Civil Engineering, UC - Davis Professional Civil Engineer, CA Grade II Water Treatment Plant Operator Over 10 Water Storage Tank Projects Over 15 Pump Station Projects

## **Technical Specialty**

- ❖ Water infrastructure planning and design
- ❖ Water master planning
- Hydraulic Modeling
- Auto CAD/Civil 3D Design

Ashley will serve as the Deputy Project Manager under Principal-in-Charge Karl Brustad. She has experience managing the PBI team as well as specialty subconsultants and has earned the trust and respect of clients and their staff since she joined PBI in 2014. Her design experience includes: water treatment plants, water storage tanks, pump stations, and pipelines. Sample relevant recent past and current projects include.

## **Project Highlights**

- **1MG WTP Clearwell Siting Study and Design** Forest Hill Public Utility District
- City of Folsom Water Master Plan City of Folsom
- Reservoir 1 Storage Analysis EID
- Gold Village Drought Resiliency Project –Yuba County Designed a new 37' diameter by 35' tall potable water tank with a useable volume of approximately 255,000 gallons. Design included site grading, drainage, electrical, SCADA, pipework and appurtenances, and obtaining all required permits
- East Reservoir No 2 Rehabilitation City of Folsom Design for the rehabilitation of a 3mg welded steel tank; new

coatings and seismic retrofit improvements

- Alta Water Treatment Plant Phases II and Phase III PCWA Design of the second and third phases of construction of the Alta WTP
- Tank Master Plan, Inspection, Maintenance, and Rehabilitation City of Folsom
- Colfax Twin Tanks Modifications and Drain Piping Improvements PCWA developed comprehensive plans and specifications, and provided bid support for the construction of the proposed improvements
- Water Supply Project Northern California Tribe

# Tim Hasler, P.E., Senior Engineer 1





B.S. Environmental Engineering, Cal Poly CSU Professional Civil Engineer, CA Grade II Water Treatment Plant Operator Grade II Water Distribution Operator Over 10 Water Storage Tank Projects Over 25 Pump Station Projects

## **Technical Specialty**

- ❖ Water storage design
- ❖ Water transmission/distribution design
- ❖ Water treatment design
- Water master planning

Tim joined the PBI team in 2020. He is an experienced engineer in the water utility industry with a demonstrated history of successfully managing and leading project teams from planning through construction completion of capital projects and programs, including planning, design, permitting, construction, and commissioning. Tim will act as senior engineer in support of Ashley Smith for this project. Relevant projects that Tim has supported while working for a water utility in the Sacramento area as well as with PBI are as follows:

- Capehart Tank Structural Analysis Sacramento Suburban Water District (SSWD) Provided peer review of the Capehart Tank structural analysis
- **Well N10 Pump Replacement** SSWD Developed bid documents for installation of a new pump
- Roseville Road Well Cal Am Designed new well and pump station.
- Fruitridge Vista Well 14 designed new well and pump station.
- Fruitridge Vista Backyard Main Replacements Cal Am
- Watt-Elkhorn Reservoir Condition Assessment SSWD Condition assessment including evaluation of coatings, CP system, of a 5MG welded steel reservoir
- Water Supply Project Northern California Tribe



## **Specialty Sub Consultants**

We have supplemented our team with specialty subconsultants that we have worked together with on numerous projects including several with the District. We have included ATEEM for electrical, a subconsultant we have worked with on dozens of projects including several important ones for CCWD: the Jenny Lind Water Treatment plant design, the Jenny Lind WTP Pre-treatment design, and currently the West Point Water Supply Reliability project. Bender Rosenthal will provide support for encroachment permits and Right-of-Way. Compliance First will develop the SWPPP for the project. Condor Earth, a firm we have teamed with on several projects including two with the District will provide geotechnical investigation. CSI Services will perform a condition assessment of both the interior and exterior coatings of the tanks. CYS Structural, another subconsultant that we have worked with on dozens of projects and has worked with the District on several recent projects, will provide the structural engineering for the new control building. Helix Environmental will prepare all necessary environmental studies and CEQA documentation. PSOMAS, a firm that PBI has worked with on more than two dozen projects will be responsible for topographic surveys and mapping. V&A Consulting, a firm that we are currently working with on two projects, will perform the condition assessments for the tanks. Information about our teaming partners is listed in the paragraphs below.



**ATEEM** specializes in planning, design and implementation of water and wastewater electrical power distribution, instrumentation and SCADA control system projects. They provide design and construction services for tank sites, water treatment plants, wastewater treatment plants, SCADA systems (designs, implementations and troubleshooting), booster pump stations, water wells, filters for wells, and pressure reducing stations

ATEEM provided the electrical design for the Jenny Lind WTP Expansion and Raw Water Pump Station Electrical Building projects and most recently teamed with PBI and provided electrical design services for the Jenny Lind WTP Pre-Treatment Design project. ATEEM is currently working with PBI on the West Point Water Supply Reliability project and also supports the District's SCADA system.

**Bender Rosenthal, Inc. (BRI)** is an industry leader in providing real estate appraisal, property acquisition, relocation, project management, planning, and land services throughout California. Since 1997, the BRI team of experts has delivered projects for both public and private client



team of experts has delivered projects for both public and private clients, providing appraisal and right of way services for projects such as pipelines, levees, rail lines, transit corridors, roadways, interchanges, electrical transmission lines, and



**Compliance First, LLC** was established to fulfill the need for creditable and reliable environmental, health and safety regulation guidance and support. Compliance First provides environmental oversight for each one of their clients. They handle all QSD/QSP needs from writing Storm

Water Pollution Prevention Plans (SWPPP's), sampling storm water run-on/run-off, and teaching/training on the California Construction and Industrial General Permits.

**Condor Earth** is a diversified, multidisciplinary organization providing a variety of earth and environmental sciences, geotechnical engineering, construction materials testing, and specialty inspection services. Condor Earth has worked with the District on a number of past projects including the Districts groundwater management programs and their recent leach field evaluation at the Arnold sewer treatment plant. Condor and PBI have teamed on numerous past projects and have a proven record of success including two with the District, the Jenny Lind pipeline design and currently the West Point Water Supply Reliability project.





Condor Earth has provided geotechnical engineering and environmental services to Calaveras County Water District (CCWD) for more than 3 decades. They recently completed a geotechnical engineering study for CCWD's Redwood Tank Replacement Project. The project consists of replacing 4 Redwood Tanks with 4 Steel Tanks. The 4 existing tanks are located along the Highway 4 corridor from Forest Meadows to Camp Connell, California. The geotechnical engineering study was completed and on schedule in February 2021. Condor also recently completed geotechnical studies and materials testing on the Reach 1 pipeline project from Murphys to Avery, CA. Condor performed the original geotechnical report for the Copper Cove Water Treatment Plant in 1996.



**CSI Services, Inc.** is a consulting engineering firm specializing in protective coatings and linings with specific expertise in storage tanks. CSI provides comprehensive coating consulting services including failure analysis, laboratory testing, expert witness, maintenance and corrosion surveys (dry and underwater), coating system evaluations, technical specifications, and in-process inspection of surface preparation and coating/lining applications. CSI is a completely independent firm enabling the delivery of totally unbiased services to owners and all members of the

tank, coating, and corrosion prevention community.

**CYS Structural Engineers** has provided structural design, investigation of existing structures, seismic analysis and retrofits, plan checking and peer review to the public and private sector for over 51 years. They have earned a reputation for designing projects that are coordinated and economical to build, resulting in few construction cost and time adjustments, thus meeting the owner's occupancy goals. Most recently, CYS Structural Engineers was part of the PBI team, providing structural design services for the Jenny Lind Water Treatment Plant Pre-Treatment Design.





HELIX Environmental Planning (HELIX) is a leader in environmental consulting and natural resource sustainability. Established in 1991 and with offices in San Diego, Los Angeles, Sacramento, Placer, Orange, and Riverside counties, HELIX is an employee-owned company providing a broad range of environmental and design services throughout California and the western U.S. HELIX has extensive experience helping public and private clients comply

with environmental laws and regulations, manage natural and cultural resources, and design and construct sustainable projects.

**PSOMAS** is a leading multi-discipline consulting firm providing public and private sector clients with services in surveying and mapping, geographic information systems, engineering, construction management, and environmental consulting. Psomas' surveyors understand responsiveness, communication, coordination, flexibility, timeliness, quality and budget adherence are the keys to Psomas successfully managing projects.





**V&A** has over 42 years of corrosion engineering experience including: cathodic protection (CP), corrosion engineering, condition assessment, flow monitoring, and coating system management. We specialize in evaluating, rehabilitating, and preserving municipal infrastructure. Our firm assists clients to evaluate and extend the remaining useful life of aging infrastructure,

primarily in the water, wastewater, and transit industries.



## PROJECT UNDERSTANDING AND APPROACH TO WORK

The Calaveras County Water District (CCWD, or the District) is moving forward with the planning, engineering design and design services for a series of high-profile capital improvements within it's Copper Cove water system that are critical to allowing the District to continue to reliably provide potable water services to the community.

Peterson Brustad Inc. (PBI) completed the Copper Cover Water System Master Plan (Plan) in 2018 and is intimately familiar with the high-profile capital improvement projects identified to be included in this effort. Our knowledge of the system is unmatched in the consulting environment and we have capitalized on this past experience by developing a thorough understanding and approach that best meets the needs of the District. The improvements identified in the SOQ/RFP are summarized below:

- New Water Treatment Plant Clearwell
- Existing Water Treatment Plant Clearwell Condition Assessment and Rehabilitation
- B Tank (Redwood) Replacement
- B Tank (Steel) Condition Assessment and Rehabilitation
- B Zone Booster Pump Station Replacement
- Lake Tulloch Emergency Intertie Project Assessment (Optional)
- C1 and Copper Valley Transmission Main (Optional)
- C-Tanks Overflow Discharge Improvements (Optional)



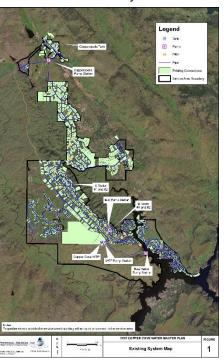
New Water Treatment Plan Clearwell: There are several deficiencies

associated with the existing clearwell. Instead of only rehabilitating the existing clearwell, the District has decided to construct a new, second clearwell, and evaluate if the existing clearwell can be rehabilitated economically. The District desires to place the new clearwell as close as practical to the existing clearwell. Two possible areas for the new clearwell are located north and east of the existing clearwell. The C-T calcs will be utilized to support the design and size the new clearwell. The new clearwell will be equipped with cathodic protection and all other features typical of an above-ground clearwell and storage tank. The design shall allow for maximum head allowed for gravity filling and provide for forced air ventilation to reduce corrosion caused by off-gassing of chlorine gas inside the clearwells. The two clearwells shall be configured to provide additional flexibility to the Operations Team by allowing these facilities to operate in parallel, in series, or with either taken offline for maintenance or repair.



#### Condition Assessment of Existing Water Treatment Plan Clearwell:

To assess necessary repairs, the existing clearwell shall be taken off-line for inspection. PBI will conduct a tank video assessment and identify the improvements (along with costs) needed to rehabilitate the existing clearwell. The District desires to identify whether rehabilitation of the existing clearwell or replacement of the clearwell is a wiser use of District funds. Once the District agrees with the recommendations, PBI will provide a scope and to complete design for existing clearwell improvements.





## Priorities #2 & #3: B Zone Improvements

Storage in the B Zone is achieved by two above-ground tanks of different sizes and materials. B Tank (Redwood) is approximately 50 years old and constructed of redwood, with a storage capacity of 0.3 million gallons (MG). B Tank (Steel) is approximately 30 years old and constructed of steel, with a storage capacity of 0.78 MG. Both tanks are in poor condition. The B Zone Tanks are currently required to meet C-T requirements from the WTP. The tanks are currently plumbed in series with the B Tank (Steel) isolated from the system and used for C-T compliance. The B Zone Tanks also serve as supply for the C Zone tanks. A 10" main conveys water from the B Zone Tanks to the C Zone Tanks.



B Tank (Redwood) Replacement: B Tank (Redwood) is in immediate need of replacement. While the Plan indicated a new tank size of 0.5 MG, the District instead desires to replace with a size equal to the existing redwood tank, 0.3MG. PBI will perform a confirmation analysis of existing and planned demands within the system to confirm the proposed size of the new B Zone Tank of 0.3 MG is not a short-sided decision. The Copper Cove Water Master Plan identified a total storage requirement of 611,000 gallons for existing conditions, 1,960,000 gallons for build-out conditions and 970,000 gallons with a 50 year planning horizon. As an optional task, the analysis shall also identify best operational practices for both tanks considering

demand from the B Zone once the new 20" transmission pipeline from the clearwell to the C Zone tanks is online. Analysis shall evaluate the possibility of disinfection by-products formation with both tanks in operation. The District does not have a preference on materials. The new B Zone tank shall be equipped with cathodic protection and all other features typical of an above-ground storage tank.

B Tank (Steel) Condition Assessment: To assess necessary repairs, the existing B Zone (Steel) tank shall be taken off-line for inspection. PBI will conduct a tank video assessment and identify the improvements (along with costs) needed to rehabilitate existing B Tank (Steel). The District desires to identify whether rehabilitation of the existing steel tank or replacement of the steel tank is a wiser use of District funds. Once the District agrees with the recommendations, PBI will provide a scope and fee to complete design for B Tank (Steel) improvements. B Tank (Steel) shall be equipped with cathodic protection and all other features typical of an aboveground storage tank.



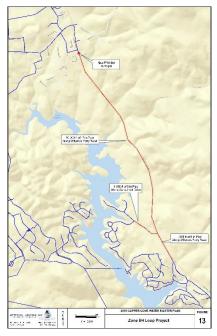


B Zone Booster Pump Station (BPS) Replacement: The B Zone Booster Pump Station (BPS) consists of three pumps, with the largest operating at a flow rate of approximately 900 gallons per minute (gpm) and the two others of equal flow rate of approximately 400 gpm. In the summer, the largest pump is operated as the lead pump and the smaller pumps are operated as the lag pumps. In times of lower demand, the smaller pumps are placed in lead. Operations staff noted that the BPS output is limited to approximately 1,100gpm with all pumps running due to the hydraulic bottleneck between B Tanks and C Tanks.



The B Zone BPS and control building, the mechanical, electrical, and instrumentation components are aged and need to be replaced to improve staff safety and system reliability. The building and backup power supply are also in poor condition and need to be replaced. The exact location, size, and configuration of the new building, as well as the flow rate and number of pumps has not been determined. The building shall be constructed of split-faced concrete masonry units, with skylights that can be removed to allow for the pumps to be removed through the opening in the roof structure. The motor control center shall be placed in its own room.

The District understands that the existing 10" main and new B Zone BPS and building will be redundant facilities once the improvements identified in Priority #4 are brought on-line. The District does not want to be in the position of having only one facility that supplies the C Zone Tanks.



Lake Tulloch Emergency Intertie Project Assessment (Optional): The District submitted a grant application for the Lake Tulloch Emergency Intertie Project under the 2021 Urban and Multi-Benefit Drought Relief Program. The improvements proposed in the grant application consist of a 12" distribution main along O'Byrnes Ferry Road from Copper Meadow Drive to Duchess Drive, for a total length of 3.25 miles, along with other ancillary improvements. This will include connections into the four distinct neighborhoods along the east side of Lake Tulloch. The new intertie will bypass Lake Tulloch by going around its perimeter and following the public road right-of-way. The consequence of this proposed improvement is that these customers would be transitioned from the B Zone to the C Zone. The scope of work shall assume that the distribution system remains as is. As an optional task, the design team shall assess the impact of this grant funded project on the operation of the existing system, specifically sizing of the B Zone BPS and replacement tank. Approximately 750 domestic water customers on the east side of Lake Tulloch are provided service via a single, 10" distribution main that crosses the bottom of Lake Tulloch.

#### Priority #4: C1 and Copper Valley Transmission Main

The Plan identified several components to this improvement: a new 20" transmission main to convey water from the CCWTP to the C Zone Tanks, a new 1,900 gpm BPS, and two pressure reducing valves (PRV). The Plan estimated the cost at approximately \$8.65M.

Redesign of the C1 and Copper Valley Transmission Main: The District does not want to implement all of the improvements identified in the Plan. The subdivisions surrounding the Golf Club at Copper Valley are fed from a water main directly from Tank C. The Plan identifies disconnecting from this water main and connecting into a new 12" main fed by the new BPS and installing a new PRV. The District will not entertain this change recommended in the Plan. The improvements to be designed are only the new BPS and the new 20" main from the effluent pump station at the Copper Cove WTP to C Zone tanks and modifications to the existing effluent pump station at the Copper Cove WTP.

These improvements were previously designed by HDR in 2008 but were never constructed. PBI will update the project plans and specifications for these improvements. While the District is of the opinion that the civil (water main) plans do not require any major re-work, all other components may need to be redesigned given the age of the original design, including the control strategy and installation of variable frequency drives for effluent pumps #1 and #2 to control



the flow to C Tanks from the clearwell. The District desires to re-assess the proposed flow rate of the new BPS



and the number of pumps (including one pump as backup) necessary to operate this new BPS, based on anticipated growth in the C Zone, as the HDR plans identified a flow rate of 2,800 gpm per pump.

It is important that the architecture of the pump station blends in with the architecture of the nearby Copper Valley development. One meeting with the Copper Valley development team to share project plans shall be included in the project scope. The District can coordinate scheduling this meeting. The District wants to be a good neighbor to the local development community, in response PBI will include the development of a landscaping plan as an optional task.

C Tanks Overflow Discharge Assessment (Optional): The C Tanks overflow line discharges off-site into a roadside swale. In the rare occasion when these tanks overflow, the roadside swale is overwhelmed and water drains into nearby private properties. Extensive water system plumbing existing within the roadway immediately in front of the C Tanks, including 17 water valves. The plumbing and valves will need to be defined to identify an acceptable alignment for the overflow discharge pipeline. As an optional task, PBI will include an assessment of improvements to remedy this situation, such as installing a dedicated drain line in the same trench as the 20" transmission main. Design of any improvements identified in this assessment will be considered out of scope work effort.

**Hydraulic Model Update and Technical Memorandum:** The District is interested in revisiting and updating the assumptions used in the recent water model and master plan. The findings will be summarized in a draft and final technical memorandum.

## **Approach to Work**

We are proposing a focused approach on the Districts most immediate system needs; Phase 1 and Phase 2 improvements. Our approach includes the development of preliminary design reports for all proposed improvements so that the recommended projects can be developed and defined to support the development of a programmatic CEQA document. The reports will also include updated costs to aid the District in refining their future capital improvement plan (CIP). We have included costs for all phases of work but understand that some of these improvements are not budgeted or included in the District's current CIP. We don't want the District to expend excess funds on design services that may not be constructed in the near term and result in potential redesign efforts. With this focus we are presenting a cost table focused on the Phase 1 and Phase 2 improvements that are currently included in the District's approved CIP. Our cost table includes the costs for additional phases beyond the preliminary design reports as optional tasks.

Our overall approach to supporting the District's Copper Cove Water System Improvements is to capitalize on our system experience, staff familiarity, and relevant project experience to provide the District with an efficient quality focused solution to achieve the system needs. We have learned from years of experience that one of the most valuable resources in support of water system designs are the system operators. Operations staff live the system, know the shortcomings and have the intrinsic knowledge to provide the necessary background to help us develop and define the recommended improvements.

We have done a lot of the technical assessments during the development of our proposal, which allows us to better define our scope of work and make the District confident that we will be able to complete the service identified within the proposed scope and budget.

We are presenting our approach in relation to the order of projects identified under the project understanding with the exception of the hydraulic modeling update has been moved to happen first:

**Hydraulic Model Update and Technical Memorandum:** The hydraulic model is critical to the accurate sizing of the proposed facilities. PBI developed the Copper Cove hydraulic model update as part of the 2018 water master plan and has recently updated the model to assess the proposed improvements as part of this proposal process.



Our approach is to work with operations staff to acquire recent production data at the WTP and B-Tank BPS to update the existing demands and complete the hydraulic model early in support of the preliminary design efforts of all proposed improvements. Our familiarity and recent experience with the model will make this effort timely and efficient to the benefit of the Phase 1 project schedule.

Key Issues	Approach
Update Existing System Demands	Collect current system demand data. Annual WTP production will be utilized to determine current ADD. B Tank BPS production will be utilized to determine C Tank demands. WTP production – B Tank BPS production will be utilized to determine B Tank demands. Utilize max day demand multipliers and peak hour multipliers from master plan.
Update Planning Horizon Demands	Develop 25 year and 50 year planning horizon demands. 25 year is typical planning horizon for mechanical equipment and 50 year for storage improvements.
C Tank Level	Utilize extended period simulation runs to model various pumps to ensure tank level stabilization for both existing and planning horizon demands

New Water Treatment Plant Clearwell: The key issues with designing the new clearwell are associated with determining the appropriate size and location. Sizing of the clearwell will be a function of determining the system demand for the planning horizon and then confirming C-T compliance. We are intimately familiar with the operations of the Copper Cove WTP; we were previously tasked to update the operations plan for the WTP. During this effort we worked closely with Bill Cardinal and became familiar with his C-T calculation spreadsheet. We understand that the existing clearwell provides minimal C-T, and the pipeline and B Tanks are necessary to achieve the necessary C-T compliance. It is common to size WTP clearwells to meet C-T compliance criteria, however, Copper Cove WTP has the unique characteristic of having a dedicated fill line to system storage that provides credit for C-T, which will apply to both current and future scenarios once the C1 and Copper Valley Transmission Main is installed. This characteristic provides more flexibility to the sizing criteria for the new clearwell.

We have performed C-T calculations on several sizing alternatives and solicited input from operations staff during the development of this proposal. Alternatives such as tank baffling will be considered to improve C-T, however, these are not desirable by operations staff and will likely not be recommended.

Our approach includes the design of forced ventilation systems and cathodic protection to help protect the new facilities against future corrosion concerns. PBI has recently designed forced ventilation systems for multiple tanks for Placer County Water Agency.

Our approach to locating the tank will be to assess the two preferred locations suggested by the District; north and east of the existing clearwell. The new tank should be located at the same elevation of the existing to allow the two tanks to operate in parallel and in series as desired. The area to the north of the existing appears to be more desirable as it will require less grading to match the existing tank elevation and will likely have fewer utility conflicts.

Once the preliminary design report is completed, we will begin the design of the preferred alternative with the goal of having the tank in service by end of June 2023.



**Condition Assessment of Existing Water Treatment Plant Clearwell:** Our initial recommendation was to utilize divers to inspect the tank in lieu of taking the tank out of service for the inspection; however, we have reviewed the prior inspection reports and learned from District staff that it is not safe to enter the clearwell from the roof, which would be required to dive the tank. This discovery supports the District's desire to take the existing clearwell out of service for inspection.

