

A G E N D A

**SAN RAFAEL SANITATION DISTRICT
BOARD OF DIRECTORS
THURSDAY – FEBRUARY 11, 2016 - 3:30 P.M.
SAN RAFAEL CITY HALL
1400 FIFTH AVENUE –CONFERENCE ROOM 201
SAN RAFAEL, CALIFORNIA 94901**

Members of the public may speak on Agenda items.

1. OPEN PERIOD

Opportunity for the public to address the Board on items not on the agenda.
(Presentations are generally limited to 2 minutes.)

2. MINUTES OF THE MEETING

Request approval as submitted – December 9, 2015.

3. PAYMENTS

Request approval as submitted.

4. OLD BUSINESS

None scheduled.

5. NEW BUSINESS

- a. Adopt resolution authorizing District Manager/District Engineer to execute a Professional Services Agreement with WorkSmart Automation, Inc., for programming related services for The Village at Loch Lomond Marina Sewage Pump Station.
- b. Adopt resolution authorizing District Manager/District Engineer to execute a Professional Services Agreement with Ewers Engineering for engineering related services for the Force Main Condition Assessment Program Development, Phase 1.
- c. Adopt resolution authorizing District Manager/District Engineer to execute a Professional Services Agreement with Nute Engineering for design and construction related services for the Sun Valley Sewer Replacement Project, Phase 2.

6. INFORMATIONAL ITEMS

- a. Karen Chew, City of San Rafael Employee of the Second Quarter of 2015.

7. ADJOURNMENT

The next scheduled meeting is Thursday, March 10, 2016.

**SAN RAFAEL SANITATION DISTRICT
Minutes of the Meeting
December 9, 2015**

Regular Meeting

City of San Rafael
Conference Room 201
1400 Fifth Avenue
San Rafael, CA 94901

The meeting was called to order at 8:37 A.M. by Chairman Phillips.

Attendance Board: Gary O. Phillips, Chairman
Maribeth Bushey, Secretary/Director
Katie Rice, Director

Attendance Staff: Doris Toy, District Manager/District Engineer
Karen Chew, Senior Civil Engineer
Cynthia Hernandez, District Secretary

Attendance Others: Jack F. Govi, Assistant County Counsel

1. OPEN PERIOD - No persons were present to address the Board.

2. MINUTES OF NOVEMBER 23, 2015.

MOTION by Director Bushey, seconded by Director Rice, to approve the minutes of the November 23, 2015, meeting as presented.

AYES: Director Bushey, Director Rice, Chairman Phillips

NOES: None

ABSENT: None

Motion Carried

3. PAYMENTS

MOTION by Director Bushey, seconded by Director Rice, to approve the payments for November 2015 in the amount of \$734,659.54 for maintenance and operation of the District and for capital improvements.

AYES: Director Bushey, Director Rice, Chairman Phillips

NOES: None

ABSENT: None

Motion Carried

4. CLOSED SESSION

- a. **Conference with Legal Counsel – Existing Litigation**
California Government Code Section 54956.9(d)(1)
Name of Case: Postelle v. SRSD, JMB Construction, et al.
Marin County Superior Court, Case No. SMC 15-10629

Closed Session – Opened at 8:38 A.M.

Closed Session – Ended at 8:59 A.M.

Chairman Phillips reported that there was no reportable action.

5. OLD BUSINESS

- a. **Consider changing current Board meeting schedule.**

After some discussion, the Board decided to change the current Board meeting schedule to the second Thursday of the month at 3:30 P.M.

6. NEW BUSINESS

- a. **Adopt resolution authorizing District Manager/District Engineer to execute a Professional Services Agreement with Park Engineering for inspection related services for various projects.**

District Manager Toy reported that the District currently has two capital improvement projects in construction—the Glenwood Pump Station Improvement Project, which involves replacing the pump station with one that will have submersible pumps with larger capacities, and the Sun Valley Sewer Replacement Project (Phase I), which involves installing a new sewer main nearer to the center of the street and extending the sewer laterals for the properties that were previously connected to old main that ran through their front yards. She also reported that this project will require a lot of attention by the District. Manager Toy then reported that the District is also involved with the development of the subdivision for the Village at Loch Lomond Marina and will own and maintain the sewer main, force main, and pump station for this development once they have been installed. She also reported that the District's construction inspector is currently busy inspecting the Glenwood Pump Station project and the Village project, in addition to the sewer repairs on private laterals and marking and locating the District's sewer mains for Underground Service Alert (USA). Next, Manager Toy reported that because the District's construction inspector is so busy with the aforesaid work and because the District had some budget remaining with Nute Engineering, she had requested Nute Engineering to assist the District's inspector with the Sun Valley project over the past couple of months. She then reported that because Nute's inspector is currently working on a project for another agency that requires more attention than anticipated and because the