We also understand that the existing clearwell cannot be bypassed and must remain in service until the new clearwell is constructed and placed into service. Thus, the inspection will not be allowed until summer of 2023.

We understand that the steel structural members that support the tank roof have corroded beyond repair. The coatings have not only failed but the steel members themselves have begun to delaminate. Corrosion is common to occur in steel tanks above the normal operating levels.

In an attempt to expedite the project completion, we believe we can proceed with a preliminary design report without performing any additional inspection services. Our assumptions will be that the steel members have continued to degrade since the prior assessments and at minimum will require removal and replacement to support a rehabilitation effort along with both interior and exterior recoating efforts. We will review the available condition assessments previously completed, review available as-built drawings and identify recommended structural repair details. We will develop preliminary cost estimates for the rehabilitation efforts and compare them to the cost of a complete replacement alternative. The preliminary design report will conclude with a recommended approach based on these assumptions. If the rehabilitation effort is determined to be the preferred approach, we would then recommend proceeding with the tank inspection after the new clearwell construction is complete. If the replacement alternative is the most cost-effective approach with these assumptions, we will be able to utilize the scope and fee for the existing clearwell with the addition of demolition details and specifications to complete the design effort.

Our team is prepared to inspect the tank after it is taken out of service even if the replacement is the recommended approach if this remains the desired approach by the District.

Once the preliminary design report is complete, we will develop a scope and fee to support the design of the recommended improvements.

**B Tank (Redwood) Replacement:** Our approach will consider the long-term operational impacts and flexibility at the B Tank facility. The existing tanks are plumbed in series and have differing heights, which limits the storage if the tanks were plumbed in parallel. It is typically desirable to have redundant tanks at a common location of the same size and height. However, we understand that the existing B Tank (Steel) is isolated from the system and provides the necessary C-T with the existing demands.

We have utilized the C-T calculations included in the operations plan to support the sizing analysis for the replacement tank. The current C-T calculations assume a minimum storage at the B-Tank site of approximately 500,000 gallons to achieve an effective contact time of 58.3 minutes at peak demands. The minimum C-T criteria from the EPA table identified in the Operations Plan is 59 mg-min/l. Therefore, increasing the chlorine residual to 1.5ppm achieves the necessary C-T with a C-T of approximately 89.3 mg-min/l. In the event the existing B Tank (steel) needs to be taken out of service for maintenance the C-T calculations must utilize the reduced capacity of the second 300,000 gallon tank at its minimum operating level. Assuming the minimum operating capacity of 200,000 gallons the C-T criteria can still be achieved with a chlorine residual of 1.5ppm. This analysis will also need to be performed for the expected demands for the planning horizon of the project to ensure continued compliance.

The water master plan recommended replacing the two existing B Tanks with two new 500,000 gallon tanks. The tank sizing criteria was determined utilizing the planning horizon of 50 years, which matches the typical life expectancy of the proposed improvements. Utilizing the growth rates from the County's General Plan the tank sizing criteria for the 50 year planning horizon resulted in the need for approximately 1,000,000 gallons of



storage at the B Tank site.

Our approach includes the design of forced ventilation systems and cathodic protection to help protect the new facilities against future corrosion concerns. The analysis will balance the need for providing C-T compliance, consider water age and disinfection by-product formation, consider operational flexibility, and consider the cost efficiencies of rehabilitating the existing B Tank (steel) tank. The alternatives identified to be assessed in the analysis include; replacing the existing B Tank (redwood) in kind while retaining the storage capacity of the existing B Tank (steel) tank for a total capacity of approximately 1,050,000 gallons, and replacing both tanks with two 500,000 gallon tanks.

Our approach to tank siting will be to look at multiple locations within the existing site. Replacing the tank in its current location provides several benefits as it will minimize plumbing modifications and support the future relocation of the existing B Tank (steel) or B Tank BPS if they are both replaced. Other locations will be considered and included in the preliminary design report with a preferred location identified.

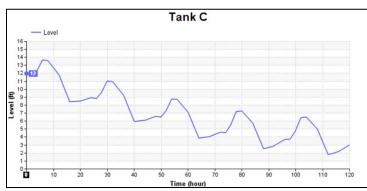
Once the preliminary design report is completed we will begin the design of the preferred alternative with the goal of having the tank in service by end of June 2023.

**B Tank (Steel) Condition Assessment:** Our approach to the B Tank (steel) condition assessment is similar to that of the existing clearwell. We understand that the steel members are in even worse condition than those of the existing clearwell and are beyond repair.

We believe we can proceed with a preliminary design report without performing any additional inspection services. Our assumptions will be that the steel members have continued to degrade since the prior assessments and at minimum will require removal and replacement to support a rehabilitation effort along with both interior and exterior recoating efforts. We will review the available condition assessments previously completed, review available as-built drawings and identify recommended structural repair details. We will develop preliminary cost estimates for the rehabilitation efforts and compare them to the cost of a complete replacement alternative. The preliminary design report will conclude with a recommended approach based on these assumptions. If the rehabilitation effort is determined to be the preferred approach, we would then recommend proceeding with the tank inspection after the new B Zone Tank construction is complete. If the replacement alternative is the most cost-effective approach with these assumptions, we will be able to utilize the scope and fee for the new B Tank with the additional of demolition details and specifications to complete the design effort.

Our team is prepared to inspect the tank after it is taken out of service even if the replacement is the recommended approach if this remains the desired approach by the District.

Once the condition assessment is complete, we will develop a scope and fee to support the design of the recommended improvements.



**B Zone Booster Pump Station (BPS) Replacement:** Our approach to the B Tank BPS replacement includes utilizing the hydraulic model to size the pumps so they can provide the necessary flows to the C Tank during peak hour demands. The current model was utilized during development of this proposal to assess the C Tank levels during max day demands in an extended period simulation. The model adequately represents operators' the observations during max day demands with the

tank level continuously declining throughout the simulation period.



The model was modified to include higher head pumps with the same design flows and the C Tank level stabilized during the extended period simulation. The model also observed excessive pressures and velocities within the distribution system.

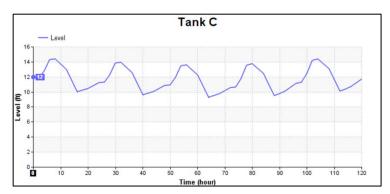
Our approach will be to relocate the B Tank BPS so that the existing BPS can remain in operation during construction and abandoned after the new pump station is brought online. We will assess multiple locations within the site considering proximity to existing plumbing, proximity to electrical service, and overall site planning. The assessment will recommend the preferred location and pump design criteria.

Once the preliminary design report is reviewed and approved by the District we will initiate the final design effort.

Lake Tulloch Emergency Intertie Project Assessment: Our approach will include the development of a preliminary design report that will assess the alignment and proposed alternative alignments and utilize the hydraulic model to confirm pipe sizing and assess potential water age concerns.



Redesign of the C1 and Copper Valley Transmission Main: Our approach is to consider alternatives to constructing the in-line booster pump station. Operating pumps in series without storage is an operational challenge and we believe alternatives should be considered. We understand that the PRV connections to the existing distribution system are not desirable, and this improvement will be a dedicated transmission main to the C Tanks. We also understand that this is necessary to meet C-T



requirements. The alternative we have considered and modeled for its effectiveness is the addition of a high-head pump at the WTP effluent pump station that will eliminate the need for the in-line booster pump station. PBI identified a pump with a TDH of 380 feet to adequately maintain C Tank level during a max day demand extended period simulation. PBI has recent experience designing high-head booster pump stations and this modified approach can save the District the cost of the pump station with a minimum increase in the effluent pump station improvement costs. Our electrical design team will need to assess the electrical service requirements during the preliminary design effort to confirm this approach is viable without significant service upgrades.

Our preliminary design report will assess the alternative approach along with the approach previously designed. The report will identify the capacity needs of the pump station that are appropriate for the immediate planning horizon appropriate for mechanical equipment. The report will also confirm the transmission main sizing, which should be designed for build-out demands.

If the conclusion of the preliminary design approach is to continue with the in-line pump station, our initial approach is to **recommend the District to contract directly with the original pump station designer** in an attempt to avoid a complete redesign of the pump station. We have included a scope and fee to redesign the pump station and would be happy to do so, but this would likely require a complete design and result in the District having to pay for this design twice. We believe it is in the District's best interest to consult with the original designer and if they can update their design with the modified criteria from the preliminary design report the District may drastically reduce their costs on the project.

We are proposing the redesign effort as an optional task as it is not currently budgeted in the District's CIP and



may not be efficient to design until a construction budget and schedule is defined by the District.

C Tanks Overflow Discharge Assessment (Optional): Our approach will include the development of a preliminary design report that will assess the alignment of the proposed drain line. The drain line will need to cross the frontage road adjacent to the C Tank site, which we have already identified as being filled with utility conflicts. The utility conflicts will be identified through utility map research and field observations and the report will recommend potholing during the future design phase.

Programmatic CEQA Approach: Our approach is to utilize the preliminary design reports developed for all proposed improvements to support the development of a programmatic CEQA document. This approach streamlines the environmental process and is much more economical as a whole when all project elements are combined. Although the proposed project is envisioned to be constructed in distinct phases based upon priority and funding availability, the environmental approach will be focused on identifying and analyzing "the whole of the action" for to provide legally defensible California Environmental Quality Act (CEQA) compliance. Rather than prepare disparate CEQA documents for each phase, HELIX proposes to prepare an overarching CEQA document. This approach nullifies the need to identify which project elements may be subject to a CEQA Categorical Exemption status and which elements may require a Negative Declaration. The most efficient and effective approach is to prepare a single Mitigated Negative Declaration, allowing the District to implement the project in phases as funding becomes available. Equally, the technical studies outlined below will be prepared for the entire study area rather than for individual project elements.

Alternatively, following completion of the listed technical studies Helix will consult with the District to determine which individual project elements may be processed as Categorically Exempt (CE) under CEQA. The remaining project elements not suitable for CE processing will be incorporated into the Initial Study/Mitigated Negative Declaration.

## **Copper Cove Water System Familiarity**

Our approach is to capitalize on our Copper Cover System familiarity. We have utilized the hydraulic model that we developed for the recent water master plan to provide preliminary assessments of the proposed improvements during the development of this proposal. Our familiarity will eliminate any learning curve or come up to speed time allowing our team to accelerate the completion of the time sensitive Phase 1 improvements.

#### **Project Goals**

PBI's approach to this project will be to initiate the project with a preliminary design phase. This phase will identify the District's desires and concerns relative to this project. This phase will include a kick-off meeting, draft preliminary design report (PDR), PDR review meeting, and final design report. The kick-off meeting with District staff will focus on discussing District goals, objectives, project schedule, list of information needed and identifying District/PBI staff roles.

We understand the District's goals of the project to be:

- Timely installation of Phase 1 improvements
- Optimize tank and pump station sizing
- Minimizing system interruptions during construction

We have identified key issues associated with fulfilling project goals through discussions with District staff and by reviewing the water master plan, C-T calculation spreadsheet, prior design submittals, RFQ/RFP, and response to questions. We have utilized our existing relationships with District staff to gain additional insight on the system performance and overall system goals.



#### **QA/QC Plan**

We pride ourselves on delivering quality deliverables. We will utilize our established QA/QC procedures to ensure all deliverables are reviewed by senior level staff prior to delivery to the District. We utilize BlueBeam to document internal QC procedures of all deliverables. This process documents all comments, provides responses from the design team members, and concludes with backchecking to close out all comments by the reviewers. The QC procedures are documented in a comment response log for each deliverable and can be provided to the District.

## **SCOPE OF WORK**

Our scope of work for this project is detailed below and was developed based on our experience with similar projects, a visit to the project site, discussions with District staff, and a review of the request for proposal (RFP) and available information.

#### Task 1 - Project Management/Meetings

This task includes general management of the project from initial kick-off through bid period support services for Phase 1 design, Phase 1 Condition Assessments, Phase 2 PDR and Phase 3 PDR:

#### 1.1 General Project Management

- Ashley Smith, an experienced project manager, will continuously review the project schedule and budget. If any deviations are identified Ashley will immediately notify the District and develop a corrective action plan to get the project back on schedule and within budget. Ashley will act as the primary point of contact between PBI and the District and will be involved in all aspects of the project.
- Quality Assurance/Control This task includes all quality assurance/control activities throughout the project design. All deliverables will be reviewed and approved by Dave Murbach or Karl Brustad prior to delivery to the District
- 1.3 Project Meetings Project meetings with District staff and other entities as determined necessary during the design process. PBI will coordinate the meetings, develop meeting agenda and meeting minutes. This task includes up to ten (10) project meetings including: Kick-off meeting, Preliminary Design Review Meeting, 50% Design Review Meeting, 90% Design Review Meeting, two (2) additional meetings TBD, two (2) public workshop dry run meetings, and two (2) public workshop/outreach meetings. Additionally, PBI will capitalize on the scheduled meetings to perform up to two (2) site visits/field visits that are deemed necessary to support the design efforts and review site constraints with District staff. PBI will schedule bi-weekly conference calls/virtual meetings with CCWD's Project Manager. PBI will maintain an on-going action items list from all meetings.
  - PBI will submit a draft agenda to the District for review one week prior to each meeting. The final agenda will be submitted to the District two business days prior to each meeting. Draft meeting minutes will be provided to the District within three business days after each meeting. Final meeting minutes will be provided within three business days of receipt of comments from the District.
- **Monthly Invoices and Progress Reports** PBI will prepare monthly invoices, including a report of services provided during the reporting period and percent complete for each task compared against percent billed for each task. Additionally, we will update the project schedule monthly and submit with each invoice.

**Deliverables:** Meeting agendas and minutes (transmitted electronically), monthly invoices, updated project schedule and monthly progress reports.

#### **Assumptions:**

Includes attendance at up to ten (10) meetings, including two public workshop meetings.



- > PBI will prepare all exhibits for the public meetings, PowerPoint presentations, and public meeting notices
- The District will generate the mailing list and mail all public meeting notices.

#### Task 2 - Phase 1 Design New Clearwell and New B Zone Tank

PBI will prepare civil, mechanical, structural, electrical, and instrumentation design drawings, contract documents and specifications for the new Clearwell and B Tank (redwood) replacement. The Phase 1 design will be developed as a common standalone bid document. The design will include all necessary tank appurtenances including but not limited to; site piping, drain piping, overflow, forced air ventilation systems, vents, tank level transmitters, ladders, cathodic protection system, safety railings, and ringwall footings. Site grading plans and site piping plans will be provided. Clearwell will be designed to allow the tanks to be operated in parallel, series or with either tank taken offline. We will perform value engineering efforts with each submittal and document any recommended cost savings that should be considered by the District.

- 2.1 Updated Hydraulic Model PBI will update the hydraulic model they recently updated for the Copper Cove Water Master Plan. The update will include data collection associated with updating system demands. PBI will work with District staff to determine the appropriate system demands and update the model to reflect actual demands. Planning horizon demands for 25 years and 50 years will be determined utilizing anticipated growth rates from the most recent County General Plan or with alternative growth rates as agreed upon with the District. Specific model runs will be included in the preliminary design report efforts for each specific project.
- 2.2 <u>Draft Preliminary Design Report</u> PBI will develop a draft PDR and planning level cost estimate for the New Clearwell and B Tank (redwood) replacement following the approach defined herein, confirming the basis of design and addressing key issues and constraints. The analysis shall also identify best operational practices for two B Zone Tanks considering demand from the B Zone once the new 20" transmission pipeline from the clearwell to the C Zone tanks is on-line. Analysis shall evaluate the possibility of disinfection by-products formation with both B Zone Tanks in operation. This task will include data collection and analysis of alternatives.
- **2.3** <u>Final Preliminary Design Report</u> PBI will address all comments from the District and include a response to comments table, identifying how each comment was addressed and where each revision is located in the final PDR.

**Deliverables:** Draft and Final Preliminary Design Reports (transmitted electronically) **Assumptions:** Design Includes New Clearwell and New B Tank to Replace Existing Redwood Tank

- **2.4** 50% Design Documents PBI will develop 50% design drawings, specifications, and estimate of probable construction cost. Design plans include 4 G Sheets, 15 C Sheets, 7 E Sheets and 3 I Sheets.
- **2.5 90% Design Documents** PBI will incorporate the District's comments from the 50% design and develop 90% design documents.
- **2.6** 100% Design Documents PBI will incorporate the District's comments from the 90% design and develop 100% design documents.
- **2.7 Bid Set Documents** PBI will incorporate the District's comments from the 100% design and develop Final design documents.

#### **Deliverables:**

- A complete set of plan and profile drawings
- Edited project manual
- Engineer's probable construction cost estimate
- Response to comments table identifying how each comment was addressed and where each revision



- is located in the engineering documents
- PBI will perform value engineering efforts with each submittal and document any recommended cost savings that should be considered by the District
- PBI will perform "constructability/buildability" reviews of the 90%, 100%, and final deliverables, and submit documentation to the District demonstrating this effort was completed

#### **Assumptions:**

- PBI understand that the District uses the Engineer's Joint Contract Document Committee (EJCDC) boilerplate front end contact documents and bid forms
- Tank Design will utilize a performance based approach and detailed structural analysis will be provided by the tank manufacturer, as is commonly used in the design industry
- > The format for the construction cost estimates will be consistent with the bid schedule to be utilized
- Lump sum items on the bid schedule will be broken down as would be required for a contractor for their Schedule of Values
- New Clearwell and New B Zone Tank Tank will be provided with level monitoring and forced air ventilation
- Existing control panel and power service will be reused
- > Construction services, SCADA configuration, and PLC Programming are not included in this scope
- SCADA upgrade is not included in this scope of work.
- > Lights, security gate and camera system are not included
- Project Drawings will be "to scale" and furnished to the District in Portable Document Format (PDF) file format for reproduction as both 11"x17" (ANSI C) and 22"x34" (ANSI D) paper size.
- Final drawings will be furnished in Autodesk AutoCAD format in addition to PDF file format.
- > PBI can assist the District in submitting an amendment to their water supply permit (optional)

#### Task 3 - Phase 1 Existing Clearwell and B Tank (steel) PDR and Condition Assessment

This task includes the development of a preliminary design report that assesses the alternatives for each of the tanks identified in prior assessments to have severe corrosion concerns to their respective roof structures. Our scope for the PDR assessment and identification of necessary repairs to the existing clearwell and the B Zone Steel tank are defined in the approach section. The detailed design scope and budget can be provided following the completion of the PDR, which will mirror the scope and budgets for Phase 1 Design improvements with the addition of demolition drawings and details.

3.1 <u>Draft Preliminary Design Report</u> - PBI will develop a draft PDR and planning level cost estimate for this phase of the project following approach defined herein, confirming the basis of design and addressing key issues and constraints. Our assumptions will be that the steel members have continued to degrade since the prior assessments and at minimum will require removal and replacement to support a rehabilitation effort along with both interior and exterior recoating efforts. We will develop preliminary cost estimates for the rehabilitation efforts and compare them to the cost of a complete replacement alternative. The preliminary design report will conclude with a recommended approach based on these assumptions. The PDR will assess the alternatives of rehabilitation versus complete replacement. It is assumed that the tank sizing criteria will have already been defined in the Task 2 PDR.

**Deliverables:** Draft and Final Preliminary Design Reports (transmitted electronically) **Assumptions:** PDR of Existing Tanks to occur in 2022

3.2 <u>Tank Condition Assessment (Optional)</u> – PBI will complete tank assessment to determine sound maintenance strategies and plans for maintaining the structure. Surveys of both the internal and external surfaces of potable steel reservoirs will be completed. The survey will be conducted by a team of highly trained and certified inspectors having exceptional photography skills. During the evaluations, particular attention will be paid to the condition of the following critical areas on the following page:



Roof Roof Structure Shell Tank Bottom Overflow Pipe/Weir Drains/Sumps

Inlets/Outlets

Piping Vents/Screens Shell and Roof Chine/Joints Weld or Bolt Connections Ladders/Safety Climbs Vandal Deterrents Platforms/Railings Manways
Hatches
Gaskets
Ringwall/Anchor Bolts
Grade/Tank Crevices
Water Level Indicators
CP Equipment/Components

The focus of the inspections will be to evaluate the current condition of the interior and exterior coating systems and the level of corrosion on the tanks. The evaluation will involve visual observations, dry film thickness (DFT) measurements, adhesion testing, and potentially corrosion pit depth and/or ultrasonic (UT) testing for steel thickness measurements.

Visual exterior observations will note the degree of exterior paint chalking and any breaks, blisters, or other coating defects. The degree of chalking will be determined in general accordance with ASTM D4214 "Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films" and areas of rusting will be quantified in accordance with ASTM D610 "Standard Test Method for Evaluating the Degree of Rusting of Painted Steel Surfaces." Dry film thickness (DFT) measurements will be obtained in general accordance with SSPC: The Society of Protective Coatings Paint Application Specification No. 2 "Measurement of Dry Film Thickness with Magnetic Gages" and exterior paint adhesion will be assessed using ASTM D3359 "Standard Test Method for Evaluating Adhesion by Tape Test, Method A" (modified) and/or ASTM D6677 "Adhesion by Knife Test". Any blistering will be quantified in accordance with ASTM D714 "Standard Test Method for Evaluating the Degree of Blistering Paints."

The surveys will investigate any areas where rust or other corrosion products are in evidence for erosion, cracking, pitting and/or metal loss. Where applicable, corrosion pits will be measured and compared to obtained steel thickness (UT) measurements.

The product of the above would be a written narrative and color pictorial description of the condition of each tank along with specific recommendations for coatings, cathodic protection, and structural considerations, where applicable. Recommendations for maintenance work will be based on the level of corrosion and the condition of tank coatings and CP systems. Corrosion assessments will be based on the amount of change from the original tank design. The life expectancy of existing coating systems, as well as the projected corrosion rates on the structures are used to determine the future maintenance strategies. Recommendations for coatings work will be based on paint or lining's percentage of failure, ability to be recoated, film heavy metal content, estimated remaining life of the system(s); and/or concerns with any impressed current cathodic protection system. Recommendation for CP repair work, if required will include a list of required repairs.

Recommendations for any future retrofitting concerns will also be presented, where identified. We will comment on any applicable safety, sanitary, vandalism, and seismic concerns. Safety concerns will include ladder size/design observations, fall-prevention systems, roof access areas, etc. Sanitary concerns will make note of items such as venting and other tank openings such as overflow air-gaps. Vandalism concerns will involve an evaluation of perimeter fencing, locking mechanisms, and climb deterrents. Seismic concerns will address items such as obvious visual indications of tank movement, flexible couplings, drain locations, etc. The report will also include estimated repair costs (if applicable) and prioritization for recommended work.

#### **Deliverables:**

Condition Assessment Report



> A narrated video will be included for inspections.

#### **Assumptions:**

- > Tanks have satisfactory access roads
- Access to a tank exterior roof can be made from ladders
- ➤ Repelling is not included with in this scope
- Proposal does not include a seismic analysis of tank's ability to structurally withstand a probable seismic event
- > This scope does not include any geotechnical/soils reports.
- Assumes multiple tanks will be available the same day
- Includes prevailing wage payments

#### Task 4 - Phase 2 - B Tank BPS

PBI will prepare civil, mechanical, structural, architectural, electrical, and instrumentation design drawings, contract documents and specifications for the new B Tank BPS. The Phase 2 design will be developed as standalone bid document. The design will include three pumps similar to the existing pump station, with one higher flow pump and the two lower flow pumps of equal flow rate. In the summer, the largest pump is operated as the lead pump and the smaller pumps are operated as the lag pumps. In times of lower demand, the smaller pumps are placed in lead.

The exact location, size, and configuration of the new building, as well as the flow rate and number of pumps will be determined during the development of the PDR. The building will be constructed of split-faced concrete masonry units, with skylights that can be removed to allow for the pumps to be removed through the opening in the roof structure. The motor control center will be placed in its own room with a new backup power supply system.

- **4.1 Draft Preliminary Design Report** We are proposing to include the PDR into Phase 1 of the project implementation. PBI will develop a draft PDR and planning level cost estimate for B Tank BPS Replacement, confirming the basis of design and addressing key issues and constraints. The scope is further defined in the approach section.
- **4.2** Final Preliminary Design Report PBI will address all comments from the District and include a response to comments table, identifying how each comment was addressed and where each revision is located in the final PDR.

**Deliverables:** Draft and Final Preliminary Design Reports (transmitted electronically) **Assumptions:** PDR of B Zone Tank Booster Pump Station to occur in 2022

- **4.3 50% Design Documents** PBI will develop 50% design drawings and specifications. Additionally we will prepare and edit the project and provide an estimate of probable construction cost.
- 4.4 90% Design Documents PBI will incorporate the District's comments from the 50% design and develop 90% design documents.
- **4.5** 100% Design Documents PBI will incorporate the District's comments from the 90% design and develop 100% design documents.
- **4.6 Bid Set Documents** PBI will incorporate the District's comments from the 100% design and develop Final design documents.

#### **Deliverables:**

- Edited project manual
- Engineer's probable construction cost estimate
- Response to comments table identifying how each comment was addressed and where each revision is located in the engineering documents
- ➤ PBI will perform value engineering efforts with each submittal and document any recommended cost savings that should be considered by the District



PBI will perform "constructability/buildability" reviews of the 90%, 100%, and final deliverables, and submit documentation to the District demonstrating this effort was completed

## **Assumptions:**

- Design to occur in 2022
- PBI understand that the District uses the Engineer's Joint Contract Document Committee (EJCDC) boilerplate front end contact documents and bid forms
- > The format for the construction cost estimates will be consistent with the bid schedule to be utilized
- Lump sum items on the bid schedule will be broken down as would be required for a contractor for their Schedule of Values
- The new building will house the booster pumps, motor controls, and new PLC controls for booster pump station.
- Motor controls will be in a separate room than pumps.
- New standby generator and ATS will be provided.
- > Programmable logic controller (PLC) and operator interface to match CCWD standards.
- Construction services, SCADA configuration, and PLC Programming are not included in this scope
- SCADA upgrade is not included in this scope of work.
- Lights, security gate and camera system are not included
- Project Drawings will be "to scale" and furnished to the District in Portable Document Format (PDF) file format for reproduction as both 11"x17" (ANSI C) and 22"x34" (ANSI D) paper size.
- Final drawings will be furnished in Autodesk AutoCAD format in addition to PDF file format.
- PBI can assist the District in submitting an amendment to their water supply permit (optional)

#### Task 5 - Phase 3 Design C1 BPS and Copper Valley Transmission Main

PBI will prepare civil, mechanical, structural, architectural, electrical, and instrumentation design drawings, contract documents and specifications for the redesign of the C1 and Copper Valley Transmission Main BPS. The Phase 3 design will be developed as standalone bid document. PBI understands that the improvements to the C1 and Copper Valley Transmission Main identified in the Plan were originally designed by HDR in 2008. PBI recommends that the District consult directly with the original design engineer (HDR) to update the project plans and specifications for these improvements to avoid a complete redesign. This approach will save funds for the District over having another firm redesign these improvements. We have included a scope of work for the PDR and have separated the redesign effort for the pump station as an optional task.

- 5.1 <u>Draft Preliminary Design Report</u> We are proposing to include the PDR into Phase 1 of the project implementation. PBI will develop a draft PDR and planning level cost estimate for the C1 BPS, confirming the basis of design and addressing key issues and constraints. The scope is further defined in the approach section.
- <u>Final Preliminary Design Report</u> PBI will address all comments from the District and include a response to comments table, identifying how each comment was addressed and where each revision is located in the final PDR.

**Deliverables:** Draft and Final Preliminary Design Reports (transmitted electronically) **Assumptions:** PDR of C1 and Copper Valley Transmission Main Pump Station to occur in 2022

- **5.3 50% Design Documents (Optional)** PBI will develop 50% design drawings and specifications. Additionally we will prepare and edit the project and provide an estimate of probable construction cost.
- **5.4 90% Design Documents (Optional)** PBI will incorporate the District's comments from the 50% design and develop 90% design documents.
- **5.5** 100% Design Documents (Optional) PBI will incorporate the District's comments from the 90% design and develop 100% design documents.



**5.6 Bid Set Documents (Optional)** – PBI will incorporate the District's comments from the 100% design and develop Final design documents.

#### **Deliverables:**

- Edited project manual
- Engineer's probable construction cost estimate
- Response to comments table identifying how each comment was addressed and where each revision is located in the engineering documents
- PBI will perform value engineering efforts with each submittal and document any recommended cost savings that should be considered by the District
- PBI will perform "constructability/buildability" reviews of the 90%, 100%, and final deliverables, and submit documentation to the District demonstrating this effort was completed

#### **Assumptions:**

- > PBI understand that the District uses the Engineer's Joint Contract Document Committee (EJCDC) boilerplate front end contact documents and bid forms
- > The format for the construction cost estimates will be consistent with the bid schedule to be utilized
- Lump sum items on the bid schedule will be broken down as would be required for a contractor for their Schedule of Values
- The new building will house the booster pumps, VFD motor controls, and new PLC controls for booster pump station.
- Motor controls will be in a separate room than pumps.
- New standby generator and ATS will be provided.
- Programmable logic controller (PLC) and operator interface to match CCWD standards.
- Construction services, SCADA configuration, and PLC Programming are not included in this scope
- SCADA upgrade is not included in this scope of work.
- > Lights, security gate and camera system are not included
- Project Drawings will be "to scale" and furnished to the District in Portable Document Format (PDF) file format for reproduction as both 11"x17" (ANSI C) and 22"x34" (ANSI D) paper size.
- Final drawings will be furnished in Autodesk AutoCAD format in addition to PDF file format.

# <u>Task 6 – Phase 2 and Phase 3 PDR Development – Lake Tulloch Emergency Intertie Project, C Tank Overflow</u> Improvements

PBI will develop preliminary design reports for the Phase 2 Lake Tulloch Emergency Intertie Project and the Phase 3 Tank Overflow Improvements.

- **6.1 Draft Preliminary Design Report** We are proposing to include the PDR into Phase 1 of the project implementation. PBI will develop a draft PDR and planning level cost estimate for the Lake Tulloch Emergency Intertie Project and the C Tank Overflow Improvements, confirming the basis of design and addressing key issues and constraints. The scope is further defined in the approach section.
- **6.2 Final Preliminary Design Report** PBI will address all comments from the District and include a response to comments table, identifying how each comment was addressed and where each revision is located in the final PDR.

**Deliverables:** Draft and Final Preliminary Design Reports (transmitted electronically) **Assumptions:** PDR of C1 and Copper Valley Transmission Main Pump Station to occur in 2022

#### Task 7 - Encroachment Permits/Right of Way (Optional)

We are proposing this task as an optional task as it is not necessary for our focused approach in support of the Phase 1 and Phase 2 improvements. This task is only necessary for the Phase 3 improvements that are not currently included in the Districts CIP.



PBI will prepare and secure all encroachment permits from Calaveras County Public Works Department (County PWD) for. As part of the permit application, plans and specifications will be submitted to the County PWD for review and comment. Items of concern will likely include traffic control, trench backfill and compaction testing, location and placement of fire hydrants, extent of removal and replacement of AC paving, and storm water pollution prevention measures. Additionally, PBI will assess where additional right-of-way, either temporary for construction or permanent is needed for these improvements.

**7.1** Public Works Permit Application – PBI will prepare and secure all encroachment permits from Calaveras County Public Works Department (County PWD) for the project.

**Deliverables:** Calaveras County Encroachment Permit

#### **Assumptions:**

- ➤ Phase 1 and Phase 2 Design New Clearwell, New B Zone Tank and B Tank BPS will not require an encroachment permit or Right of Way.
- ➤ PBI will work with County PWD obtain specific requirements on how to repair and restore the roadway sections
- ➤ PBI will work with the County PWD to minimize costs associated with encroachment permit conditions.

### Task 8 - Topographic Surveys - Phase 1 and Phase 2 Design

We will perform design level topographic survey and shall include setting and surveying semi-permanent survey control suitable for future design surveys or construction staking. Field survey shall include but not limited to the following: edge of pavement, edge of traveled ways, water valves, edge of concrete, fencing, building corners, clearwell structure, water tanks, visible pipeline, concrete block walls, trees 6" dbh or larger, concrete spot shots, dirt shots, grade breaks, swales, luminaires, accessible storm drain manhole including pipe size and inverts, accessible sanitary sewer manholes including pipe size and inverts, all visible evidence of existing utilities, visible USA markings, utility vaults, utility pull boxes, electrical panels, and any other features that may affect project design.

We will produce a composite archival base map of the topographic information. All base mapping shall be prepared in AutoCAD Civil 3D (2021) .dwg format. The mapping information will be on individual layers within the electronic drawing files. Frozen layers will contain the remainder of the survey information (information not required to be viewed on the base map). Information shown on frozen and unfrozen layers will be free of conflicts.

**8.1** Topographic Survey for Phase 1 Design – PBI will provide a topographic survey and base map for Phase 1 design New Clearwell and B Zone Tank. This survey will also be able to support the Phase 2 Design for the B Tank BPS.

#### **Deliverables:**

- AutoCAD Civil 3D (2021) .dwg file containing the base map and legend
- One (1) PDF copy of the CAD drawing

- Project horizontal datum shall be NAD 83 California State Plane Zone III and vertical datum shall be NAVD88 and based on nearby found Calaveras County or NGS benchmarks, US Survey Feet.
- The following services are excluded from the scope of work of this proposal:
  - Boundary Dispute Resolution
  - Easement resolution or staking of easements
  - Ground Penetrating Radar (GPR) or Subsurface Exploration (These services can be provided upon request)
  - USA Notification
- **8.2** Geotechnical Engineering Study and Reporting for Phase 1 and Phase 2 Design PBI will explore and evaluate the subsurface soil conditions at the site and provide geotechnical recommendations and foundation design



parameters for the proposed project. We will begin field work by contacting Underground Service Alert (USA) to mark any public utility right of ways located at the various sites. Each project site boundary will be physically marked so that USA representatives will be able to mark the site for public utilities.

PBI will secure the necessary drilling permits from the County for drilling along the proposed pipeline alignments. Any Traffic Control necessary will also be provided for the drilling/soil boring operations.

To explore the subsurface conditions beneath the project sites, we propose to perform tests pits ranging from 5 to 12 feet in depth and soil borings ranging in depth from 5 to 20 feet maximum. Soil samples will be collected at selected depth intervals from the test pits and soil borings for laboratory testing. We anticipate the soil borings will utilize hollow-stem or flight auger drilling methods. A geotechnical log will be produced for each test pit and soil boring. Standard penetration and California modified penetration tests will be performed at regular intervals in the soil borings to assist in evaluating ground conditions of the subsurface soils and to collect undisturbed samples at the site. The borings will be backfilled in accordance with CCEHD. Upon completion of the drilling program, the holes will be backfilled with soil cuttings or lean cement grout. Test Pits will be backfilled with excavated material and tamped.

To evaluate subsurface conditions at the Main Plant site for the newly proposed Clearwell, we propose excavating and logging a maximum of two test pits. Condor's original geotechnical report for the Main Plant site, performed in 1994, suggests that bedrock conditions are shallow, and portions of that report will be used to limit the extent of the field investigation at the plant site.

To evaluate subsurface conditions at the site for the proposed Redwood Tank Replacement, the Booster Pump Station (BPS) and Controls Building, we anticipate excavating and logging a maximum of three test pits. It is likely that bedrock will be relatively shallow based on visual observations made at the Pre-Proposal Field Meeting.

We will perform laboratory tests on samples collected from the sites that may include moisture content and dry density, particle size analysis, plasticity index, and R-Value (if needed). The final selection of testing type and frequency will be selected based on the subsurface conditions encountered during the field exploration.

We will perform geotechnical engineering evaluations and summarize our findings, conclusions, and recommendations in a report. The report will include the following items:

- ➤ A description of the proposed project.
- A description of the surface and subsurface site conditions encountered during our field exploration.
- A description of our field and laboratory investigations.
- A summary of the geologic and seismic conditions within the project area.
- A description of our evaluation to develop ground shaking parameters for the project.
- Conclusions and recommendations related to the geotechnical aspects of:
  - General earthwork, including site stripping, subgrade preparation, temporary excavations, permanent slopes, trench backfill, import fill, compaction criteria, and site surface drainage.
  - Foundation design and construction, including foundation type, allowable bearing capacities, lateral resistance, settlement, and foundation depth.
  - 2019 CBC seismic design criteria.
  - Excavation difficulty and trench backfill recommendations.
  - Concrete slabs and exterior flatwork.
- Plates and maps showing the site vicinity, the test pit locations, the subsurface soil encountered, the geologic conditions in the project area; and
- Appendices that will include results of the test pits, soil borings, and laboratory test results.



#### **Deliverables:**

Geotechnical Engineering Report in PDF format signed and stamped by the Geotechnical Engineer of Record for this project

#### **Assumptions:**

- District to provide the locations of any on-site utilities or other buried obstructions not marked by USA prior to our field activities.
- > District to provide geotechnical subconsultant the authorization to enter the project site.
- The approximate soil boring and test pit locations will be staked in the field prior to commencement of field activities by subconsultant.
- > Subconsultant will not be held responsible for damage to any utilities that were not marked or that were not brought to our attention prior to beginning our field activities.
- We have included a third party utility locator in our proposal for utility confirmation and safety purposes.
- Additional laboratory testing, other than that listed above, will be approved by the client prior to testing and will result in additional fees.
- The design is based on the 2019 CBC. The 2019 CBC requires a site-specific ground motion hazard analysis be performed for sites identified as Class D and S1 values greater than or equal to 0.2g unless structural design exceptions are taken.
- This project is likely to meet these criteria. We are not including this analysis as part of this proposal but can provide it at a later date upon your request.

#### Task 9 - Potholing/Utility Coordination - Phase 1 and Phase 2 Design

PBI will undertake, coordinate, and schedule a potholing effort to verify the location and depth of potential utility conflicts. This effort is focused on the projects anticipated to be constructed in Phase 2 only.

- 9.1 <u>Utility Research</u> PBI via site visits, information requests, and by other available means will attempt to locate existing fiber optic, telephone, electrical, cable, natural gas, water and other utilities, adjacent to, or in conflict within the project limits.
- **9.2** Potholing Plan Development PBI will submit a plan for potholing along the alignment at strategic locations that warrant investigation to obtain better information for design. We will survey the location of each pothole and include this data in the plan sheets.

#### **Deliverables:**

Potholing Plan

#### **Assumptions:**

Potholing efforts for the C1 and Copper Valley Transmission Main not included in this effort

#### <u>Task 10 – Environmental/CEQA – Programmatic Approach</u>

PBI will prepare all necessary environmental studies for compliance with the California Environmental Quality Act (CEQA). Helix has identified a programmatic approach as the most cost-effective approach that will still support the aggressive schedule needs of the Phase 1 improvements.

10.1 <u>Biological Resource Evaluation</u> – This task consists of preparation of a Biological Resource Evaluation (BRE) to support CEQA documentation and potential regulatory permitting. The BRE will provide information on site conditions and the potential for impacts to special-status species required to support any such federal agency consultation. We will conduct a biological reconnaissance survey of the project site, including mapping the locations of sensitive species observed during the time of the survey (assumed to be spring/summer 2022). Plant and animal species encountered on the site will be identified to the taxonomic level as possible at the time of the survey. We will prepare a BRE letter report to



describe the methods of the biological studies conducted, present the results of the literature review and fieldwork, provide mapping of all of the biological habitats present on the property, assess the potential for special-status species to occur on the property or be impacted by the proposed project, identify regulatory issues related to the resources on the site, quantify acreages of any special-status species or sensitive habitats on the property, quantify impacts to sensitive resources (based on the PDR), and recommend avoidance and minimization measures and/or mitigation measures, if necessary. Based on our experience with multiple projects in Calaveras County, USFWS considers the federally threatened California red-legged frog (CRLF; Rana draytonii) to have the potential to occur in the project region. Therefore, a habitat assessment will be conducted for CRLF as part of the biological reconnaissance survey and incorporated into the BRE report.

#### **Deliverables:**

Draft and Final Biological Resource Evaluation letter report

#### **Assumptions:**

- The project will require a Section 404 Nationwide Permit from USACE
- Does not include protocol surveys for special-status animal species or focused botanical surveys for special-status plants
- Preparation of a Biological Assessment to support formal Section 7 Consultation is not expected to be necessary at this time and is not included in this scope of work.
- > Coordination with CDFW or USFWS regarding special-status species is not included in this scope of work
- <u>10.2 Aquatic Resources/Wetland Delineation</u> Wetland scientists will conduct a wetland delineation of the project site to help determine the need for project permits. We will prepare an aquatic resources delineation letter report presenting the results of the jurisdictional delineation. We will respond to one round of consolidated comments, if provided, and provide the District with one hard copy and one electronic copy of the final report.

#### **Deliverables:**

Draft and Final Aquatic Resources Delineation letter report

#### **Assumptions:**

- We will rely primarily on project site data for the Aquatic Resources Delineation Report.
- The jurisdictional boundaries identified during the jurisdictional delineation will be subject to verification by the applicable resource agencies.
- **10.3** <u>Cultural Resource and Historic Properties Study/Built Environment Assessment</u> The cultural resources studies proposed below are intended to fully meet the requirements for CEQA and regulatory permitting.

Area of Potential Effects Map: We will develop an Area of Potential Effects (APE) map that will identify the project area that will be archaeologically and architecturally surveyed for the project. The APE map will be submitted to the District (and/or other participating federal agencies, as appropriate) for approval and adoption.

Record Search, Background Research, Native American Outreach: We will conduct an archaeological and historical records review and literature search through the Central California Information Center (CCIC) of the California Historical Resources Information System, located at California State University, Stanislaus. The records search area will include the project's APE and a 0.25-mile radius around the APE. The purpose of the records search is to: (1) identify archaeological sites and historic structures previously documented within and immediately adjacent to the APE; (2) to determine if the APE has been previously surveyed, when those surveys took place, and how the surveys were conducted; and (3) to ascertain the potential for cultural resources to be found in the APE and within 0.25-mile of the APE boundaries. The records search will include reviews of the appropriate US Geological Survey (USGS) topographic maps



where cultural resources are mapped, archaeological site and historic structure records, and data from previous surveys and research reports. In addition, the State of California Historic Resource Inventory (HRI) database, the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the listings of California Historical Landmarks, and the California Points of Historical Interest will be examined to determine the presence of designated, evaluated, and/or historic-era resources in the vicinity of the APE.

Upon approval of the District, the Native American Heritage Commission (NAHC) will be contacted to conduct a records search of their Sacred Lands File for the presence of Native American sacred sites or human remains in the vicinity of the APE. The results provided by the NAHC will include a list of Native American groups and individuals with potential knowledge of cultural resources in or near the project.

<u>Cultural Resources Survey:</u> We will conduct a survey to determine the presence of prehistoric and/or historic resources within the APE. The fieldwork will consist of an intensive physical inspection of the APE by crew members on foot. The methods and results of the survey will be documented in a Cultural Resources/Built Environment Studies Survey Report (CRBESSR), described below.

<u>Cultural Resources/Built Environment Studies Survey Report:</u> The results of the records search, background research, NAHC coordination, and cultural resources survey would be presented in a CRBESSR. This report would be NAHC Section 106 compliant and suitable for consultation with federal agencies during the regulatory permitting process. Copies of the draft CRBESSR would be submitted to the District and federal agencies (as needed) for review and comment. Upon receipt of written comments, the draft CRBESSR would be revised into a final report. Documentation of the records search, NAHC coordination results, and any completed DPR forms would be attached to the final report as appendices. The CRBESSR would be intended to provide evidence to any participating federal agencies (i.e., USACE) that potential effects to cultural resources would be avoided and that no further compliance with Section 106 is required.

Finding of No Adverse Effect Document: We assume that the significance evaluations of and properties/resources in the project study area will not meet the criteria of eligibility to the NRHP or the CRHR, and therefore the project will not adversely affect the significance of a historic property (under Section 106) or a historical resource (under CEQA). In order to satisfy the requirements of Section 106, we would prepare a Finding of No Adverse Effect (FNAE) document that summarizes the supporting research and fieldwork and clearly demonstrates that no significant cultural resources would be impacted as a result of the project. Copies of the draft FNAE would be submitted to the District and federal agencies (as needed) for review and comment. Upon receipt of written comments, the draft FNAE would be revised into a final document for submittal to State Historic Preservation Office (SHPO).

#### **Deliverables:**

- Draft and Final Area of Potential Effects Map
- > Draft and Final Historic Cultural Resources/Built Environment Studies Survey Report (Section 106 compliant)
- Draft and Final Historic Finding of No Adverse Effect document.

- CCIC fees will not exceed \$500.
- The District will undertake all formal tribal consultations under AB52.
- Any such historic properties or features will not be identified in the project's APE and/or will be avoided during construction therefore no significance evaluations or Finding of Effects (FOE) documents will be required to address potential effects on those structures.
- No previously recorded or undocumented archaeological resources will be located within the APE.
- Subsurface testing, archaeological significance evaluations, and data recovery studies are not included



- in this scope.
- if archaeological resources are encountered within the APE and cannot be avoided during construction, a separate scope and budget will be prepared if these types of additional work are warranted.
- 10.4 CEQA Mitigated Negative Declaration We will prepare an IS/MND per Sections 15070-15075 of the CEQA Guidelines in support of the proposed project. The Administrative Draft IS/MND will include a detailed description of the proposed project, an Initial Study checklist consistent with the Appendix G checklist in the 2022 CEQA Statute and Guidelines, and supporting figures. We. will produce an electronic version of the Administrative Draft IS/MND for District review. Following a single round of comments and revision, we will produce an electronic version of the Draft IS/MND for public circulation by the District (via the State Clearinghouse).