District's inspector will be taking a 1-month vacation in January, she had requested Park Engineering to submit a proposal for part-time construction inspection services from December through March 2016 and full-time inspection services in January, which is when the District's inspector will be on vacation. Next, Manager Toy reported that Park Engineering had submitted a proposal for inspection services on a time-and-materials basis for \$47,871. She also reported that the City of San Rafael is currently contracting with Park Engineering for various construction projects, including the H Street Roadway Improvement Project, which is a shared project with the District. She then reported that both the City of San Rafael and the San Rafael Sanitation District have been satisfied with Park Engineering's services. Director Rice then inquired about the replacement of the sewer laterals, and Manager Toy reported that the District will be replacing the lower laterals as part of the project. She also reported that the property owners would be responsible for replacing the upper laterals but are not required to do so. She then reported that the District advises all property owners to televise their sewer laterals to ensure that they are in good condition and makes them aware that the contractor may charge them a lower fee if they have the work done while the contractor is onsite during a construction project. Senior Civil Engineer Chew then reported that the District's Assistant Civil Engineer, Ana Bernardes, is the project manager for this project and that she has been working with the residents that want to have their upper laterals replaced and coordinating this work with the contractor. The Board reported that they felt this would be a good opportunity for the residents to have their upper laterals replaced at a potentially lower cost since the job has already been staged and that it would be a good idea for the District to sell the residents on this idea. The Board then discussed the potential benefits of having a lateral replacement program, and Manager Toy reported that she had been considering the possibility of developing a lateral loan program. She reported that she first wanted to see how Las Gallinas Valley Sanitary District's lateral loan program was working out. The Board then requested staff to draft a letter to the Sun Valley residents that would encourage them to replace their upper laterals during the project and to provide a copy of the draft letter to Director Rice for her review. They also asked Manager Toy to think about establishing a program for future lateral replacement and suggested that this program could also be contracted out since the District has minimal staffing.

MOTION by Director Bushey, seconded by Director Rice, to adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Park Engineering for inspection related services for various projects.

AYES: Director Bushey, Director Rice, Chairman Phillips

NOES: None

ABSENT: None

Motion Carried

b. Review Budget Status Report for the period 7-1-15 through 9-30-15.

District Manager Toy reported that the District had not yet received the revenue from the first installment of the sewer service charges because payment of the property taxes would not be due until tomorrow (December 10th). She also reported that the expenditures for Supplies and Services were normal. She then reported that the expenditure for the debt service payment to CMSA was at 70% of the budget because the largest portion of the payment is made at the beginning of the year (mostly principal) and that the next payment would be due in January 2016. Next, Manager Toy reported that when the 2015-16 and 2016-17 Budget was adopted, the Board had decided to establish separate accounting funds for Operations, Equipment Acquisition, 80-Year Life-Cycle Sewer Replacement, and Pump Station & Force Main Capital Improvements. She also reported that the District had established a policy to make annual transfers from the Operating Fund to the three other funds in amounts approximating the average projected annual expenditures. She then reported that this was why the report had a new section showing these transfers, which was titled "Transfers to Capital Funds." Next, Manager Toy reported that the remainder of the report was on the Equipment Acquisition Fund, the 80-Year Life-Cycle Sewer Replacement Fund, and the Pump Station and Force Main Capital Improvement Fund. She also reported that some of the capital improvement projects were now complete, such as Warner Court, Lincoln Avenue (Paloma to Mission), and H Street and would be at 100% in the next report. She then reported that all of the expenditures are currently on budget.

MOTION by Director Rice, seconded by Director Bushey, to accept the Budget Status Report for the period 7-1-15 through 9-30-15.

AYES: Director Bushey, Director Rice, Chairman Phillips

NOES: None

ABSENT: None

Motion Carried

7. INFORMATIONAL ITEMS.

a. Web Transparency Audit letter from Marin County Civil Grand Jury, dated 10-29-15.

District Manager Toy reported that the District's report card on this matter was not very good and that the District had been given until December 11, 2015, to improve it. She then pointed out the checklist of items that need to be included on the District's Web page. She also reported that because the list of items is fairly extensive, she had requested an extension for the due date and had been given until January 4, 2016. The Board then suggested that in order for the District to do a good job on the Web page, more time might be needed to complete the process. They also suggested that Manager Toy prioritize the list, come up with a plan, and then request a longer extension.