We will prepare a Notice of Intent (NOI) to Adopt an MND and a distribution list for review and approval by the District.

In consultation with the District, we will respond to comments received on the contents of the Draft IS/MND during public and state agency review of the document. We will prepare draft responses to comments on the Draft IS/MND for District review; it is assumed that public comments will be minor and supporting technical analyses will not need any revisions. The final responses to comments and revisions to the Draft IS/MND (as needed) will be incorporated into the Final IS/MND.

We will draft the Mitigation Monitoring and Reporting Program (MMRP) per Section 15097 of the CEQA Guidelines. An electronic version of the screen check Final IS/MND and MMRP will be provided to the District for review. If necessary, one set of revisions will be incorporated prior to finalizing the document. Following consideration (and assumed adoption) of the proposed project and IS/MND by the District's Board, HELIX will produce the Notice of Determination (NOD).

#### **Deliverables:**

- ➤ Administrative Draft IS/MND delivered electronically
- Draft IS/MND delivered electronically
- ➤ Notice Of Intent
- > Up to up to three hardcopies of the MMRP along with an electronic copy in Microsoft Word® and Adobe Acrobat® (.pdf) formats.
- > Up to up to three hardcopies of the Final IS/MND along with an electronic copy in Microsoft Word® and Adobe Acrobat® (.pdf) formats.
- Notice Of Determination

- The District will disseminate the Draft IS/MND through the State Clearinghouse per AB 819.
- District will also be responsible for filing the NOI with the County Clerk, publishing a public notice in a local newspaper, and/or notifying surrounding property owners of the availability of the Draft IS/MND (as needed).
- ➤ All filing fees associated with the NOD will be borne by the District.
- Notice of Determination (NOD) to be executed and filed with the County Clerk and State Clearinghouse by the Lead Agency within 5 business days of project adoption.
- 10.5 Section 401 Clean Water Certification Section 401 of the CWA requires that the discharge of dredged or fill material into waters of the US, including wetlands, does not violate state water quality standards. As required by Section 404, a 401 Water Quality Certification must be obtained or waived for permit compliance. It is assumed for the purposes of this scope that waters of the US will be impacted/filled during project development. We will prepare an application for a Section 401 Water Quality Certification



to discharge fill into waters of the State associated with implementation of the proposed project. If features classified as waters of the State will be impacted and those features are not also waters of the US, a Report of Waste Discharge (ROWD) is required to be submitted to the appropriate RWQCB pursuant to California Water Code Section 13260 for impacts to those features.

We will prepare a 401 Water Quality Certification or Waste Discharge Requirements Application for submittal to the Central Valley Regional Water Quality Control Board (CVRWQCB). The 401 application will include the 401 Water Quality Certification Application Form, the CVRWQCB fee calculator spreadsheet, and supporting figures showing impacts to federally jurisdictional waters and/or waters of the State, and additional, relevant information required for a complete application.

We will prepare a pre-application packet including a project description narrative and supporting graphics to initiate a pre-application meeting (assumed to be virtual) with the CVRWQCB prior to submitting the application. As applicable, relevant issues raised and discussed during the pre-application meeting will be incorporated into the final application for submittal.

The level of effort required for an alternatives analysis within each of the three tiers shall be commensurate with the significance of the impacts resulting from the discharge:

- Tier 3 projects are defined under the Procedures to include any discharge of dredged or fill material that directly impacts more than two-tenths (0.2) of an acre or 300 linear feet of waters of the State, rare, threatened, or endangered species habitat in waters of the State, wetlands or eel grass beds, or Outstanding National Resource Waters or Areas of Special Biological Significance, and is not a project that inherently cannot be located at an alternate location. Tier 3 projects are required to provide an analysis of off-site and on-site alternatives.
- Tier 2 projects include any discharge of dredged or fill material that directly impacts more than one tenth (0.1) and less than or equal to two tenths (0.2) of an acre or more than 100 and less than or equal to 300 linear feet of waters of the state unless it meets the criteria for a Tier 3 project, or any project that inherently cannot be located at an alternate location (unless it meets the size requirements set forth in Tier 1). Tier 2 projects shall provide an analysis of only on-site alternatives. For routine operation and maintenance of existing facilities, analysis of on-site alternatives is limited to operation and maintenance alternatives for the facility.
- Tier 1 projects include any discharge of dredged or fill material that directly impacts less than or equal to one tenth (0.1) of an acre or less than or equal to 100 linear feet of waters of the state unless it meets the criteria for a Tier 3 project. Tier 1 projects shall provide a description of any steps that have been or will be taken to avoid and minimize loss of, or significant adverse impacts to, beneficial uses of waters of the state.

If an alternative analysis is required, HELIX will prepare a brief Alternatives Analysis Memo relevant to the project. The Alternatives Analysis Memo will include information relevant to on-site and, if applicable, off-site alternatives to the proposed development, up to budgeted amount, to demonstrate that the proposed project represents the LEDPA. The memo will incorporate a variety of information sources, GIS mapping, land use data, CEQA analysis, and other information, as relevant.

#### **Deliverables:**

- Brief Alternatives Analysis Memo, relevant to the project, if required
- Digital copy of the 401 Water Quality Certification and/or Waste Discharge Requirements Application submitted to the CVRWQCB.

- Application fees are based on the area extent of impacts to aquatic features.
- This fee is not included in the budget for this task and is the responsibility of the District.



- The application fee is due prior to submittal of the application to the CVRWQCB.
- drainages are characterized as "waters of the US" and are, therefore, subject to the regulation of the USACE. The USACE regulates the discharge of fill material into jurisdictional waters of the US under Section 404 of the CWA. Any project resulting in the placement of dredged or fill material into waters of the US requires procuring a CWA Section 404 permit from the USACE. Select activities may be authorized under general permits (i.e., pre-authorized nationwide permits) subject to certain conditions.

It is assumed for the purposes of this scope that waters of the US on the site will be impacted/filled during project development. If so, we will prepare a Pre-Construction Notification (PCN) for submittal to the Sacramento District USACE requesting authorization for the placement of fill in waters of the US pursuant to the requirements authorized under the Federal CWA Section 404 Nationwide Permit 3 (NWP 3). NWP 3 is focused on maintenance (including repair or replacement) of existing facilities and was reissued by the USACE on Dec 27, 2021 (with an effective date of Feb 25, 2022).

This scope of work assumes that any fill proposed for placement within the 100-year floodplain will be completed in a manner consistent with all applicable state and local floodplain management requirements. The PCN will include relevant project information as required for authorization under the NWP 3, and specified pursuant to 82 FR 1860. The following information is required to prepare the application submittal package:

- Surface area of waters to be filled and dredge volume (development footprint provided in usable digital file format by the District's engineer and analyzed by PBI)
- Biological Resources Study prepared for the project (see above)
- Aquatic Resources/Wetland Delineation Report prepared for the project (see above)
- > A Cultural Resources Assessment Report prepared for the project (see above)
- ➤ Digital files for the project including the project boundary and/or area of potential effect, as applicable (usable file formats include \*.dwg, \*.dxf, or GIS-shape files, provided by the District's engineer)
- Construction drawings/Improvement Plans, 11x17-format PDF (provided by the District's engineer).

We will investigate the most cost and time effective method(s) to mitigate project impacts to waters of the US. The payment of in-lieu-fees and/or the purchase of mitigation credits at a USACE-approved mitigation bank, as required, will be investigated as the preferred mitigation option(s).

We will provide agency liaison through the Section 404 permitting process and will address comments and/or questions concerning the aforementioned reports and application packet as necessary, up to our budgeted amount. The scope assumes electronic submittal of the NWP PCN application package to the USACE (based on current USACE Guidelines).

#### **Deliverables:**

Digital copy of the PCN NWP 3 permit application as submitted to the USACE.

- ➤ All mitigation, if warranted, will be coordinated through the District.
- We do not believe that compensatory mitigation will be required for this project.
- 10.7 1600/1602 Lake/Streambed Alteration Agreement The CDFW regulates stream zones and adjacent riparian corridors. A Streambed Alteration Agreement (SAA), in compliance with Section 1602 of the California Fish and Game Code, is required when projects will substantially divert, obstruct, or change the natural flow of a river, stream or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed.



We will prepare a Streambed Alteration Notification (Notification) for submittal to CDFW (Region 2, North Central Region) via CDFW's Environmental Permit Information Management System (EPIMS). The Notification will rely on the technical studies outlined above to support preparation of a complete Notification. Additionally, we will provide liaison during the application review process, up to the budgeted amount.

The CDFW application fee total is based on the aggregate total of construction costs of individual improvements to be constructed within the stream zone. This fee is not included in the budget for this task and is the responsibility of the District. Application fee is due prior to submittal of the Notification via EPIMS.

#### Deliverables:

Digital copy of the Notification submitted to CDFW, North Central Region (Region 2 via EPIMS).

#### **Assumptions:**

- The District will be responsible for the CDFW application fee
- > Application fee is due prior to submittal of the Notification via EPIMS.

#### Task 11 – Stormwater Pollution Prevention Plan (SWPPP) – Phase 1 and Phase 2 Design

The Phase 1 and Phase 2 Design projects; New Clearwell, New B Zone Tank and B Zone BPS do not require a SWPP, as their impact area is less than an acre. PBI will develop Water Pollution Control Plan (WPCP) in lieu of a SWPP. The WPCP will be uploaded electronically by the Consultant via the State's Storm Water Monitoring and Report Tracking System (SMARTS), certified by the District, and assigned a valid WDID number by the State.

#### **Deliverables:**

Six (6) printed, color copies of final WPCP document in three ring binders: two copies each to Contractor, County Public Works and District staff.

#### **Assumptions:**

- PBI will upload the final WPCP electronically to State's Stormwater Monitoring and Report Tracking System (SMARTS) database
- District to certify the WPCP prior to PBI uploading it to the SMARTS database

# Task 12 (Phase 1 Design) and Task 13 (Phase 2 Design) – Bid Period Services/Issue Addenda/Answer RFIs PBI will provide Bid Assistance to the District which shall include the following major tasks:

- ➤ PBI will prepare written responses to answer bidder's requests for information and to make clarifications and prepare written addenda to address changes and clarifications to the drawings, bid forms, project manual and technical specifications.
- ➤ PBI will review the bids and make a recommendation for award, addressing any significant discrepancies between the final engineer's opinion of probable construction costs and the lowest responsive, responsible bidder's bid.
- Prepare conform plans and specifications, in response to changes based on addenda prepared for the bid documents.

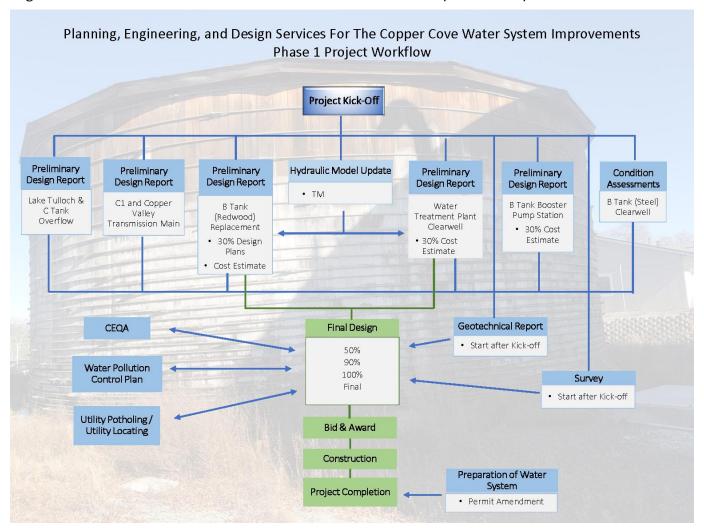
**Deliverables:** Addenda, Conformed Plans and Specifications delivered electronically **Assumptions:** The District will advertise and circulate the bid documents for public bidding of the project for construction.



#### PROJECT SCHEDULING/PHASING

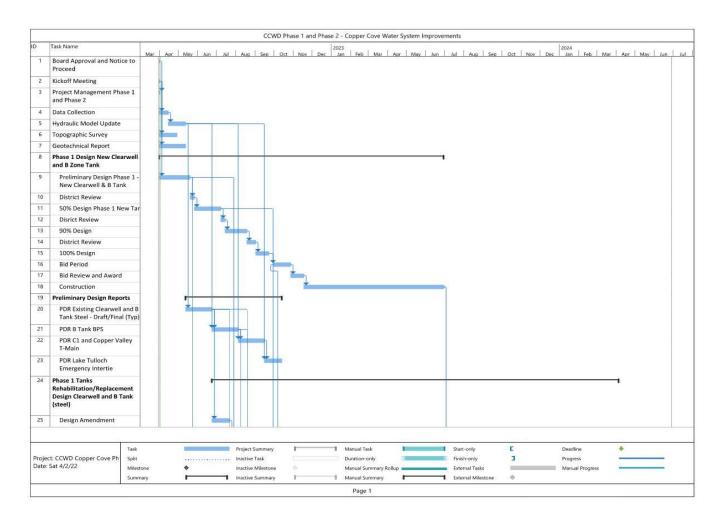
Our approach to phasing is to include the New Clearwell, New B Zone Tank and preliminary design reports for the rehabilitation/replacement of the existing Clearwell and B Tank (steel) in Phase 1. These projects are currently funded in the CIP and of the highest priority for the water system. We have developed an aggressive schedule that supports completion of the design and construction by end of June 2023. We have also included the preliminary design reports for the remaining projects into Phase 1. This will provide the District with recommended projects and updated cost estimates that can be utilized to update the CIP once the recently approved bond funding becomes available along with supporting a programmatic approach to the CEQA process. We have included the design of the new B Tank BPS in Phase 2. The Phase 2 project is also currently funded in the District's CIP. We have kept the C1 and Copper Valley Transmission Main in Phase 3 as it is not currently funded and timing will be dependent of funding availability.

Our approach to construction phasing addresses the fact that the 5 highest priority projects all occur on two sites; WTP and B Tank site. The new Clearwell and new B Zone Tank are planned to be constructed in 2023. The remaining high priority improvements include two improvements at the B Tank site; B Tank (steel) rehabilitation/replacement and the new B Tank BPS. It is recommended to combine these two improvements into a common project to improve efficiencies in the design and construction phase of the project. The combined B Tank and BPS project along with the Clearwell rehabilitation/replacement construction would not begin until after the new Clearwell and new B Zone Tank construction phase is complete.

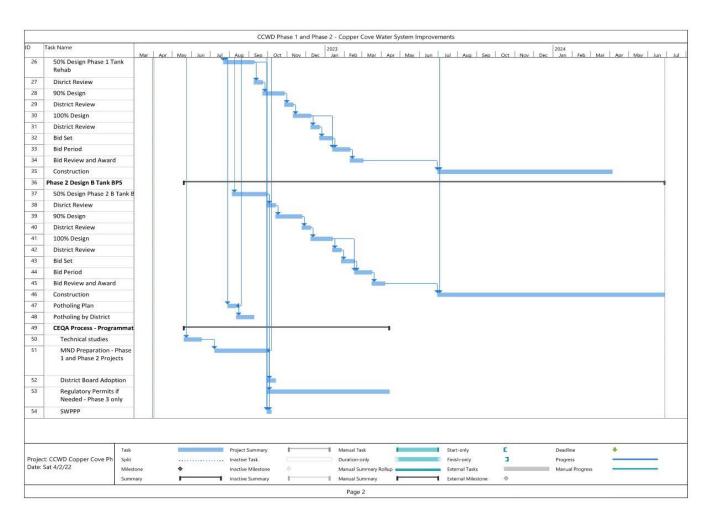




We have developed a detailed and aggressive project schedule that supports the District's desire to complete the construction of the proposed tanks by the end of June 2023.









## **LEVEL OF EFFORT TABLE**

Task No.	<sup>Task</sup> Description	Principalin Charge	Senior Engineer 3	Project Manager 1	Senior Engineer 1	Staff Engineer 2	Staff Engineer 1	Technidan 2	Administrative 4	PBILabor	BRIROW	PSOMAS (Survey)	Helix (Environmentary	Compliance First	ATEBN (Electrical)	CYS(Structural)	V&A Condition Assessment and Co Design	CSI (Condition Assessment)	Condor (Geotech)	Total_ator Hours
Task 1 - F 1.1	Project Management (Excludes Optional Tasks) General Project Management	16	4	24	0	0	0	0	2	46										0
1.2	Quality Assurance/Control	4	24	4	0	0	0	0	0	32										0
1.3	Project Meetings (Up to 10)	40	0	40	0	16	0	0	0	96					32		18			50
1.4	Monthly Invoices and Progress Reports  Subtotal Task 1	6 66	28	12 80	0	16	0	0	24 26	42 <b>216</b>	0	0	0	0	32	0	18	0	0	0 50
Task 2 - F	Phase 1 Design Clearwell/B Tank	00	20	00	U	10	U	U	20	210	·	U	Ū	Ū	32	U	10	·	U	30
2.1	Update Hydraulic Model	4		12			24			40										0
2.2	Draft Preliminary Design Report Final Preliminary Design Report	2	2	12 8		24 8	32 12	8		80 36					10					10
2.4	50% Design Documents	15	10	30	20	65	88	49	0	277					25		32			57
2.5	90% Design Documents	19	12	37	25	78	107	65	0	343					34 17		42			76
2.6	100% Design Documents Bid Set	12 3	8	7	14 5	43 14	58 19	32 16	0	191 66					8		21 11			38 19
	Subtotal Task 2	57	36	130	64	232	340	174	0	1,033	0	0	0	0	94	0	106	0	0	200
Task 3 - E 3.1	xisting Tanks PDR and Condition Assessment - Cle Preliminary Design Report	arwell a	nd B Ta	nk (steel	4	24	32		2	84						64				64
	Final Preliminary Design Report	2	2	8	2	12	16		2	44						16				16
3.3	Tank Condition Assessment (Optional)	2		6		-	4		1	13					L_		_	50		50
Task 4 - F	Subtotal Task 3 Phase 2 Design - B Tank BPS	8	4	30	6	36	52	0	5	141	0	0	0	0	0	80	0	50	0	130
4.1	Draft Preliminary Design Report	2	4	12	4	24	32	8	2	88										0
4.2	Final Preliminary Design Report	2	2	8	2	12	16	4	2	48					18					18
4.3	50% Design Documents 90% Design Documents	4 8	9	18 26	10 15	40 48	52 75	28 38	0	160 221					50 67	87 116				137 183
4.5	100% Design Documents	4	9	18	10	32	42	19	0	133					34	58				92
4.6	Bid Set Subtotal Task 4	24	38	10 92	6 46	16 172	26 242	9 106	6	76 <b>726</b>	0	0	0	0	17 186	29 290	0	0	0	46 476
Task 5 - F	Phase 2 and Phase 3 Improvements PDR - Lake Tul							100	U	120			U	•	100	230		Ū	U	410
5.1	Preliminary Design Report	4	4	24	4	32	40		2	110										0
5.2	Final Preliminary Design Report  Subtotal Task 5	6	6	12 36	6	16 48	24 64	0	4	60 <b>170</b>	0	0	0	0	0	0	0	0	0	0
Task 6 - F	hase 3 Design C1 and Copper Valley Transmission														ŭ			Ů		Ľ
6.1	Draft Preliminary Design Report	2	4	12 8	12 8	24 12	32 24			86 58										0
6.2	Final Preliminary Design Report 50% Design Documents (Optional)	4	10	18	10	40	52	29	0	163					85	135				220
6.4	90% Design Documents (Optional)	8	13	26	17	47	77	38	0	227					113	180				293
6.5 6.6	100% Design Documents (Optional) Bid Set (Optional)	4	10 4	18 10	10 6	32 16	42 26	19 10	0	136 76					56 28	90 45				146 73
0.0	Subtotal Task 6		46	92	64	170	254	96	0	746	0	0	0	0	282	450	0	0	0	732
	ncroachment Permits/Right-of-Way (Optional)																			
7.1	Encroachment Permit Application Right-of-Way (Optional)			2	4	8	12			26 0	100									100
	Subtotal Task 7	0	0	2	4	8	12	0	0	26	100	0	0	0	0	0	0	0	0	100
	and Survey and Geotechnical Report - Phase 1 and	d Phase	2 Desig			4				8		76			ī					76
8.1 8.2	Topographic Survey - Phase 1 and Phase 2 Design Geotechnical Report - Phase 1 and Phase 2 Design			4		4				8		76							304	304
	Subtotal Task 8		0	8	0	8	0	0	0	16	0	76	0	0	0	0	0	0	304	380
<b>Task 9 - F</b> 9.1	otholing/Utility Locating - Phase 1 and Phase 2 De Utility Research	sign 1		2		12	12			27										0
9.2	Potholing Plan Development	1		2		8	8			19										0
T1:40	Subtotal Task 9	2	0	4	0	20	20	0	0	46	0	0	0	0	0	0	0	0	0	0
10.1	Environmental/CEQA - Programmatic Approach Biological Resource Evaluation	- 1		2					1	4			55							55
10.2	Aquatic Resources/Wetland Delination	- 1		2						3			55							55
10.3	Cultural Resources and Historic Properties Study/Buillt Environment Assessment	1		2						3			78							78
10.4	CEQA Mitigated Negative Declaration	1		2						3			188							188
10.5	Section 401 Clean Water Certification	1		2						3			48							48
10.6 10.7	CEQA Mitigated Negative Declaration CEQA (IS/MND)	1 2	2	2					1	3 9			64 36							64 36
	Subtotal Task 10	8	2	16	0	0	0	0	2	28	0	0		0	0	0	0	0	0	
	Stormwater Pollution Prevention Plan - Phase 1 ar Water Pollution Control Plan (WPCP)	nd Phase	2 Desi	gn 1					1	2				8						8
	Subtotal Task 11		0	1	0	0	0	0	1	2	0	0	0	8	0	0	0	0	0	8
	Bid Period Services/Addenda/Conformed Set Phas		rwell/B							40										
	Pre-Bid Meeting Bid Addenda (Up to 3)	4		6	8	12	16		2	12 46	-				10					10
12.3	Conformed Documents	2	4	6			8	10	2	32					2					2
12.4	Bid Evaluation	4		4	_	8		40		16						_				0
Task 13 -	Subtotal Task 12 Bid Period Services/Addenda/Conformed Set Phas		4 ank BP	22 S	8	20	24	10	4	106	0	0	0	0	12	0	0	0	0	12
13.1	Pre-Bid Meeting	4		6					2	12										0
	Bid Addenda (Up to 3) Conformed Documents	2	4	6	8	12	16 8	10	2	46 32					10	15 15	5			29 22
	Bid Evaluation	4	4	4		8	8	10		16						15	3			0
	Subtotal Task 13	14	4	22	8	20	24	10	4	106	0	0	0	0	12	30	10	0	0	51
	COLUMN TOTALS	223	168	535	206	750	1,032	396	52	3,362	100	76	524	8	618	850	134	50	304	2,663

### **DISTRICT'S STANDARD CONSULTING AGREEMENT**

Peterson Brustad Inc. (PBI) is willing to execute the District's standard professional services agreement.