8. ADJOURNMENT

There being no further business to come before the Board, the meeting of December 9, 2015, was adjourned at 9:28 A.M. The San Rafael Sanitation District meeting scheduled for Thursday, January 14, 2016, at 3:30 P.M. at San Rafael City Hall was later canceled. The next regularly scheduled meeting will be held on Thursday, February 11, 2016, at 3:30 P.M. at San Rafael City Hall.

Respectfully submitted,

Maribeth Bushey, Recording Secretary

ATTEST THIS 11th DAY OF FEBRUARY 2016

Gary O. Phillips, Chairman

3.

**SAN RAFAEL SANITATION DISTRICT
PAYMENT SUMMARY
December 1, 2015 - December 31, 2015**

Vendor/Payee	Memo	Class	Acct #	Account Name	Amount
AAA BUSINESS SUPPLIES	Office Supplies - file folders	100	2133	Office & shop supplies	\$ 1,107.21
AAA BUSINESS SUPPLIES	Office Supplies - toner for DPW printer	100	2133	Office & shop supplies	\$ 223.94
AMERICAN SPECIALTY OFFICE PRODUCTS	Office Supplies - numbered file labels	100	2133	Office & shop supplies	\$ 112.15
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 11/04/15	200	2021	Uniforms	\$ 116.52
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 11/11/15	200	2021	Uniforms	\$ 118.53
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 11/18/15	200	2021	Uniforms	\$ 116.52
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 11/25/15	200	2021	Uniforms	\$ 97.77
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 12/02/15	200	2021	Uniforms	\$ 97.77
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 12/09/15	200	2021	Uniforms	\$ 116.58
AT&T	Telephone Service - land lines for dialers to CMSA from 9/20/15-10/19/15	100	2534	Telephone service	\$ 196.36
AT&T	Telephone Service - land lines for dialers and pump stations from 10/02/15-11/01/15	100	2534	Telephone service	\$ 300.53
AT&T MOBILE	Telephone Service - cell phone service from 10/04/15-11/03/15	100	2534	Telephone service	\$ 674.08
BPXPRESS	Glenwood - one set each of plans and specs	300	4146	Glenwood Pump Station (10Yr)	\$ 53.25
CARAMUCCI JOSEPH W. & MARGARET M.	Glenwood - reimbursement for packing fees for breakable items	300	4146	Glenwood Pump Station (10Yr)	\$ 1,289.63
CENTRAL MARIN SANITATION AGENCY	FOG Program - personnel services from 7/01/15-9/30/15	300	4300	FOG Program	\$ 4,959.21
CHEW, KAREN	Memberships - reimbursement for P.E. license renewal	100	2388	Training and education	\$ 115.00
CITY OF SAN RAFAEL	Contract with San Rafael - 2nd quarter FY 15-16 reimbursement	100	2361	Contract with San Rafael	\$ 721,289.09
CORRPRO INC	Catholic Protection - renovation project stage 2, progress payment #3, final 5% retention	300	4145	Catholic Protection (10 Yr)	\$ 11,897.24
COUNTY OF MARIN	Director's Fees - Katie Rice board meeting on 11/23/15	100	2282	Director's fees	\$ 100.00
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Bret Harte, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 282.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Cayes Main, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 310.00
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Glenwood, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 337.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Loch Lomond, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 337.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - North Francisco, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 310.00
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Riviera, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 337.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - San Pedro, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 282.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - Simms Street, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 282.50
COUNTY OF MARIN - PUBLIC WORKS DEPT	Pump Stations - West Railroad, hazardous material permit	200	2359	Maint- pump sta's & force mains	\$ 337.50
CWEA-TCP	Memberships and Dues - Stichter membership renewal	100	2388	Training and education	\$ 81.00
EVOQUA WATER TECHNOLOGIES, LLC	Odor Control - chemicals for pump stations 11/09/15	200	2106	Odor control chemicals	\$ 8,096.50
GABEL MARIA	Sun Valley - sewer replacement project, phase 1 reimbursement	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 3,450.00
GRAINGER	Pump Stations - fan belt for vent at San Pedro	200	2359	Maint- pump sta's & force mains	\$ 5.36
GRAINGER	Pump Stations - light bulb for PS control panels	200	2359	Maint- pump sta's & force mains	\$ 8.53
HARRIS & ASSOCIATES INC	Sewer System Condition Capacity - professional services from 10/01/15-10/31/15	300	4301	Sewer Syst condition/capacity	\$ 875.00
JACKSON'S HARDWARE	Pump Stations - heavy duty tarps	200	2359	Maint- pump sta's & force mains	\$ 69.90
JACKSON'S HARDWARE	Pump Stations - locks for MSDS boxes at pump stations	200	2359	Maint- pump sta's & force mains	\$ 63.20
JACKSON'S HARDWARE	Pump Stations - paint and stencils for MSDS boxes at pump stations	200	2359	Maint- pump sta's & force mains	\$ 29.30
JMB CONSTRUCTION, INC.	Glenwood - improvement project, Progress Payment #1	300	4146	Glenwood Pump Station (10Yr)	\$ 208,373.00
JRL Machine & Driveline	Pump Stations - driveshaft repair at San Pedro pump station	200	2359	Maint- pump sta's & force mains	\$ 335.09
MAGGIORA & GHILOTTI INC	Lincoln Ave. - sewer improvement project, progress psyment #4	300	4318	Lincoln Ave, Paloma/Mission (80)	\$ 30,275.88
MAHER ACCOUNTANCY	Accounting Services - November	100	2717	Accounting services	\$ 3,600.00
MARIBETH BUSHEY	Director's Fees - board meetings on 11/23/15	100	2282	Director's fees	\$ 100.00
MARIN COUNTY TAX COLLECTOR	Legal Services - from 7/01/15-9/30/15	100	2713	Legal services	\$ 3,638.75
MARIN MUNICIPAL WATER DIS	Water - Vacior truck, 220 Tarnal Vista BL from 7/01/15-10/30/15	200	2536	Water utility costs	\$ 1,040.32
MARIN RESOURCE RECOVERY INC	Pump Stations - dump fees for asphalt repair at Riviera	200	2359	Maint- pump sta's & force mains	\$ 35.00
MILLER PACIFIC ENGINEERING GROUP	Sun Valley - geotechnical construction and observations services from 8/24/15-11/01/15	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 3,837.50
MUNICON CONSULTANTS	Glenwood - vibration monitoring	300	4146	Glenwood Pump Station (10Yr)	\$ 4,900.00

SAN RAFAEL SANITATION DISTRICT
PAYMENT SUMMARY
December 1, 2015 - December 31, 2015

Vendor/Payee	Memo	Class	Acct #	Account Name	Amount
NUTE ENGINEERING	Consulting Services - Loch Lomond Village plan review services from 10/1/15-10/31/15	100	2325	Consulting services	\$ 846.00
NUTE ENGINEERING	Consulting Services - revise standard specs from 10/1/15-10/31/15	100	2325	Consulting services	\$ 188.00
NUTE ENGINEERING	Glenwood - construction review services from 10/1/15-10/31/15	300	4146	Glenwood Pump Station (10Yr)	\$ 10,059.25
NUTE ENGINEERING	Lincoln Avenue - sewer improvement project construction review from 10/1/15-10/31/15	300	4318	Lincoln Ave, Paloma/Mission (80)	\$ 3,964.00
NUTE ENGINEERING	Lincoln Avenue - sewer improvement project design from 10/1/15-10/31/15	300	4319	Lincoln Ave, Prospect/Paloma (80)	\$ 17,105.75
NUTE ENGINEERING	Sun Valley - construction review services from 10/1/15-10/31/15	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 31,463.95
PERIN - BATTERIES PLUS	Pump Stations - batteries for pump station dialers	200	2359	Maint- pump sta's & force mains	\$ 4.35
PERIN - BATTERIES PLUS	Pump Stations - batteries for San Pedro generator exercise timer	200	2359	Maint- pump sta's & force mains	\$ 6.50
PG&E	Power - service for pump stations 10/09/15-11/09/15	200	2535	Electric utility costs	\$ 9,770.12
PHILLIPS, GARY	Director's Fees - board meeting 11/23/15	100	2282	Director's fees	\$ 100.00
R & B COMPANY	Pump Stations - standpipe parts	200	2359	Maint- pump sta's & force mains	\$ 1,025.66
R & B COMPANY	Pump Stations - standpipe reducing flanges	200	2359	Maint- pump sta's & force mains	\$ 1,292.78
ROY'S SEWER SERVICE INC	Consulting Services - CCTV inspection on 775 Lindaro	200	2325	Consulting services	\$ 850.00
ROTO-ROOTER SEWER SERVICE	Collection System - work at 217 Marin Ave.	200	2360	O&M - collection systems	\$ 7,783.00
ROTO-ROOTER SEWER SERVICE	Standby - work at 11 Twin Oaks Ave.	200	2363	Standby services	\$ 230.00
SEQUOIA SAFETY SUPPLY COM	Safety Supplies - gloves	200	2365	Safety equipment and supplies	\$ 107.78
STAPLES INC	Office Supplies - calendars and plastic document holders	100	2133	Office & shop supplies	\$ 174.71
STAPLES INC	Office Supplies - diaries	100	2133	Office & shop supplies	\$ 200.98
STAPLES INC	Office Supplies - plastic document holders	100	2133	Office & shop supplies	\$ 35.99
STAPLES INC	Office Supplies - various office supplies	100	2133	Office & shop supplies	\$ 73.16
STAPLES INC	Office Supplies - wall clock	100	2133	Office & shop supplies	\$ 59.97
STATE WATER RESOURCES CONTROL BOARD	Memberships - SWRCB annual permit fee from 7/01/15-6/30/15	100	2131	Memberships and subscriptions	\$ 2,088.00