#### **RESUMES**





Education
M.B.A., California State
University, Sacramento

B.S., Civil Engineering, California State University, Chico

#### Registrations

Registered Professional Civil Engineer, CA No. 57869

#### **Certifications**

Grade 4 Water Treatment Operator, CA No. 22526

Certificate of Advanced Business Studies; CA State University, Sacramento

#### **EXPERIENCE**

Mr. Brustad is a founding principal of PBI and has more than 25 years of experience in the planning, design, and construction of water supply, water treatment, water storage, and water storage systems. His experience includes groundwater and surface water treatment, storage tanks, pumping stations, pipeline distribution and conveyance, wells, master planning, flood control, telemetry, and SCADA. He is intimately familiar with a variety of water and wastewater modeling applications. Project experience includes:

#### WATER DISTRIBUTION AND PIPELINES

2020 Priority Mains Replacement Project - California American Water, Sacramento, CA. Project manager for design services to install new front yard mains with new front yard services and meter boxes for the Sampson-Dewey project area. Design includes specifications and drawings for approximately 13,500 feet of new front yard mains, associated services and meters, and related appurtenances. Project includes field survey, proposed utility crossings and Department of Drinking Water variance approvals, permitting support, and bid and construction support services.

2021 Backyard Main Replacement Project - California American Water, Sacramento, CA. Project manager for design services to relocate backyard mains and services to front yard. New front yard mains include service laterals, meters and boxes, hydrants, and related appurtenances. Design includes specifications and drawings for approximately 15,500 feet of new water mains and 330 service laterals and meter installations. Project includes field survey, proposed utility crossings and Department of Drinking Water variance approvals, encroachment permit and permitting support, and construction support services.

Fruitridge Vista Meter Replacement Project - California American Water, Sacramento, CA. Project manager for design of approximately 575 meters to be installed at those services that already have front yard service lines. Design of approximately 575 drop-in meters and 570 new front yard service connections as conversions from back yard mains. Design documents include drawings and specifications. Project includes identification and support of permitting needs including County Encroachment permit for new front yard service connections. Project includes engineering services during construction including: bid support, submittal review, RFI review, and preparation of As-Built drawings.

**Pump Outfalls Replacement Project - City of Sacramento, CA.** Providing condition assessment of outfalls for seven drainage sump station facilities for deterioration, structural failure, corrosion, or need for repair and/or replacement. Prepared pre-design report of recommended repairs and improvements including costs of those repairs and replacements. Developing plans, specifications, and cost estimates for pump outfall replacements at eight pump stations. Project includes survey, CEQA/NEPA compliance, and Water Pollution Control Plan. Project includes bidding and construction management services.

Climate Change Vulnerability Analysis – County of Yuba, CA. PBI is preparing a climate change vulnerability analysis to examine the vulnerability of the urbanized areas of Linda, West Linda, and Olivehurst to climate change. The proposed project will inventory the existing drainage system, evaluate the capacity of the existing drainage system, and compare the existing capacity to anticipated flows based on the latest hydrologic data. This analysis will include the drainage facilities within the urbanized areas and will also examine how these drainage facilities interact with the downstream drainage facilities owned and operated by Reclamation District 784. This comprehensive study will be completed in close collaboration with Reclamation District 784 (RD 784), Yuba-Sutter Transit, and the residents of Linda, West Linda, and Olivehurst. The project represents the first phase of a comprehensive effort. Phase 2 of this comprehensive effort

## Karl B. Brustad, P.E.



will include the development of a future capital improvement program (CIP) to retrofit the drainage system in the project area, incorporate water quality Best Management Practices (BMPs), and preliminary designs for critical improvements.

Dutch Flat Mutual Consolidation Project - Placer County Water Agency (PCWA). The objective of the project was to connect PCWA's Alta water system to the Dutch Flat Mutual water system, bring the Dutch Flat Mutual water system up to current design standards and ultimately dissolve the mutual water system with the consolidation of the two systems. Developed preliminary design report assessing alternatives for the consolidation of Dutch Flat Mutual. Design included plan and profile sheets for approximately 2-miles of water distribution pipelines ranging in size from 10" to 8" to replace the existing undersized and failing distribution system: intertie the two systems, install tank control valve, SCADA, pressure reducing station, and replacement of approximately 10,000lf of water mains. Utilized potholing and USA markings from geotechnical effort to identify locations of existing utilities. Design included replacement of water services and in many cases required modified connections to the existing customers. Included permitting coordination with the Department of Drinking Water and Placer County.

Oak Avenue Parallel Pipeline Project – City of Folsom, CA. Providing design services to eliminate the need for emergency storage at the Oak Avenue pump station and would like to divert flow through a parallel pipeline. Project design includes the development of plans and specifications for the construction of the Oak Avenue Parallel Pipeline. Project includes coordination of survey, right of way, and environmental services. Project will also include bid support and construction support services.

Foresthill Road Pipeline Replacement Project - Foresthill Public Utility District. Project included the design of approximately one mile of 12" diameter water main in Foresthill Road to replace an old failing main. Included installation of new meters and service lines for approximately 35 homes. Design included existing utility location research and inclusion into the design along proposed pipe alignment. Design included applicable detail sheets, including pipeline appurtenances, trenching, and detailed tie-in plans. Included permitting coordination with the Department of Drinking Water and Placer County. Project included bid support and construction management services.

Mosquito Ridge Road to Thomas Street Pipeline Project - Foresthill Public Utility District (FPUD). Design of 6,200 feet of replacement pipeline along Foresthill Road between Mosquito Ridge Road and Thomas Street. Includes 600 feet of replacement pipeline along Sierra View Lane. Improvements will include all necessary valving, separation, hydrants, and service connections to all allow the District to abandon the existing main. Includes the development of a set of improvement plans and includes providing a complete set of written construction specifications for the proposed pipeline. Project includes: survey services, bidding support, and construction management services.

*Transmission Main Evaluation – City of Roseville, CA.* Project Manager for the development of a full desktop evaluation utilizing a risk-based approach for all of the transmission mains within the City of Roseville. Conducted collaborative workshops with City Staff to develop the desktop evaluation.

Arden Intertie and Booster Pump Station Project - California American Water, Sacramento, CA. Provided design services for intertie with Cal Am and City of Sacramento with a booster pump station in Cal Am's Arden system. Included coordination with City of Sacramento Dept. of Utilities for communication and control of flow meter. Project included development of plans, specs, and cost estimate. Included support during construction and start up.

*Transmission Main Evaluation – Fair Oaks Water District, CA.* Prepared a study to assess the current condition of FOWD's transmission mains. Included development of



alternatives for rehabilitation, abandonment, and replacement of the system. The evaluation concluded with a recommended alternative and a capital improvement plan for implementing that alternative.

*Trussel Plant Offsite Improvements Project – Golden State Water Company.* Project manager for the planning and design to provide piping for drainage of surface runoff and well water discharge. Provided water main connection to existing main in a residential street. Design included street improvements. Project included permitting, and right-of-way support.

Keena-Bell Pipeline Project – Placer County Water Agency, Auburn, CA. Project objective was to replace and relocated a failing cross country water main and place within County and private roads. PBI provided design services for the installation of 2,200 ft of new 18" transmission line to replace an aging 14" pipeline. Project was mostly through private property and required reconnection of existing water services. Project included permitting coordination with the Department of Drinking Water and Placer County and public outreach to coordinate proposed improvements with property owners and assist PCWA with development of permanent and temporary construction easements.

*Ophir Road Pipeline Project – Placer County Water Agency, Auburn, CA.* Provided design services for the installation of 2,200 ft of new 12" transmission line. Completed design in less than three months to allow new water service to a community with a failing well. Design included traffic control plans, Placer County encroachment permit, and coordination with Placer County

*Red Ravine Siphon – Placer County Water Agency, Auburn, CA.* Designed approximately 1,000 feet of 24-inch raw water main to replace and relocate existing main that has deteriorated and is prone to leaks. Project included utility coordination, permitting services, and engineering support during bidding.

Channel Hill Neighborhood Water System Improvements – Placer County Water Agency, Auburn, CA. Principal in charge of design for 1,200 linear feet (LF) of 6-inch diameter ductile iron pipe to convert an existing neighborhood to a higher pressure zone. Designed for demolition of unused facilities and clean up of piping connections. Coordinated with Placer County to obtain Encroachment Permit. Prepared design of multiple private service pipelines. Coordinated preparation of plats and legal descriptions for temporary and permanent easements. Coordinated re-construction of past easements and exceptions to resolve deed / easement mismatch.

Highway 20 Pipeline Infrastructure Realignment Project – Browns Valley Irrigation District (BVID), Browns Valley, CA. PBI developed plans and specifications for the relocation of approximately 5,620 feet of pipeline including three Highway 20 crossings. The new HDPE pipeline was designed to replace those impacted by the Highway 20 realignment. Project included the development of traffic control plans, assistance with bidding, and providing engineering support during construction. Prepared As-built drawings.

Sicard Pipeline Project – Browns Valley Irrigation District (BVID), Browns Valley, CA. The objective of the project was to pipe approximately 10 miles of an open ditch system (Sicard Flat Ditch) to eliminate water loss from the ditch and improve service to customers. PBI developed a planning study to determine build out pipeline sizing and to identify preferred alignments. The project was broken up into 6 phases and included a detailed construction sequencing plan as the construction had to occur during limited windows between October and April to avoid impacting the seasonal irrigation demands. The design included plan and profile design sheets and specifications for the construction of approximately 9.6 miles of new 48" to 24" pipeline. The alignment included cross country, dirt roads, county roads and the existing ditch.

Crestridge Lane Pipeline Replacement – City of Folsom, Folsom, CA, 2014. Developed plans and specifications of a new water pipeline that will replace a privately owned

## Karl B. Brustad, P.E.



pipeline serving approximately 40 homes in a community built on a single parcel. Design included installing individual water meters at each home which were originally served through one meter at the bottom of the parcel. Construction manager for the replacement of this pipeline.

*Historic District Utilities Rehabilitation*— *City of Folsom, Folsom, CA.* Designed over 6,000 feet of 8-inch water main and over 1,000 feet of 8-inch sewer main to replace old mains. Developed plans and specifications for the project, including traffic control plans. Provided engineering support during bidding. Provided construction management services including progress payment review, submittal review, RFI's, contract change orders, weekly construction meetings, and as-built plans.

Easton Booster Pump Station & Pressure Reducing Stations – City of Folsom, CA, 2014. Developed plans and specifications for three elements necessary to support the future Aerojet developments of Easton Place, Glenborrow and possibly others. The recommended improvements for the project included: a Booster pump station to supply water from the City's Pressure Zone 1 to the Glenborough Project as well as providing fire flow and two PRV Stations. Project included utility coordination, environmental services and bid support service.

**Relocation of Water Lines for the I-80 Auxiliary Lanes Project** – City of Roseville, CA. The I-80 Auxiliary Lanes Project has three storm drain crossings that conflict with the City's distribution water mains that will require relocation. PBI is developed the relocation plans for three conflicting water lines so they could be incorporated into the Caltrans contract documents for I-80 auxiliary lanes project.

Golden State Water Intertie Pump Station and Pipeline – City of Folsom. Project manager for the feasibility study, design, and installation of 1,800 feet of pipe to connect Intertie pump station with the City of Folsom system. Required the coordination of Folsom, Easton, and intertie pump stations designed to tie the utilities of each together into the City of Folsom water system. Managed the whole process, including feasibility studies, designs, and as build designs.

Highway 26 Transmission Line Extension – Calaveras County Water District, Jenny Lind, CA. Principal. Prepared design for over 7,300 linear feet (LF) of 12-inch diameter ductile iron pipe. Coordinated with CalTrans and Calaveras County to obtain Encroachment Permits. Coordinated design of four pressure reducing stations. Developed traffic control plans. Provided bid-period services including pre-bid meeting, addenda, RFI responses, and also provided engineering services during construction including submittal review, responding to RFIs, and provided opinion on construction change orders.

Ebbetts Pass Reach 3A Pipeline Technical Review and Hydraulic Modeling - Calaveras County Water District, San Andreas, CA. Provided assistance to CCWD with development of the project design including: project deliverables, plans, specifications, and cost estimate. Updated and utilized the Innovyze InfoWater hydraulic model of water system to develop the construction sequencing plan. Provided evaluation of several miles of Ebbetts Pass transmission mains to prioritize improvements by reach – each reach varied in length from one to five miles.

**Backyard Main and Meter Retrofit Project – City of Sacramento.** Project manager for design of improvements to replace backyard mains with mains located within the public right-of-way and the installation of new water services with meters. Project included over 50,000 LF of new water mains and approximately 1,000 new water services with meters.

*Isleton Distribution System Improvements – California American Water.* Established methods required to abandon in-place water pipes in levee. Designed plans and specifications for the construction of new pipelines and water service connections through levee. Coordinated and supported permitting efforts with descriptions and figures

## Karl B. Brustad, P.E.



to obtain all necessary permits. Provided engineering support during bidding and construction.

Larkfield Pipelines Project – California American Water. Provided design and engineering support during construction for the Larkfield Pipelines Project. Services include: identify potential utility conflicts that may be located within the vicinity of the project, development of plans and specifications adequate for the construction of the Larkfield Pipelines, obtaining permits as identified, participate in the bidding process including: pre-bid walk through, response to question, and preparation of addendum. Provide engineering support during construction.

Elverta Road Bridge Main Replacement, (Antelope System) - California American Water, Sacramento, CA. Project manager for preparation of a basis of design report (BODR) for the Elverta Road Bridge Main replacement project, which involved removal and replacement of approximately 280 lineal feet (LF) of 12-in-diameter water main attached to the Elverta Road Bridge.

**Moonbeam Drain Line Design – California American Water.** Project Manager for the design and servicing of the Moonbeam Well Storm Drain. The permitting support included review and approval from Sacramento County for connection to the County's storm drain system.

Nut Plains Well Storm Drain Improvements Project - California American Water, Sacramento, CA. Provided planning, design and permitting support services for the installation of a new storm drain at Cal Am's Nut Plains well site. The permitting support included review and approval from the City of Rancho Cordova for connection to the City's storm drain system. Assisted with the storm drain lateral connection to County storm drain for well pump to waste.

Water Distribution and Fire Protection System Improvements for Grant Grove and Lodgepole Areas of Sequoia and Kings Canyon National Parks – National Park Service, Three Rivers, CA. Project Manager. Participated in a scoping meeting, coordinated with the surveying subconsultant, and provided preliminary design services for improvements to reconstruct major components of the water distribution systems in the Grant Grove and Lodgepole areas of the Sequoia and Kings Canyon National Parks. Project involved removing and replacing approximately 33,100 linear feet (LF) of water pipelines ranging in size from less than 1 to 10 inches in diameter that were old, deteriorated, and failed on a regular basis.

Copper Cove Water System Zone C Pumping Station and Transmission Main Improvements - Calaveras County Water District, San Andreas, CA. Project manager for preliminary design and final design of a new 2,000 gpm (4,500 gpm buildout) water pumping station and approximately 10,000 linear feet (LF) of 20-inch-diameter water transmission main.

Finished Water Pumping Station - Stockton East Water District, Stockton, CA. Project manager for predesign and design of improvements to existing 50 mgd finished water pumping station at the water treatment plant. The project increased the pumping capacity to over 70 mgd including modifications to 48- to 54-inch-diameter distribution pipelines supplying water to California Water Service Company and the City of Stockton's service areas. The existing pumping station included 3 diesel-driven pumps that were replaced with electric motors. Improvements also included electrical and control system improvements, along with a backup generator.

*Eldridge-Madrone Pipeline - Sonoma County Water Agency, California.* Project manager for design of approximately 8,500 linear feet (LF) of 27-inch-diameter mortarlined and coated steel pipe. Design included: connections to existing piping facilities, valves, cathodic protection, and appurtenances.



On-Call Engineering for Capital Improvement Projects - California American Water Company, Sacramento, Placer, Sonoma, and San Mateo Counties, CA. Project manager for on-call contract to provide preliminary design, design, and construction management services for miscellaneous projects as part of the capital improvements program. Projects included: West Placer County Development projects (four miles of 12-to 18-inch-diameter water distribution mains), new pipelines and pipeline replacements for Larkfield District and in multiple service areas located within Sacramento County, two trenchless technology crossings, and multiple state highway crossings (Highway 1, Highway 99, and two at Highway 50). Also provided permitting assistance, which included acquiring permits through direct coordination with local agencies (Caltrans, Sacramento County, and San Mateo.

Montara District Year 2 and Year 3 Fire Flow Improvements for Pipeline Replacements - California American Water, Montara, CA. Designed and provided construction management for 19 pipeline replacement projects identified in the 1996 master plan.

Alta Vista Raw Water Main and Overflow Improvements - California American Water, Montara, CA. Project manager for design and construction of 3,000 linear feet of 6-inch-diameter water main as well as piping system to capture all overflow outlets at the Alta Vista Water Treatment Plant and direct overflows to the Alta Vista drainage system. The project satisfied San Mateo's requirements identified to update the system use permit. As a separate project, prepared an erosion control and bank stability plan to repair existing slope failure areas and mitigate for potential future stability issues for a defined reach along the Alta Vista Raw Water Main's access pathway.

Water Distribution Reliability Predesign and Treatment Plant Failure Mode Analysis - Edgewood Water Company, Edgewood, Nevada. Evaluated alternatives for providing redundant treated water supply to improve the reliability of the water distribution system and designed an intertie between the 14-inch-diameter water distribution main and 14-inch-diameter water main supplying the Embassy Suites' fire protection system. The intertie included approximately 20 linear feet of 14-inch-diameter water main and one manually operated valve.

#### CONSTRUCTION MANAGEMENT

On-Call Engineering Services – Placer County Water Agency. Provided on-call support services to PCWA for the construction, inspection, and rehabilitation for projects on several sites. Services included: the Colfax Ballpark Tank Overflow Alternatives Technical Memorandum redirecting overflow drain line; Security Improvements Plan Design and Specs including fencing improvements at various PCWA sites; Foothill Water Treatment Plant buffer property fencing plan design to develop new fencing around the Foothill WTP Buffer property; an update to the Fluoridation cost estimate; Pre-Design of Bowman WTP Residuals Handling Improvements; and several miscellaneous design support tasks.

*Unionhouse Creek – Sacramento Area Flood Control Agency (SAFCA), CA.* Provided designs and construction management for the widening of Unionhouse Creek and the relocation of the City of Sacramento Storm Water Pump Station (Sump 201). Managed engineering, environmental and construction services for the Unionhouse Creek Improvement Project from Franklin Boulevard to Bruceville Road. Improvements were designed to contain the 100-yr flood flows at the lowest possible cost, while streamlining the permitting process, and accommodating a fast-tracked construction schedule. The improvements consisted of a combination of channel widening a 1-mile segment, concrete lining a 0.6 mile segment, and modifying an existing pump station.

Loomis Basin Pipeline Construction Management Services - Placer County Water Agency. Provided QA/QC services for plans and specifications for 14 repairs to existing

## Karl B. Brustad, P.E.



24-inch diameter treated water pipeline. Managed development of traffic control plans and ROW acquisitions. Completed Caltrans and Placer County encroachment permit applications.

Mather Water Tank, Booster Pump Station, and Water Main - California American Water/Sacramento County, Mather, CA. Project manager for a joint venture project for Cal Am Water and the County of Sacramento to prepare a siting study, and provided design, construction management, and inspection services for a new 3 million-gallon (MG) water tank, 6,000 gpm booster pumping station, and approximately two miles of 8to 24-inch-diameter water main improvements. The transmission main was designed to transfer flows from the new tank and booster station south of Highway 50 to an area north of Highway 50. The state highway crossing utilized an existing railroad bridge and required installation of licenses and agreements with federal government agencies, Union Pacific Railroad (UPRR), and Sacramento County. Mr. Brustad identified project requirements, created, and evaluated proposal solicitations, oversaw consultant activities, developed, and tracked project costs and schedule for budget and schedule management, evaluated project solutions, and acquired permits for the booster pumping station. Construction management services provided included attendance at weekly status meetings; review of submittals, requests for information (RFIs), change orders, and final as-built drawings; documentation management; preparation of monthly status reports, and photo documentation. Mr. Brustad also inspected pipeline construction, backfill material, and bedding material, as well as tank foundation, concrete, formwork, rebar, and compaction testing.

South Stockton Aqueduct - City of Stockton, California. Project manager during design, environmental permitting, and construction engineering services for five miles of new 42-inch-diameter water transmission main extending from the Stockton East Water District treatment plant to the city's water distribution system on Pock Lane. Project included preparation of Supplemental Assessments for Contaminants of Concern, cathodic protection analysis, traffic control, public outreach, preparation of the operations and maintenance (O&M) manual, modifications to the high service pumping station, and the completion of permits and agreements for Burlington Northern Santa Fe, California Department of Transportation (Caltrans), San Joaquin County, California Department of Fish & Game, U.S. Army Corps of Engineers, U.S. Fish & Wildlife Services, Regional Water Quality Control Board, National Marine Fisheries Service, City of Stockton, and State Reclamation Board.

Comstock Drive Sewer Improvements and Bidwell Street Water Line Replacement - City of Folsom, CA. Project manager for predesign, design, bidding, and construction engineering services for the Comstock Drive sewer improvements (1,600 linear feet of 6-to 18-inch-diameter sewer lines) and Bidwell Street water line replacement (3,700 linear feet of 10-inch-diameter water line) projects. A common set of plans was developed for both projects to include the additional of odor control measures for the Comstock Drive sewer improvements.

Montara District Pipeline Replacement Program - California American Water, Montara, CA. Project manager for design, construction management, and environmental documentation and permitting of over two miles of pipe for the Montara District Pipeline Replacement Program. Program involved 13 pipelines ranging in size from six to 12 inches in diameter. Permits include Coastal Development Permit, Department of Fish & Game permit, U.S. Army Corps of Engineers Section 404 permit, San Mateo County encroachment permit, and Caltrans encroachment permit. Oversaw preparation of Initial Study and biological report, which enabled San Mateo County to prepare the Mitigated Negative Declaration. Project included three trenchless technology crossings. Microtunneling was utilized for alignment adjacent to highway and creek crossings.

Sacramento District Pipeline Replacements - California American Water, Sacramento, CA. Project manager for design and construction management of multiple pipeline

## Karl B. Brustad, P.E.



replacement projects in the Sacramento District service area, including approximately six miles of water distribution improvements ranging in size from 12 to 24 inches in diameter.

#### PIPELINE TUNNELING

*UPRR Pipeline Crossings - Union Pacific Railroad (UPRR), Barstow, CA.* Designed and inspected three pressurized pipeline crossings. Acquired agreements with UPRR for all three crossings.

*Highway 99 Pipeline Crossing - Sacramento County, CA.* Provided construction management and inspection services for approximately 400 feet of pipeline crossing near the Florin Road exit of Highway 99. Acquired permits from Caltrans.

*Interstate 50 Pipeline Crossing - Sacramento County, CA.* Provided design and construction management and inspection services for approximately 350 feet of pipeline crossing between Mather Field and Zinfandel exits of Interstate 50 freeway. Acquired permits from Caltrans.

*Interstate 5 Pipeline Crossing - City of Stockton, CA.* Attended coordination meetings with Caltrans for preliminary design of approximately 400 feet of pipeline crossing for a 48-inch-diameter sewer interceptor.

*Light Rail Pipeline Crossing - Sacramento Regional Transit District, Sacramento, CA.* Provided design, construction management, and inspection for approximately 80-feet pipeline crossing near the intersection of Mather Field and Folsom Boulevard.

**Bear Creek Pipeline Crossing - City of Stockton, CA.** Provided preliminary design of approximately 400 feet of pipeline crossing for a 36-inch-diameter sewer interceptor. Acquired all necessary permits.

*Mosher Slough Pipeline Crossing - City of Stockton, CA.* Provided preliminary design of approximately 300 feet of pipeline crossing for a 24-inch-diameter sewer interceptor. Acquired all necessary permits.

#### PROFESSIONAL AFFILIATIONS

Mountain Counties Water Resources Association (MCWRA) Association of California Water Agencies (ACWA) American Society of Civil Engineers (ASCE) Sacramento Area Water Works Association (SAWWA) American Water Works Association (AWWA)

## Dave M. Murbach, P.E.





## Education B.S., Chemical Engineering, University of California, Davis, 1984

#### Registration

Professional Civil Engineer - California No. C054419, 1995

#### **Specializations**

AutoCAD Civil 3D ESRI ArcGIS HEC-GeoRAS HEC-GeoHMS FLO-2D H20Map Water H20Map Sewer WaterCAD LP360

#### **Affiliations**

American Water Works Association

#### **EXPERIENCE**

Mr. Murbach has more than 35 years of experience in the planning and design of domestic water, water reclamation, industrial wastewater, and municipal wastewater treatment systems. His experience includes serving as both project manager and project engineer on projects ranging from water quality studies to preliminary and detailed facility design. His particular areas of expertise include water treatment process design, distribution pump station and pipeline design, disinfection of water and wastewater, chemical feed, and storage systems, and drinking water regulations. Project experience includes:

#### WATER DISTRIBUTION AND PIPELINES

Highway 20 Pipeline Infrastructure Realignment Project – Browns Valley Irrigation District (BVID), Browns Valley, CA. PBI developed plans and specifications for the relocation of approximately 5,620 feet of pipeline including three Highway 20 crossings. The new HDPE pipeline was designed to replace those impacted by the Highway 20 realignment. Project included the development of traffic control plans, assistance with bidding, and providing engineering support during construction. Prepared As-built drawings.

Sicard Pipeline Project – Browns Valley Irrigation District (BVID), Browns Valley, CA. The objective of the project was to pipe approximately 10 miles of an open ditch system (Sicard Flat Ditch) to eliminate water loss from the ditch and improve service to customers. PBI developed a planning study to determine build out pipeline sizing and to identify preferred alignments. The project was broken up into 6 phases and included a detailed construction sequencing plan as the construction had to occur during limited windows between October and April to avoid impacting the seasonal irrigation demands. The design included plan and profile design sheets and specifications for the construction of approximately 9.6 miles of new 48" to 24" pipeline. The alignment included cross country, dirt roads, county roads and the existing ditch.

Arden Intertie and Booster Pump Station Project - California American Water, Sacramento, CA. Provided design services for intertie with Cal Am and City of Sacramento with a booster pump station in Cal Am's Arden system. Included coordination with City of Sacramento Dept. of Utilities for communication and control of flow meter. Project included development of plans, specs, and cost estimate. Included support during construction and start up.

Elverta Road Bridge Main Replacement, (Antelope System) - California American Water, Sacramento, CA. Project manager for preparation of a basis of design report (BODR) for the Elverta Road Bridge Main replacement project, which involved removal and replacement of approximately 280 lineal feet (LF) of 12-in-diameter water main attached to the Elverta Road Bridge.

Crestridge Lane Pipeline Replacement – City of Folsom, Folsom, CA, 2014. Developed plans and specifications of a new water pipeline that will replace a privately owned pipeline serving approximately 40 homes in a community built on a single parcel. Design included installing individual water meters at each home which were originally served through one meter at the bottom of the parcel. Construction manager for the replacement of this pipeline.

Easton Booster Pump Station & Pressure Reducing Stations – City of Folsom, CA, 2014. Developed plans and specifications for three elements necessary to support the future Aerojet developments of Easton Place, Glenborrow and possibly others. The recommended improvements for the project included: a Booster pump station to supply water from the City's Pressure Zone 1 to the Glenborough Project as well as providing

## Dave M. Murbach, P.E.



fire flow and two PRV Stations. Project included utility coordination, environmental services and bid support service.

Golden State Water Intertie Pump Station and Pipeline – City of Folsom. Project manager for the feasibility study, design, and installation of 1,800 feet of pipe to connect Intertie pump station with the City of Folsom system. Required the coordination of Folsom, Easton, and intertie pump stations designed to tie the utilities of each together into the City of Folsom water system. Managed the whole process, including feasibility studies, designs, and as build designs.

Oak Avenue Parallel Pipeline Project – City of Folsom, CA. Providing design services to eliminate the need for emergency storage at the Oak Avenue pump station and would like to divert flow through a parallel pipeline. Project design includes the development of plans and specifications for the construction of the Oak Avenue Parallel Pipeline. Project includes coordination of survey, right of way, and environmental services. Project will also include bid support and construction support services.

**Relocation of Water Lines for the I-80 Auxiliary Lanes Project** – City of Roseville, CA. The I-80 Auxiliary Lanes Project has three storm drain crossings that conflict with the City's distribution water mains that will require relocation. PBI is developed the relocation plans for three conflicting water lines so they could be incorporated into the Caltrans contract documents for I-80 auxiliary lanes project.

**Pump Outfalls Replacement Project - City of Sacramento, CA.** Providing condition assessment of outfalls for seven drainage sump station facilities for deterioration, structural failure, corrosion, or need for repair and/or replacement. Prepared pre-design report of recommended repairs and improvements including costs of those repairs and replacements. Developing plans, specifications, and cost estimates for pump outfall replacements at eight pump stations. Project includes survey, CEQA/NEPA compliance, and Water Pollution Control Plan. Project includes bidding and construction management services.

Dutch Flat Mutual Consolidation Project - Placer County Water Agency (PCWA). The objective of the project was to connect PCWA's Alta water system to the Dutch Flat Mutual water system, bring the Dutch Flat Mutual water system up to current design standards and ultimately dissolve the mutual water system with the consolidation of the two systems. Developed preliminary design report assessing alternatives for the consolidation of Dutch Flat Mutual. Design included plan and profile sheets for approximately 2-miles of water distribution pipelines ranging in size from 10" to 8" to replace the existing undersized and failing distribution system: intertie the two systems, install tank control valve, SCADA, pressure reducing station, and replacement of approximately 10,000lf of water mains. Utilized potholing and USA markings from geotechnical effort to identify locations of existing utilities. Design included replacement of water services and in many cases required modified connections to the existing customers. Included permitting coordination with the Department of Drinking Water and Placer County.

Keena-Bell Pipeline Project – Placer County Water Agency, Auburn, CA. Project objective was to replace and relocated a failing cross country water main and place within County and private roads. PBI provided design services for the installation of 2,200 ft of new 18" transmission line to replace an aging 14" pipeline. Project was mostly through private property and required reconnection of existing water services. Project included permitting coordination with the Department of Drinking Water and Placer County and public outreach to coordinate proposed improvements with property owners and assist PCWA with development of permanent and temporary construction easements.

*Ophir Road Pipeline Project – Placer County Water Agency, Auburn, CA.* Provided design services for the installation of 2,200 ft of new 12" transmission line. Completed design in less than three months to allow new water service to a community with a failing

## Dave M. Murbach, P.E.



well. Design included traffic control plans, Placer County encroachment permit, and coordination with Placer County

*Red Ravine Siphon – Placer County Water Agency, Auburn, CA.* Designed approximately 1,000 feet of 24-inch raw water main to replace and relocate existing main that has deteriorated and is prone to leaks. Project included utility coordination, permitting services, and engineering support during bidding.

*Transmission Main Evaluation – City of Roseville, CA.* Project Manager for the development of a full desktop evaluation utilizing a risk-based approach for all of the transmission mains within the City of Roseville. Conducted collaborative workshops with City Staff to develop the desktop evaluation.

*Transmission Main Evaluation – Fair Oaks Water District, CA.* Prepared a study to assess the current condition of FOWD's transmission mains. Included development of alternatives for rehabilitation, abandonment, and replacement of the system. The evaluation concluded with a recommended alternative and a capital improvement plan for implementing that alternative.

#### PROFESSIONAL ENDEAVORS

Peterson Brustad, Inc. 2008 to present HDR Engineering, Inc., 1990 to 1995, 1996 to 2008

HYA Consulting Engineers, 1995 - 1996 Aerojet General, 1984-1990





#### **Education**

B.S. Civil and Environmental Engineering with Minor in Sustainability in the Built Environment, UC Davis, 2013

#### Registrations

Professional Engineer California No. 86512

Water Treatment Operator, Grade T2 No. 42384

#### **Specialized Training**

AutoCAD Civil 3D ArcGIS InfoWater HEC-RAS HEC-SSP FLO-2D

#### **EXPERIENCE**

Ashley has over eight years of experience in water and water resources projects. She has design experience in pump stations, water storage tanks, and pipelines using AutoCAD Civil 3D. She also has planning experience in flood management, water system master plan, capital improvement plans, and cost estimating. Ashley will be a key contributor to the team and will be largely responsible for managing drawing and specification development. She has been the responsible engineer for numerous water infrastructure projects since she joined PBI in 2014 and has accrued valuable experience in water infrastructure and pipeline design, as well as hydraulic modeling. Project experience includes:

#### PIPELINES AND WATER DISTRIBUTION

Foresthill Road Pipeline Replacement - Foresthill Public Utilities District, Foresthill, CA. Developed plans and specifications to replace existing parallel 6-inch water mains with a new 12-inch water main that from existing facilities at the water treatment plant to the PRV station at Walter's Way in Foresthill, CA.

**Dutch Flat Mutual Consolidation Project - Placer County Water Agency, Auburn, CA.** Developed plans and specifications to replace an existing aging distribution system for the community of Dutch Flat, decommission the existing water treatment plant, and connect customers to PCWA service in Dutch Flat, CA.

*Transmission Main Evaluation – City of Roseville, CA.* Project Engineer responsible for the development of a full desktop evaluation utilizing a risk-based approach for all of the transmission mains within the City of Roseville. Developed a pipe risk screening tool utilized for the evaluation. Conducted collaborative workshops with City Staff to develop the desktop evaluation.

**Keena-Bell Pipeline Replacement - Placer County Water Agency, Auburn, CA.**Developed plans and specifications to replace an existing 14-inch water main with a new 18-inch water main that will connect existing facilities at Bell Road and Keena Drive in Auburn, CA.

*Ophir Road Pipeline Project - Placer County Water Agency, Auburn, CA.*Provided design services for the installation of 1,800 ft of new 12" transmission line. Provided design in less than 3 months to allow new water service to a community with a failing well.

Golden State Intertie and Pipeline - City of Folsom. Project engineer for the feasibility study, design, and installation of 1,800 feet of pipe to connect Intertie pump station with the City of Folsom system. Required the coordination of Folsom, Easton, and intertie pump stations designed to tie the utilities of each together into the City of Folsom water system. Managed the whole process, including feasibility studies, designs, and as build designs.

Easton Booster Pump Station & Pressure Reducing Stations - City of Folsom, Folsom, CA, 2014. Developed plans and specifications for booster pump station necessary to support the future Aerojet developments of Easton Place, Glenborough and possibly others.

La Collina Pump Station and Tank Replacement - City of Folsom, Folsom, CA. Project Engineer for the design of the replacement of the water storage tank at the La Collina pump station. Duty pumps were appropriately sized for projected demand, fire pump capability was assessed, and a hydropneumatic tank was sized to prevent excessive pump cycling.

*Larkfield Pipelines Project - California American Water.* Provided design and engineering support during construction for the Larkfield Pipelines Project. Services included: identify potential utility conflicts that may be located within the vicinity of

PETERSON . BRUSTAD . INC .



the project, development of plans and specifications adequate for the construction of the Larkfield Pipelines, obtaining permits as identified, participate in the bidding process including: pre-bid walk through, response to question, and preparation of addendum. Provided engineering support during construction.

Crestridge Lane Pipeline Replacement - City of Folsom, Folsom, CA. Developed plans and specifications of a new water pipeline that will replace a privately owned pipeline serving approximately 40 homes in a community built on a single parcel. Project included the design of approximately 2,000 lf of 8" water main in Crestridge Lane and the installation of new meters and service lines. Design required installation of individual water meters at each home which were originally served through one meter at the bottom of the parcel. The design also included the installation of a new sewer line to service the community. Managed construction for the installation of the pipelines and water meters.

*Isleton Distribution System Improvements - California American Water.* Design of plans and specifications for the construction of new pipelines and water service connections through levee.

**Ebbetts Pass Reach 3A Pipeline Project - Calaveras County Water District.** Assisted CCWD with development of the project design including: project deliverables, plans, specifications, and cost estimate.

**Moonbeam Drain Line Design - California American Water.** Project Engineer for the design and servicing of the Moonbeam Well Storm Drain.

*Trussel Plant Offsite Improvements Project - Golden State Water Company.*Project engineer for the planning and design to provide piping for drainage of surface runoff and well water discharge, provide water main connection to existing main in a residential street, design construction of street improvements, and conduct permitting and right-of-way support.

2016 Water Master Plan Update and Urban Water Management Plan, City of Folsom, CA. Project engineer to evaluate the water system relative to current and future water demands consistent with 2015 Urban Water Management Plan and identified system improvements. Developed 10-year Capital Improvement Program. Performed evaluation of existing distribution system to identify pipeline improvements.

**Dutch Flat Mutual Consolidation - Placer County Water Agency.** Project engineer for the design and coordination of connecting the Placer County Water Agency's existing Alta system to the Dutch Flat Mutual Water Company system. Project design included connecting the Alta system to an existing storage tank and replacing approximately 8,600 feet of distribution pipe, including various valves, hydrants, and ancillary appurtenances.

Jenny Lind Water System & Copper Cove Water System Master Plans. Project engineer to develop water master plans for the Jenny Lind and Copper Cove Water Systems. Developed existing and build-out conditions water system models utilizing Innovyze InfoWater to assess the systems in comparison to District design standards. Performed evaluation of existing distribution system to identify pipeline improvements.

Jenny Lind and Copper Cove Water System Master Plans - CCWD, San Andreas, CA. Developed water master plans for two water systems. Included evaluation of pipelines for development of CIP.

North Area Streams - Sacramento Area Flood Control Agency. Project engineer for the design to improve approximately 7 miles of levees adjacent to Arcade and Steelhead Creeks. Project included: utility coordination, utility improvement designs,

PETERSON . BRUSTAD . INC .



and design to restore utilities disturbed by anticipated construction activities; preparation of finished Plans, Specs, and Cost Estimates for bidding and construction; acquisition of necessary permits and approvals from CVFPB for improvements.

Highway 20 Realignment Pipeline - Browns Valley Irrigation District. Project engineer for the design of approximately one mile of raw water pipeline to be relocated by Caltrans during the realignment of the Highway 20 near Smartsville, CA. Developed plan and profile and detail plan drawings, design specifications, and cost estimate.

Sicard Pipeline Project – Browns Valley Irrigation District (BVID), Browns Valley, CA. The objective of the project was to pipe approximately 10 miles of an open ditch system (Sicard Flat Ditch) to eliminate water loss from the ditch and improve service to customers. PBI developed a planning study to determine build out pipeline sizing and to identify preferred alignments. The project was broken up into 6 phases and included a detailed construction sequencing plan as the construction had to occur during limited windows between October and April to avoid impacting the seasonal irrigation demands. The design included plan and profile design sheets and specifications for the construction of approximately 9.6 miles of new 48" to 24" pipeline. The alignment included cross country, dirt roads, county roads and the existing ditch.

Oak Avenue Parallel Pipeline Project – City of Folsom, CA. Providing design services to eliminate the need for emergency storage at the Oak Avenue pump station and would like to divert flow through a parallel pipeline. Project design includes the development of plans and specifications for the construction of the Oak Avenue Parallel Pipeline. Project includes coordination of survey, right of way, and environmental services. Project will also include bid support and construction support services.

**Relocation of Water Lines for the I-80 Auxiliary Lanes Project – City of Roseville, CA.** The I-80 Auxiliary Lanes Project has three storm drain crossings that conflict with the City's distribution water mains that will require relocation. PBI is developed the relocation plans for three conflicting water lines so they could be incorporated into the Caltrans contract documents for I-80 auxiliary lanes project.

**Pump Outfalls Replacement Project - City of Sacramento, CA.** Providing condition assessment of outfalls for seven drainage sump station facilities for deterioration, structural failure, corrosion, or need for repair and/or replacement. Prepared predesign report of recommended repairs and improvements including costs of those repairs and replacements. Developing plans, specifications, and cost estimates for pump outfall replacements at eight pump stations. Project includes survey, CEQA/NEPA compliance, and Water Pollution Control Plan. Project includes bidding and construction management services.

Easton Booster Pump Station & Pressure Reducing Stations – City of Folsom, CA, 2014. Developed plans and specifications for three elements necessary to support the future Aerojet developments of Easton Place, Glenborrow and possibly others. The recommended improvements for the project included: a Booster pump station to supply water from the City's Pressure Zone 1 to the Glenborough Project as well as providing fire flow and two PRV Stations. Project included utility coordination, environmental services and bid support service.

Nut Plains Well Storm Drain Improvements Project - California American Water, Sacramento, CA. Provided planning, design and permitting support services for the installation of a new storm drain at Cal Am's Nut Plains well site. The permitting support included review and approval from the City of Rancho Cordova for



connection to the City's storm drain system. Assisted with the storm drain lateral connection to County storm drain for well pump to waste.

*Transmission Main Evaluation – Fair Oaks Water District, CA.* Study to assess the current condition of FOWD's transmission mains. Included development of alternatives for rehabilitation, abandonment, and replacement of the system. Ultimately concluded with a recommended alternative and a capital improvement plan for implementing that alternative.

#### PROFESSIONAL AFFILIATIONS AND ACCOMPLISHMENTS

Member, Sacramento Valley, Engineers Without Borders Member, American Society of Civil Engineers Member, Society of Women Engineers 2019 Humanitarian Award, ASCE Sacramento Section





# Education B.S. Environmental Engineering, California Polytechnic State University, San Luis Obispo,

#### Registration Registered Professional Civil Engineer, CA No. 89449

#### <u>Certifications</u> Grade 2 Water Distribution Operator, CA No. 51247

Grade 2 Water Treatment Operator, CA No. 42952

#### **EXPERIENCE**

Tim has over eight years of experience in the planning, design, permitting, construction, and commissioning of water supply, water treatment, water storage, and water distribution projects. His experience includes development of planning studies and capital improvement plans, groundwater supply and treatment, storage tanks and pump stations, and pipeline distribution and conveyance. Prior to joining PBI in 2020, Tim worked for a water utility for over 5 years where he developed a history of successfully managing and leading project teams from planning through construction of capital projects and programs. Relevant projects that Tim has supported are as follows:

#### WATER DISTRIBUTION AND PIPELINES

2022 Priority Mains Replacement Project - California American Water, Sacramento, CA. Project manager for design services to install new front yard mains with new front yard services and meters for the Sampson-Dewey project area. Design includes specifications and drawings for approximately 13,500 feet of new front yard mains, associated services and meters, and related appurtenances. Project includes field survey, proposed utility crossings and Department of Drinking Water variance approvals, permitting support, and bid and construction support services.

Mosquito Ridge Road to Thomas Street Pipeline Project - Foresthill Public Utility District (FPUD). Project Manager for the design of 6,200 feet of replacement pipeline along Foresthill Road between Mosquito Ridge Road and Thomas Street, and 600 feet of replacement pipeline along Sierra View Lane. The project includes the development of plans and specifications, field survey, permitting, bid support, and construction management services.

2021 Backyard Main Replacement Project - California American Water, Sacramento, CA. Project includes relocation of backyard mains and services to front yards. New front yard mains include service laterals, meters, hydrants, and related appurtenances. Design includes specifications and drawings for approximately 15,500 feet of new water mains and 330 service laterals and meter installations. Project includes field survey, proposed utility crossings and Department of Drinking Water variance approvals, permitting support, and bid and construction support services.

Fruitridge Vista Water System – 2021 Backyard Drop-In Meters – California American Water, Sacramento, CA. Project Manager for the design of approximately 330 backyard and front yard drop-in water meters and new service laterals. The project includes: the development of design plans and specifications, permitting, and bid and construction support services.

Fruitridge Vista Meter Replacement Project - California American Water, Sacramento, CA. Project included the design of approximately 575 meters to be installed at services that already have front yard service lines. Design of approximately 575 drop-in meters and 570 new front yard service connections as conversions from back yard mains. Design documents include drawings and specifications. Project includes identification and support of permitting needs including County Encroachment permit for new front yard service connections. Engineering services during construction include: bid support, submittal review, RFI review, and preparation of As-Built drawings.

Isleton Distribution System Improvements – California American Water. Established methods required to abandon in-place water pipes in levee. Designed plans and specifications for the construction of new pipelines and water service connections through levee. Coordinated and supported permitting efforts with descriptions and figures to obtain all necessary permits. Provided engineering support during bidding and construction. The project required encroachment permits from both Caltrans and the City, and extensive stakeholder outreach and related efforts from the initial planning phase through construction to meet CEQA AB 52 requirements.

## Tim Hasler, P.E.



Walerga Road and PFE Pipeline Project – California American Water, Sacramento. Owner's Project Manager for the design of approximately 4,500 feet of a new 12-inch and 16-inch water transmission pipeline. The project included the development of plans and specifications, field survey, permitting, bidding, and construction management services.

Linda Sue Way and Chesline Drive Pipeline Project – California American Water, Sacramento. Owner's Project Manager for the design of approximately 1 mile of replacement 16-inch water distribution pipeline and associates services, meters, and appurtenances. The project included the development of plans and specifications, field survey, permitting, bidding, and construction management services.

Walerga Road Bridge Water Main Crossing Project – California American Water, Sacramento. Owner's Project Manager for the design of approximately 3,500 feet of a new 12-inch water main crossing for a new County of placer bridge. The project included the development of plans and specifications, field survey, permitting, and extensive coordination with various stakeholders, including the County of Placer, Caltrans, and various contractors and engineering firms.

Mark West Creek HDD Pipeline Crossing Project – California American Water, Santa Rosa, CA. Owner's Project Manager for the design of approximately 1,000 feet of 8-inch water main via horizontal direction drill (HDD) method under Mark West Creek. The project included the development of plans and specifications, field survey, and extensive permitting and coordination efforts with multiple local, State, and Federal Agencies.

#### Estimated Work Effort and Cost Calaveras County Water District - Copper Cove Water System Improvements

Calave	alaveras County Water District - Copper Cove Water System Improvements																						
$\Gamma$		7.	<u> </u>	; /	- /		7 .	1.	7	/	. /	9	7	/ (ve)/	7 -	/ 12	TEEM (Electrical)	1_	8 5	g /	- F	7.	7
/	Ptio	/ 8	g / g	. /	§ /	nee,	/ 5	/ 5	. / ~	/ .š		Labor (\$)	/	Surve	ltal)	/ ig ~	Ctric	(Structural)	for in	इंट्रे डि		(8)	/ ବ୍ର
/ .	scri	hal in	r Enginee	₹ /	Ma <sub>1</sub>	ibu:	/ jij	/ jij	la la	it at	/ 8	/ 🕺	/ <u>\$</u>	/ 8	X E	npliance Fi	رثق ا	/ ž	V&A Engineer (Condition Assessment an	Vesign) (Condition	/ ଓ୍ର	/ §	$\int_{C_0 st} \int_{C_0} \int$
/ × ×	/	, cipi	وَدُ	9 / 3	<u> </u>	, jo	E E	/ #	jį	ii	[g]	/ ig /	/ <u>&amp;</u>	DMAS	Helix	#s	Ë	/ Š	2 5 8 C	اري اور کا	l do	Exper	/ š /
, as	/ ss	/ i <sup>E</sup>	/ se	/ &	? / .	e,	Staf	Stat	/ 🙇	/ \$ T	/ @	👸	B <sub>R</sub>	<u>&amp;</u>	ū /	§ /	₹ /	/ څخ /	4ss	S. A.	/ §	j j	Total
	2022 Rates	\$ 265,00	\$ 240,00	\$ 200,	.00 \$ 20	00,00	\$ 150,00	\$ 132,00	\$ 110,00	\$ 105,00													
	oject Management (Excludes Optional Tasks) General Project Management	16	4	24		0	0	0	0	2	46	\$10,210										\$1.021	\$11,231
1.2	Quality Assurance/Control	4	24	4		0	0	0	0	0	32	\$7,620										\$762	\$8,382
1.3	Project Meetings (Up to 10)	40 6	0	40 12		0	16	0	0	24	96 42	\$21,000 \$6,510					\$7,524		\$4,130			\$2,100 \$651	\$34,754 \$7,161
1,4	Monthly Invoices and Progress Reports  Subtotal Task 1		28	80		0	16	0	0	26	216	\$45,340	\$0	\$0	\$0	\$0	\$7,524	\$0	\$4,130	\$0	\$0	\$4,534	\$61,528
	nase 1 Design Clearwell/B Tank																						
2.1	Update Hydraulic Model Draft Preliminary Design Report	2	2	12			24	24 32	8		40 80	\$6,628 \$12,114					\$1,012					\$663 \$1,211	\$7,291 \$14,337
2.3	Final Preliminary Design Report	2 15	10	8			8 65	12 88	49		36 277	\$5,834 \$43,187					\$1,012 \$5,326		\$6.104			\$583 \$4,319	\$7,429 \$58,936
2.4	50% Design Documents 90% Design Documents	15	10	37		20 25	78	107	65	0	343	\$43,187					\$5,326 \$7,102		\$6,104			\$4,319 \$5,320	\$73,760
2,6	100% Design Documents	12	- 8	24	1	14	43	58	32	0	191	\$30,390					\$3,551		\$4,070			\$3,039	\$41,050
2.7	Bid Set Subtotal Task 2	57	36	130	) 6	64	14 232	19 340	16 174	0	66 1,033	\$10,013 \$161,365	\$0	\$0	\$0	\$0	\$1,775 \$19,778	\$0	\$2,035 \$20,348	\$0	\$0	\$1,001 \$16,137	\$14,824 \$217,627
Task 3 - Ex	isting Tanks PDR and Condition Assessment - Clearwell a		(steel)			4				2	84	\$13,574										\$1,357	\$25,491
3.1	Preliminary Design Report Final Preliminary Design Report	2	2	16 8		2	24 12	32 16	1	2	44	\$7,132						\$10,560 \$2,640				\$713	\$25,491 \$10,485
3,3	Tank Condition Assessment (Optional)  Subtotal Task 3	2 8	4	6 30		6	36	4 52	0	1 5	13 141	\$2,363 \$23,069	\$0	\$0	\$0	\$0	\$n	\$13,200	SO	\$6,545 \$6,545	S0	\$236 \$2,307	\$9,144
	nase 2 Design - B Tank BPS	1 8	4			0		5∠		1 3			\$0	\$U	\$U	\$U	00	\$13,200	\$0	30,045	\$0		\$45,121
	Draft Preliminary Design Report	2	4	12		4	24	32 16	8	2	88 48	\$13,604					\$1,782 \$1,782					\$1,360 \$757	\$16,746
4.3	Final Preliminary Design Report 50% Design Documents	4	9	18	1	10	12 40	52	28	0	160	\$7,572 \$24,653					\$10,296	\$13,068				\$2,465	\$10,111 \$50,483
4.4	90% Design Documents	8	11 9	26 18		15 10	48 32	75 42	38 19	0	221 133	\$34,262 \$21,099					\$13,728 \$6,864	\$17,424 \$8,712				\$3,426 \$2,110	\$68,841
	100% Design Documents Bid Set	4	3	10		6	16	26	9	2	76	\$11,923					\$3,432	\$4,356				\$1,192	\$38,785 \$20,904
Taol E Di	Subtotal Task 4 hase 2 and Phase 3 Improvements PDR - Lake Tulloch Eme	24	38 tertie and C	92 Tank Ov		46	172	242	106	6	726	\$113,114	\$0	\$0	\$0	\$0	\$37,884	\$43,560	\$0	\$0	\$0	\$11,311	\$205,869
5.1	Preliminary Design Report	4	4	24		4	32	40		2	110	\$17,910										\$1,791	\$19,701
5.2	Final Preliminary Design Report Subtotal Task 5	6	6	12 36		2	16 48	24 64	0	4	60 170	\$9,588 \$27,498	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$959 \$2,750	\$10,547 \$30,248
Task 6 - Ph	nase 3 Design C1 and Copper Valley Transmission Main	0				0			U	4			\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0		
6.1	Draft Preliminary Design Report Final Preliminary Design Report	2	4	12	1	12	24 12	32 24			86 58	\$14,114 \$9,658					\$3,564 \$3,564					\$1,411 \$966	\$19,089 \$14,188
6.3	50% Design Documents (Optional)	4	10	18		10	40	52	29	0	163	\$25,213					\$15,305	\$22,440				\$2,521	\$65,479
6.4	90% Design Documents (Optional) 100% Design Documents (Optional)	8	13	26 18		17	47 32	77 42	38 19	0	227 136	\$35,338 \$21,637					\$20,407 \$10,204	\$29,920 \$14.960				\$3,534 \$2,164	\$89,199 \$48.964
	Bid Set (Optional)	4	4	10		6	16	26	10	0	76	\$12,229					\$5,102	\$7,480				\$1,223	\$26,033
Task 7 - Fr	Subtotal Task 6 acroachment Permits/Right-of-Way (Optional)	24	46	92	6	64	170	254	96	0	746	\$118,188	\$0	\$0	\$0	\$0	\$58,146	\$74,800	\$0	\$0	\$0	\$11,819	\$262,953
7.1	Encroachment Permit Application			2		4	8	12			26	\$3,984										\$398	\$4,382
7,2	Right-of-Way (Optional) Subtotal Task 7	0	-	2		4	8	12	-	0	0 26	\$0 \$3,984	\$15,000 \$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$398	\$15,000 \$19,382
	nd Survey and Geotechnical Report - Phase 1 and Phase 2		ů	_				'-	ů	Ů			\$10,000			•••	•	•••	•	•			
8.1 8.2	Topographic Survey - Phase 1 and Phase 2 Design Geotechnical Report - Phase 1 and Phase 2 Design			4	_	-	4				8	\$1,400 \$1,400		\$16,803							\$25,974	\$140 \$140	\$18,343 \$27,514
	Subtotal Task 8	0	0	8		0	8	0	0	0	16	\$2,800	\$0	\$16,803	\$0	\$0	\$0	\$0	\$0	\$0		\$280	\$45,857
Task 9 - Po 9.1	otholing/Utility Locating - Phase 1 and Phase 2 Design	1		2			12	12			27	\$4,049										\$405	\$4,454
	Potholing Plan Development	1		2			8	- 8			19	\$2,921										\$292	\$3,213
Task 10 - E	Subtotal Task 9 invironmental/CEQA - Programmatic Approach	2	0	4		0	20	20	0	0	46	\$6,970	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$697	\$7,667
10.1	Biological Resource Evaluation	1		2						1	4	\$770			\$8,250							\$77	\$9,097
10.2	Aquatic Resources/Wetland Delination Cultural Resources and Historic Properties Study/Buillt	1		2							3	\$665 \$665			\$8,525 \$13,200							\$67 \$67	\$9,257 \$13,932
10.3	Environment Assessment																					\$67	
10.4	CEQA Mitigated Negative Declaration Section 401 Clean Water Certification	1		2		_					3	\$665 \$665			\$27,500 \$8,250							\$67	\$28,232 \$8,982
10.6	CEQA Mitigated Negative Declaration	1 2	-	2		$\Box$				-	3 9	\$665 \$1,915			\$11,000 \$8,800							\$67 \$192	\$11,732 \$10,907
	CEQA (IS/MND) Subtotal Task 10		2	16		0	0	0	0	2	28	\$6,010	\$0	\$0	\$85,525	\$0	\$0	\$0	\$0	\$0	\$0		\$92,136
	tormwater Pollution Prevention Plan - Phase 1 and Phase	2 Design	_						_		2	\$305				\$1.430						\$31	\$1.766
	Water Pollution Control Plan (WPCP) Subtotal Task 11		0	1		0	0	0	0	1	2	\$305 \$305	\$0	\$0	\$0	\$1,430 \$1,430	\$0	\$0	\$0	\$0	\$0	\$31	\$1,766 \$1,766
	Bid Period Services/Addenda/Conformed Set Phase 1 Clear		ık							^	40	\$2,470										\$247	\$2,717
12,2	Pre-Bid Meeting Bid Addenda (Up to 3)	4		6		8	12	16			12 46	\$7,772					\$2,006					\$777	\$10,556
12,3	Conformed Documents	2	4	6		-	-	- 8	10	2	32 16	\$5,056 \$3,060					\$502					\$506 \$306	\$6,063 \$3,366
	Bid Evaluation Subtotal Task 12	14	4	22		8	20	24	10	4	106	\$3,060 \$18,358	\$0	\$0	\$0	\$0	\$2,508	\$0	\$0	\$0	\$0	\$1,836	\$3,366 \$22,702
	Bid Period Services/Addenda/Conformed Set Phase 2 - B Ta	ank BPS								1	12	\$2,470										6047	\$2.717
13.2	Pre-Bid Meeting Bid Addenda (Up to 3)	4	_	6		8	12	16	_		46	\$7,772					\$2,006	\$2,420	\$1,130			\$247 \$777	\$14,106
13.3	Conformed Documents	2	4	6				8	10	2	32 16	\$5,056 \$3,060					\$502	\$2,420	\$1,130			\$506 \$306	\$9,614 \$3,366
	Bid Evaluation Subtotal Task 13	14	4	22		8	20	24	10	4	106	\$18,358	\$0	\$0	\$0	\$0	\$2,508	\$4,840	\$2,261	\$0	\$0	\$1,836	\$29,803
	COLUMN TOTALS	223	168	535	5 2	06	750	1,032	396	52	3,362	\$545,359	\$15,000	\$16,803	\$85,525	\$1,430	\$128,348	\$136,400	\$26,739	\$6,545	\$25,974	\$54,536	\$1,042,659

TOTAL COST WITHOUT OPTIONAL TASKS	\$793,601

TOTAL COST WITH OPTIONAL TASKS \$1,042,659

## Agenda Item

DATE: May 11, 2022

TO: Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

RE: Report on the April 2022 Operations and Engineering Departments

#### **RECOMMENDED ACTION:**

Receive Report on the Operations and Engineering Departments Report for Divisions 1 through 5.

#### **SUMMARY:**

Attached is the monthly Operations and Engineering Departments Report for April 2022 report will review the operational status and work completed by departmental administration and each of the five Divisions. The report will cover the following:

- Administration
- Engineering
- Water treatment plants
- Wastewater treatment plants
- Distribution
- Collections
- Construction
- Electrical
- Mechanical

Staff will be present the report to the Board of Directors and will be available for questions.

#### FINANCIAL CONSIDERATIONS:

None.

Attachment: April 2022 Operations and Engineering Department Reports for Division 1 through 5

## Operations and Engineering Departments Report

April 1st, 2022, through April 30th, 2022

#### **Director of Operations:**

- 1. On-going coordination and management of multiple District Operations and Engineering projects and work efforts
- 2. Developed the Fiscal Year 22/23 Budget requests for the Operations and Engineering Departments
- 3. Worked with Staff to review District and Regional Partners Commercial Meter policies, Grease Interceptor Policies, and Accessory Dwelling Unit Policies
- On Going work related to working with PG&E to relocate underground electric utilities in the Poker Flat HOA-some progress
- 5. Participated in interviews for the newly approved Senior Inspector Position
- 6. Worked with Staff to Review Proposals and select a consultant for recommendation to the Engineering Committee and Board for Copper Cove Water System Improvements
- 7. Worked with the District Engineer and Staff to review the low bid for the West Point / Wilseyville Wastewater Consolidation Project and work to ensure cost savings
- 8. Secured the Services of a professional Cost Estimator for District Projects to improve the Districts Project Estimates overall
- 9. Routine and On-going Management of the Operations and Engineering Departments

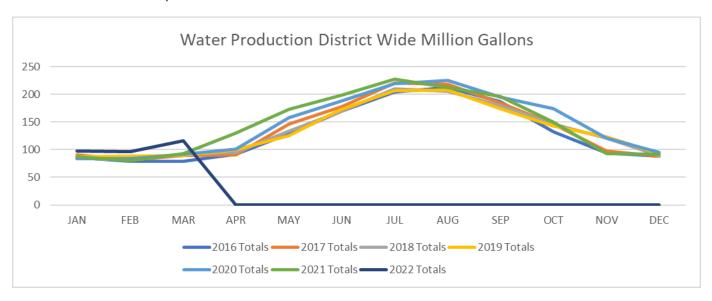
#### **Administrative Technician:**

- 10. Maintained Field Calendar
- 11. Received/Tracked All USA North Line 811 Locates Handled Associated Calls
- 12. 285 District Line Locates 04/01 04/30
- 13. Facilitated with Employee Reimbursements & Certificate Renewals
- 14. Field Training Course Ordering/Registrations
- 15. Process Operations Purchase Order Batches
- 16. On Call Reminders, Transfers, Logs
- 17. Electronic Lab Report Filing
- 18. Organizing and Archiving Operations Department Documents
- 19. Safety Tailgate Meetings: Create, Track, & Archive
- 20. Attended Various Meetings
- 21. Permit Renewals
- 22. Continued Work Efforts for CERS Program
- 23. Attended Safety Webinar
- 24. Miscellaneous Administrative Functions

#### **Plant Operations Manager:**

- Completed the review and acceptance of the monthly and quarterly State Water Reports for all the Districts Water Systems and submitted them to the State
- 2. Completed the monthly and quarterly Wastewater Reports for all the Districts WW Systems and submitted them to the State
- 3. Working very closely with the new operator in West Point to ensure that all system needs are met

- 4. Ongoing meetings with Nexgen engineering for the West Point WWTP for the discussion of the consolidation project of Wilseyville and West Point WWTP's
- 5. Attended Bi-weekly meetings for Ebbetts Pass tank replacement project.
- 6. On-going work associated with PO's and ordering supplies for different District facilities and projects
- 7. Continued work efforts on annual backflow testing
- 8. Ongoing work efforts associated with the Ebbetts Pass HAA5 violation for purposes of public notification and data collection
- 9. Ongoing conversations with PBI for the design of the second filter at West Point Water Treatment Plant and construction bidding.
- 10. Working with Hydro Science about upgrades at Arnold WWTP
- 11. Ongoing work efforts working with Keller and Associates on upgrades to Copper Cove Reclaim Plant
- 12. On-going work efforts with the Districts CERS (California Environmental Reporting System) annual reporting
- 13. Discussions regarding the Hunters Dam raw water pump station with Blackwater Engineering
- 14. Completed the District's volumetric annual flows for our wastewater facilities
- 15. Completed a site inspection on the newly constructed tank at Big Trees 6 tank site with the State Division of Drinking Water
- 16. Completed work tasks pertaining to the upcoming fiscal year's budget
- 17. Followed up a Dissolved Air Floatation pilot study that occurred at Copper Cove
- 18. Attended a meeting to discuss the new UV system that was purchased for Forest Meadows
- 19. Attended the District's Engineering Committee meeting
- 20. Participated in a presentation given by Lumos Engineering for Sheep Ranch water system
- 21. Attended the USA North quarterly board meeting
- 22. Updated the District's monthly conservation reports
- 23. Below is the water production for the month of March 2022



#### **Construction and Maintenance Manager:**

- 1. Staff meetings, Board meetings, Operations, and Customer Service meetings
- 2. AMI project update meetings
- 3. Ebbett's Pass redwood tank replacement project weekly meetings
- 4. Field meeting at Connor Estates with HOA groups and CCWD staff to verify flow to LS 42
- 5. Attend Tyler smart meter web demo
- 6. CCWD-LGI Homes meeting
- 7. Participated in the quarterly Utilities Coordination meeting
- 8. Met with Calaveras Public Works Inspectors to discuss paving restoration efforts on Crosel Ct
- 9. Attend the Jenny Lind A-B transmission pipeline replacement kick-off meeting
- 10. Read through and scored RFPs for the Copper Cove Water System Improvements project
- 11. Participated in the Operations and Engineering departments budget prep meeting
- 12. Attend various meetings with PG&E

- 13. Forest Meadows UV replacement project, internal meeting
- 14. Meeting with Keystone/Mueller and CCWD staff regarding cannot complete list of District side issues and work effort plan
- 15. Participated in the Sheep Ranch Water Supply Study task 5 workgroup with CCWD staff and Lumos
- 16. Site visit with the Construction Crew, they were working on charging and flow testing slurry line
- 17. Site visit with Copper Distribution crew to investigate and locate possible leak on Innocent Way in Poker Flat
- 18. Coordinate crew members to assist with traffic control during tree removal by Cal Fire crews on Avery Sheep Ranch Rd
- 19. Attend Copper Cove Water Systems Improvement proposal selection with CCWD staff
- 20. Multiple site visits to Dunn Road with Utility Crew replacing service lines
- 21. Multiple phone calls to resolve Customer issues/concerns
- 22. Attended CRWA Expo in South Lake Tahoe

#### **District Engineer:**

- Participated in project meetings and completed review comments for 50% design by HydroScience Engineer's for Arnold Sewer Treatment Plant Secondary Clarifier Improvements
- 2. Participated in project meetings and completed review comments for 50% design for La Contenta Sewer System Jenny Lind Elementary School Sewer Force Main Project. Working with County staff to identify easement for locating sewer lift station.
- 3. Cost Estimating: Participated in project meetings and field visit with John Collins regarding updates to construction cost estimates for Copper Cove Pond 6 Dam Raise and Reservoir Enlargement and Arnold Sewer Plant Secondary Clarifier Improvement Project.
- 4. Processed contract award to Coleman Engineers for Jenny Lind A-B Water Transmission Pipeline Project and conducted kickoff meeting with Coleman staff. Worked with Sam Singh and Coleman staff on data transfer and review of hydraulic water model and water system analysis.
- 5. Participated in project meetings for review of bid results for the West Point and Wilseyville Wastewater Consolidation Project, worked with engineering firm Nexgen and apparent low bidder K.W. Emerson to value engineer project to determine how project cost can be reduced, notified CWSRF staff of bid results and plan to submit updated budget and request to increase funding.
- 6. Participated in recurring meetings with CCWD staff and LGI Homes regarding proposed development on North Vista Plaza and request for concept review. Discussion points include offsite sewer impacts from development to Huckleberry Lift Station and potential developer funding of facilities and infrastructure through the "BOLD" program.
- 7. For Forest Meadows Wastewater Treatment Plant UV Disinfection System Improvements, participated in staff meeting with CCWD construction crew and engineering department regarding on-site construction of new concrete channel for UV system. Will design drawings for concrete channel and rebar details for construction by concrete subcontractor.
- 8. Reviewed engineering/design consultant proposals and provide recommendation design contract for Copper Cove Water System Improvements (CIP 11083C, 11111 and 11122) for Tank B and clear well replacement, water transmission pipelines and pump station improvements.

#### **Purchasing Agent:**

- 1. Meetings with Enterprise about leasing F150's. worked on invoices for project purchases. Worked on getting decals for trucks from gateway.
- 2. Worked with La Contenta crew doing leaks.
- 3. Invoicing
- 4. Worked on parts list
- 5. Meetings with Enterprise about GPS and vehicle purchases
- 6. Follow up on sampling stations for capital outlay
- 7. Follow up on standby generator quote for new warehouse.
- 8. Meetings with PG&E about electric vehicles and charging stations
- 9. Worked on the quote for west point actuators
- 10. Worked on vehicle mileage reports in Mobile MMS
- 11. Budget Meeting
- 12. Organized and cleaned district warehouse

- 13. Prepared credit card report
- 14. Delivered supplies and materials and parts

#### **Engineering Department**

- 1. Mueller Systems is installing water meter in Jenny Lind Service Area
- 2. Completed connection, disinfection, and filling of new Big Tree Water Tank #8 in Camp Connell
- 3. Crews are working on foundation for new Heather Drive Water Tank in Forest Meadows
- 4. Blackwater Engineers has completed the 60% Design and Technical Specifications for new Raw Water Intake at Hunters Reservoir
- 5. Piping to Sheep Ranch Fire water tank was completed, tank is in process of being filled
- 6. Finalizing the structural design for interior spaces within the Maintenance Building and accepted deliveries of electrical materials to begin installation of interior Electrical
- 7. Weekly meetings with Engineering Dept
- 8. Engineering Committee Meeting
- 9. Prep for ADU Breakout Meeting
- 10. CAMRA Meeting Prep
- 11. CPPA Meeting
- 12. ADU Policy Update Meeting
- 13. AMI/AMR Meter Project (bi-weekly meetings)
- 14. Warehouse and Maintenance Building Project (retainage invoice prep)
- 15. West Point Back Up Filter Project (Quarterly report, bid opening and evaluation)
- 16. West Point Wilseyville Project (Bid evaluation, funding discussions)
- 17. Hunters Raw Water Pump Station Project (Quarterly report)
- 18. Arnold WWTP Improvement Project (Weekly meetings)
- 19. Jenny Lind A-B Project (Kick off meeting)
- 20. Redwood Tanks Project (Quarterly report, CA Aquastore progress pay #4)
- 21. Copper Cove Water System Improvements (Proposal evaluation)
- 22. LGI Homes/North Vista Plaza (Bi-weekly meetings)
- 23. Tri Dam Lake Tulloch (Signing of easement)
- 24. Lallo Car Wash (follow up, payment of fees)
- 25. Jenny Lind Elementary (Project number, title research PO)
- 26. Gold Creek 3 (Fire flow testing)
- 27. Cost of Service & Financial Analysis Study RFP (Posting, distributing for Jeff M., fielding questions)
- 28. ADU Breakout Group Prep
- 29. Commercial Review and Commercial Change of Use Policy Update
- 30. CRWA Conference Registration for Staff
- 31. Fire Hydrant Meter Reading/Billing
- 32. PUE Vacate = 2 (EP)
- 33. Request for Comments = 1 (JL)
- 34. Cost to Serve = 1 (EP)
- 35. Customer Issues = 1 (CC Meter Relocation)
- 36. Termination of Service = 3 (CC)

#### **Construction Inspection**

- 1. Worked on gathering information for multiple projects for Engineering Dept.
- 2. Attended training for contact hours
- 3. Service connection inspections
- 4. Attended staff and project meetings
- 5. Inspected construction of Sheep Ranch fire tank, site piping
- 6. Attended project meetings
- 7. Reviewed plans for multiple projects
- 8. New construction inspector interviews
- 9. Worked with engineering and collections staff on District standards revision
- 10. Ebbetts Pass redwood tank replacement project inspections at Heather tank and tank 8
- 11. West point filter addition bid opening

- 12. Attended District board meeting
- 13. Met with District staff regarding District standards for septic tanks
- 14. Reviewed RFP's for Copperopolis projects
- 15. Worked on review of Jenny Lind force main project
- 16. Reviewed as-builds for Gold Creek 3
- 17. Worked with staff to go over paving for Crosel Ct.
- 18. Attended sheep ranch water supply study meeting

#### **Water Treatment Plants:**

#### **Copper Cove Water Treatment Plant:**

- 1. Training new operator. (Going very well)
- 2. B-Tank, Redwood Tank leaking a bit after patch work from bottom of tank
- 3. Worked with engineering on Water system upgrades
- 4. Outstanding work Orders
  - a. Calibrate high pressure and headloss switches on both filters
  - b. Repair backwash return supply pump #1 controls. Pump will not operate in Auto

#### **Hunter's (Ebbett's Pass) Water Treatment Plant:**

1. Operations as usual

#### **Jenny Lind Water Treatment Plant:**

1. Operations as usual

#### **Sheep Ranch Water Treatment Plant:**

1. Operations as usual

#### Wallace Lake Estates Well System:

1. Operations as usual

#### **West Point Water Treatment Plant:**

1. Operations as Usual

#### **Wastewater Treatment Plants:**

#### **Arnold Wastewater Treatment Plant:**

- 1. Daily process control and all that entails, adding ph. Control, running belt press, hosing head works, hosing clarifier, etc.
- 2. Lab work for process control
- 3. Sampling for compliance
- 4. Maintenance, IE: greasing, flushing, brushing clarifier. Running, cleaning and greasing belt press. Checking spray fields and leach fields and repairing when necessary, backwashing filters, doing calibrations, cleaning probes, grounds tree and brush removal and snow and road clearing, etc.

#### **Copper Cove Wastewater Treatment Plant:**

- 1. Training new operator. (Going very well)
- 2. New replacement ultrasonic algae killers installed in pond 6. One new unit failed already and was removed and sent back for inspection. A replacement was also sent out and installed where the failed unit was
- 3. Currently waiting to see if the new units can help with the algae in Pond 6

#### **Copper Cove Wastewater Reclamation Plant:**

- 1. Training of new operator. (Going very well)
- 2. Plant online for the season
- 3. Pilot testing on coagulants for DAF and sampling of water sent out for trials
- 4. Meetings with staff and Keller on new upgrades

#### **Country House Wastewater Facility:**

1. Monitoring fields and reporting flows and switching leach fields and maintain tree and brush removal

#### **Forest Meadows Wastewater Treatment Plant:**

- 2. Daily process control and all that entails, adding ph. Control, exercising differential valves, running belt press, hosing head works, hosing DAF inlet, pond and facility grounds maintenance
- 3. Lab work for process control
- 4. Sampling for compliance. Daily, monthly, annually, and primary pollutants for title 22 compliance
- 5. Maintenance, IE: servicing UV system, replacing lamps, maintaining head works, servicing DAF units, inspecting effluent pond, inspecting leach fields, air purging tertiary filters, hypo and acid washing, , pond and facility grounds maintenance, Running, cleaning and greasing belt press
- Replacing air lifts, changing oil in compressors, cleaning probes, doing secondary and primary calibrations etc.

#### **Indian Rock Vineyards Wastewater Facility:**

- Operations as Usual Weekly inspection of facility. Switched leach fields, tested pumps, changed chart, weekly reads for state compliance.
- 2. Quarterly effluent sampling
- 3. New Orenco System on-line

#### La Contenta Wastewater Treatment Plant:

- 1. Monitoring fields and reporting flows and switching leach fields and maintain tree and brush removal
- 2. Bi-annual, annual sampling with standard minerals and supply water per new 2020 permit

#### Mountain Retreat / Sequoia Woods Wastewater Facility:

Operations as usual

#### **Six Mile Wastewater Collection System:**

1. Monthly reads taken and report submitted to the City of Angels Camp

#### **Southworth Wastewater Treatment Plant:**

1. Operations as usual

#### Vallecito / Douglas Flat Wastewater Treatment Plant:

- 1. Daily process control and all that entails, adding ph. Control, adjusting WAS, running belt press, doing PFT's, nitrate testing, etc.
- 2. Lab work for process control
- 3. Sampling for compliance
- 4. maintenance, IE: hosing/scraping grease ,de-ragging headworks ,doing secondary's ,primary's ,cleaning instruments ,empty headworks screenings ,cleaning belt press ,greasing belt press , checking oil levels in RAS pumps ,testing and fixing spray fields ,servicing UV banks , cleaning blower oil change and air filters, filling algae tank ,doing CIP when necessary. Lowering mbr, s, s for inspection and maintenance, pond and facility grounds maintenance

#### **West Point Wastewater Treatment Plant:**

- 1. Operations as usual
- 2. On-going work with the District's consultant to facilitate plan development for the West Point/Wilseyville WWTP consolidation project.
- 3. Construction Bid walk 2-17-22

#### Wilseyville Wastewater Facility:

- 1. Operations as usual
- 2. Construction Bid walk 2-17-22

#### **Distribution:**

#### **Copperopolis Distribution System:**

#### **SERVICE LINE WORK**

- 2. Brett Heart 1" 3 gpm
- 3. Uncle Billy 1" 2 gpm
- 4. Sunrise 1" 3 gpm
- 5. Sunrise 1" 2 gpm
- 6. Cheyenne1" 2 gpm
- 7. Sawmill 1" 4 gpm
- 8. Mono Ct 1" 3 gpm
- 9. Winchester Ct 1" 2 gpm
- 10. Feather Dr 8" 10 gpm

#### **MAIN LINE WORK**

1. None during this time

#### **Additional Work**

- 2. Flushed 101,320 gals.
- 3. 40 Values Turned
- 4. Flint PRV check

#### **Ebbett's Pass Distribution System:**

#### **SERVICE LINE WORK**

1. Service Requests - 19

#### MAIN LINE WORK

- 1. 1" Cheyenne
- 2. Repaired 6" ARV on Russell Dr.

#### **Additional Work**

- 2. Service Leak Repair 1- 1" Poly on Cheyenne
- 3. Manually read approximately 500+ Meters
- 4. Installed Nodes on Snowshoe Springs Meters
- 5. Repaired Fire Hydrant on Meko Dr.
- 6. Replaced Pump #1 at Big Trees 4&5
- 7. Assisted Copper Crew with leak repairs
- 8. New Big Trees #8 Fill
- 9. Sheep Ranch Fire Tank Fill
- 10. Weekly Redwood Tank / Sheep Ranch Tank meetings
- 11. Filled potholes at Barn

#### **Jenny Lind Distribution System:**

#### SERVICE LINE WORK

- 1. Gabor
- 2. Westhill
- 3. Bell Ct
- 4. Mitchell Ct
- 5. Cane
- 6. Lazer Ct
- 7. Dunn
- 8. Treosti
- 9. Stagecoach
- 10. Westhill
- 11. Bartelink
- 12. Mann
- 13. Hartvickson
- 14. Goggin
- 15. Hironymous
- 16. Goggin
- 17. Berkesey
- 18. Jenny Lind Rd

- 19. Garner
- 20. Siegel
- 21. Heney Ct x 2
- 22. Huckleberry

#### **MAIN LINE WORK**

- 1. 2" on Siegel that is on the "D" tank pressure zone
- 2. 6" cross country line between Hwy. 26 and Friedman that was hit by a contractor who didn't call in a USA
- 10" on Gold Creek Drive that the tap saddle failed. We replaced the neighboring services tap saddle as well as it had signs of failure also

#### **ADDITIONAL WORK**

- 4. Vehicle Inspections
- 5. Month end reads for hydrant meters, Lancha Plana and raw water
- 6. Tank and pump station checks
- 7. Line locates
- 8. Work orders for meter installs, leak checks, pressure problems, change of occupancies etc.
- 9. Lower end flushing for water quality purposes
- 10. Flushing in Wallace for water quality purposes
- 11. Met with Condor for compaction testing on Crosel Ct and scheduled for final paving
- 12. Took measurements and pictures of multiple water services in the La Contenta area that we found through potholing that are very different than what is on our as built maps so we could make GIS updates in our MMS software
- 13. Multiple curb stop replacements to assist the meter replacement crew in changing out the old meters in our area
- Multiple days of potholing for our utilities in the La Contenta area for the contract crew doing work for PG&E
- 15. Greased and maintenance our GapVax vacuum truck

#### **West Point Distribution System:**

#### **SERVICE LINE WORK**

- 1. Charles
- 2. Fay
- 3. Jurs
- 4. West Point Pioneer

#### MAIN LINE WORK

1. 2" on Barbara Way

#### ADDITIONAL WORK

- 2. Month end Lancha Plana reads
- 3. Line locates

#### Construction

- 1. Pennsylvania Gulch/load slurry line to vault on Ponderosa, flow testing
- 2. Pennsylvania Gulch/find access route for slurry line repair
- 3. Pennsylvania Gulch/dug up repair on Green Tree Lane, drained slurry line
- 4. Pennsylvania Gulch/sloping & benching around leak site, moved brush piles, made dewatering barrel at Vallecito
- Ebbetts Pass/installed new sewer service in Mill Woods, supplement Copper distribution crew
- 6. Pennsylvania Gulch/slurry line, dug up feed line to Camp 9, removed section of aluminum pipe to be used for welding repair on Green Tree Lane
- 7. Vallecito/gather materials for slurry line repair on Green Tree Lane, greased equipment, supplement Copper distribution crew
- 8. Pennsylvania Gulch/set up & test pump ground water for welding repair, supplement Copper distribution crew
- 9. Pennsylvania Gulch/kept ground water pumped out for welders
- 10. Pennsylvania Gulch/loaded slurry line, checked for leaks on welded repair
- 11. Pennsylvania Gulch/checked static pressures on slurry line, supplement Copper distribution crew
- 12. Vallecito/equipment maintenance, supplement Copper distribution crew
- 13. Valley Springs/Gold Creek, fixed leak on 10 inch with the LaContenta crew

- 14. Pennsylvania Gulch/slurry line, flow testing
- 15. Vallecito/worked on entry gates, attended a meeting for Forest Meadows UV system
- 16. Vallecito/replaced front entrance gates, worked on transfer trailer, supplement Copper distribution crew
- 17. Pennsylvania Gulch/cleanup at leak repair site, hauled out brush & equipment, cleanup at vault hauled out backhoe
- 18. Pennsylvania Gulch/slurry line, backfilled around PRV & cleanup on Hang Tree Trail, supplement leak crew, Valley Springs
- 19. Copper/eliminate old 2" on Feather drive, supplement leak crew, Valley Springs.
- Driver training, hauled rock to White Pines Barn, supplement Copper distribution crew, supplement leak crew, Valley Springs
- 21. Vallecito/equipment maintenance, supplement Copper distribution crew

#### **Electrical:**

- 1. Installed/set apps on new employee's Surface Pro
- 2. Repaired septic control system at 8934 Westwood Court after failure
- 3. Troubleshot and repaired aerator control system at LCWWTP, reset tripped overloads due to power outage
- 4. Replaced level transducer at Woodgate lift station after failure of old unit
- 5. Pulled slurry line flow data off portable flow meter and gave to construction crew
- 6. Adjusted flow for well #3 at Wallace WTP to match chemical dosing pumps
- 7. Finished cut over to new soft start for effluent pump #3 at Hunters WTP, put pump #3 back into rotation in SCADA
- 8. Oiled doorknob and latch at Hunters effluent building back door restoring proper function
- 9. Installed underground conduit at Sheep Ranch WTP for AMI repeater power circuit
- 10. Troubleshot and repaired automatic transfer switch at Mountain Retreat lift station after failure
- 11. Troubleshot DAF unit #1 transducer at FMWWTP
- 12. Ran conduit and pulled wire to new AMI repeater at the JLWTP ozone towers
- 13. Troubleshot and repaired effluent pump #2 at Southworth WWTP, found burnt wires, rewired with new
- 14. Installed new CB radio and district voice radio into new dump truck
- 15. Replaced all indoor 4' fixture plastic lens clips at Copper Cove raw water pump station
- 16. Replaced door switch in ozone generator at CCWTP
- 17. Replaced failed 4' fluorescent lamps with new LED lamps in filter room at CCWTP
- 18. Wired new aerator in pond #1 at CCWWTP
- 19. Went online with telemetry radio at Avery Tank to diagnose and repair communications failure
- 20. Modified breaker linkage for influent pump #3 at JLWTP so it will reset properly
- 21. Aligned main breaker linkage for ozone generator #2 at JLWTP after power outage
- 22. Cleared alarms for sand pumps at the Jenny Lind pretreatment system after power outage
- 23. Troubleshot and repaired Avery tank radio communications failure, replaced failed PLC backplaine
- 24. Troubleshot and replaced failed PLC analog card after level indicator failed at B-Tank in Copper Cove
- 25. Added underground conduit for fire tank controls at Sheep Ranch WTP
- 26. Trained new employee on sewer lift station troubleshooting
- 27. Troubleshot Woodgate lift station #1, put pump #2 in lead, pump #1 was ragged up, sewer crew to clean out
- 28. Replaced failed strain relief connector at the Copper Cove reclaim plant
- 29. Troubleshot and repaired Woodgate lift station 1 pump controls, adjusted overloads, restoring proper function
- 30. Used SCADA remote access to restart alarm history logger at WPWTP
- 31. Replaced/set up new Hydroranger 200 flow meter at LCWWTP sand filter #5 after failure of old unit's analog output
- 32. Used bucket truck to install/set up new weather station at WPWTP
- 33. Replaced lamps in the sign at the main office in San Andreas
- 34. Used the new bucket truck to fix the Bummerville mechanical level gauge
- 35. Replaced failed lamps in lighting fixtures at Wallace WWTP and Wallace WTP
- 36. Replaced failed lamps in lighting fixtures at Southworth WWTP
- 37. Replaced pump at Big Trees 4&5 after rebuilt pump failed to run properly, sent pump in for warranty work
- 38. Troubleshot and repaired the septic control system at 7024 Ospital Road in Burson, replaced bad floats
- 39. Troubleshot pump at Hwy 26 lift station, bad capacitors, ordered new
- 40. Troubleshot 6 mile lift station pump fail to start, found melted/welded starter, ordered new unit
- 41. Repaired DAF unit #1 PID level controls with A-TEEM at FMWWTP

- 42. Added auto/off controls to DAF unit controls in SCADA system at FMWWTP to enable control via remote SCADA access
- 43. Unloaded new mechanics shop electrical parts on site
- 44. Replaced failed Nema size 1 starter for a pump at 6 Mile lift station after failure of old unit
- 45. Renewed multiple FCC licenses for our radio telemetry system
- 46. Replaced effluent pump overloads with correctly rated units at Southworth WWTP
- 47. Troubleshot oxygen valve not operating filter 6 at JLWTP
- 48. Replaced aerator and circuit breaker at FMWWTP pond
- 49. After hours repair of effluent pumps at Wallace WWTP, pulled pumps, baskets and basket holders, cleaned sludge out, restoring proper function
- 50. Troubleshot interior lighting at the Mokelumne River pumps station in West Point, replaced bad toggle switch
- 51. Troubleshot and repaired exterior light on the old filter building at WPWTP
- 52. Troubleshot new aerator tripping at FMWWTP, found bad S/O cord, ordered replacement cord
- 53. After hours emergency replacement of bad effluent pump overloads at Wallace WTP, replaced with mechanical overload units, restoring proper function
- 54. Repaired rotten/rusted underground conduits at JLWTP ozone towers, found during AMI power installation

#### **Collections:**

- 1. Weekly lift station checks performed
- 2. Monthly dry can inspections completed
- 3. SSO monthly reporting
- 4. Westwood Ct. septic alarm a horse stepped thru lid and tore the junction box off the riser. Pumped tank for the weekend will need to redo junction box and wiring 4-1-22
- 5. Helped La Contenta water crew with leaks
- 6. Repaired septic tank electrical at Westwood Court
- 7. Helped construction crew with confined space entry in vault on slurry line
- 8. Ospital septic issue. Customer had a blockage on their side
- 9. Installed new lateral service at Bull Whacker
- 10. Pumped and cleaned lift station 7 for quarterly cleaning
- 11. Pumped and cleaned 12&13 for yearly maintenance
- 12. Checked grease traps in La Contenta
- 13. Checked ARV's on Huckleberry force main. Biannual maintenance
- 14. Repaired lateral at Signal Hill. Lateral was full of rocks
- 15. Pulled pumps at Woodgate LS 1 and deragged them
- 16. Checked ARV's on Saddle Creek force main
- 17. Called to septic tank issue on Ospital and found control relay was going bad
- 18. Pumped and cleaned Woodgate 1 &2 and Hwy 26 lift stations
- 19. Flushed main line in West Point for quarterly cleaning
- 20. Checked ARV's in West Point
- 21. Checked grease traps in West Point
- 22. Called to lift station 17 due to pump 2 malfunction
- 23. Called out to Ospital septic tank due to storm issue had to pump tank and clean basket so it would handle incoming water due to thunderstorm
- 24. Called to Pine in West Point to verify tank was working correctly
- 25. Called out to Hwy 26 lift station due to pump 1 failure and high level
- Called out to six-mile Lift Station due to isolated power outage at the station which caused the generator to run until
  it ran out of diesel
- 27. Pulled pumps at Lift Station 17 due to rags
- 28. Cleaned check valves at Hwy 26 Lift Station
- 29. Called out to Ospital due to on off float going out
- 30. Finished ARV's in Copperopolis
- 31. Checked dry cans in Copperopolis
- 32. Pumped effluent tank at Wallace WWTP for due to pump failures
- 33. Hydroed the head works at VWWTP
- 34. Checked cans in Forest Meadows
- 35. Checked ARV's on Avery force main

- 36. Checked grease traps in Arnold
- 37. ADU meeting at the main office

#### **Mechanical:**

- 1. Finish repairs to truck 608. Spark plugs, oil change, rear brake pads and rotors, replace driveshaft u-joints and center bearing, and clutch fan
- Diagnose and ordered parts for truck 529. Replace E-brake assembly, rear brake pads and E-brake shoes, oxygen sensor B2S2, spark plugs & coils, upper control arms, and disassemble gauge cluster and repair solder joint on gauge circuit board
- 3. Asses and order remote actuator for forest meadows isolator valve
- 4. Diagnose and ready truck 708 for repairs. Clean out rodent damage and mess, replace inside door handle, battery, oil change, spark plugs, convert rear wiring to 7 pin trailer, sublet tire replacement
- 5. Make over all pressure adjustment to Wilseyville pressure tank system
- 6. Replace compressor pressure blow off valve on Hunters plant air system
- 7. Diagnose and repair jeep 130. Replace rear upper and lower control arms, front sway bar links, and all four shocks
- 8. Carry out district wide generator checks
- 9. Assist slurry line PRV speed control calibrations
- 10. Diagnose and remove rebuilt submersible water pump at big trees 4&5, prep & install new pump as well as confirm satisfactory test run of replacement pump
- 11. Weld hole in gap-vac vacuum boom
- 12. Replace effluent actuated ball valve at Wallace wastewater
- 13. Attend backflow certification class and final testing
- 14. Install 4 sets of new brakes and hardware on V745 transfer trailer. Grease and adjust slack adjusters after install. Test and verify correct operation.
- 15. Replace leaking stem seals on effluent pump #2 Cla-valve.
- 16. Replace batteries on Underground crew's dump truck because of one being defective.
- 17. Patch rust hole on E tank in Valley Springs.
- 18. Install new glad hand covers on V745 and 3 axle equipment trailers
- 19. Replace pneumatic diversion valve with electronic diversion valve at Sheep Ranch water plant
- 20. Install new batter in V303 at Huckleberry yard.
- 21. Replace steering column switches on Jenny Lind Water Treatment Plant forklift and verify horn repair. Install new propane regulator to eliminate hard starting issue.

### **Underground:**

- 1. Approximately 30 service line replacements
- 2. Began saw-cutting and potholing on Heinnemenn
- 3. Began saw-cutting and potholing on Dunn
- 4. Provide leak repair assistance to the Jenny Lind and Copper Distribution Crews

Prepared By: Damon Wyckoff, Director of Operations