SUN IRON WORKS, INC.	Pump Stations - fabrication of pump guide rail	200	2359	Maint- pump sta's & force mains	\$ 33.79
TELSTAR INSTRUMENTS INC	Pump Stations - fans replaced at North Francisco and Simms St.	200	2359	Maint- pump sta's & force mains	\$ 1,282.53
TELSTAR INSTRUMENTS INC	Pump Stations - service call to North and South Francisco pump stations	200	2359	Maint- pump sta's & force mains	\$ 1,345.00
TIFCO INDUSTRIES	Pump Stations - anti-seize compound	200	2359	Maint- pump sta's & force mains	\$ 93.20
TRANSBAY SECURITY SERVICE	Pump Stations - hasp and keys	200	2359	Maint- pump sta's & force mains	\$ 57.89
TRANSBAY SECURITY SERVICE	Pump Stations - keys	200	2359	Maint- pump sta's & force mains	\$ 14.09
TRANSBAY SECURITY SERVICE	Pump Stations - keys and padlocks	200	2359	Maint- pump sta's & force mains	\$ 230.08
US BANK CORPORATE PAYMENT	Office & Shop Supplies - laminate wall calendar	100	2133	Office & shop supplies	\$ 27.20
US BANK CORPORATE PAYMENT	Pump Stations - hand wipes for use in truck	200	2359	Maint- pump sta's & force mains	\$ 2.71
US BANK CORPORATE PAYMENT	Pump Stations - phase fail relay	200	2359	Maint- pump sta's & force mains	\$ 299.38
US BANK CORPORATE PAYMENT	Safety Equipment and Supplies - shipping fee to return safety video to CSRMA	200	2365	Safety equipment and supplies	\$ 8.43
US BANK CORPORATE PAYMENT	Training and Education - Inspection course for SRSD Inspector	100	2388	Training and education	\$ 375.00
US BANK CORPORATE PAYMENT	Vehicle Equipment and Acquisition - trailer tongue truck box	100	4830	Vehicle equipment & acquisition	\$ 328.99
VERIZON WIRELESS	Telephone Service - wireless service for laptops 9/21/15-10/20/15	100	2534	Telephone service	\$ 266.73
VERIZON WIRELESS	Telephone Service - wireless service for laptops 10/21/15-11/20/15	100	2534	Telephone service	\$ 266.73
WATER COMPONENTS & BLDG SUPPLY	Collection System - pipe wrap	200	2360	O&M - collection systems	\$ 27.91
WATER COMPONENTS & BLDG SUPPLY	Pump Stations - standpipe gaskets	200	2360	O&M - collection systems	\$ 131.62
WECO INDUSTRIES LLC	Collection Systems - installation of CCTV cable	200	2360	O&M - collection systems	\$ 100.00
WOODLAND CTR AUTO SUPPLY	Pump Stations - fan belt for North Francisco PS	200	2359	Maint- pump sta's & force mains	\$ 52.83
Total					\$ 1,106,987.27



SAN RAFAEL SANITATION DISTRICT
PAYMENT SUMMARY
 January 1, 2016 - January 31, 2016

Vendor/Payee	Memo	Class	Acct #	Account Name	Amount
ALL STAR GLASS	Vehicles - windshield replacement on vactor truck	200	2083	Parts and repairs vehicles	\$ 423.97
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 12/16/15	200	2021	Uniforms	\$ 97.77
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 12/23/15	200	2021	Uniforms	\$ 112.13
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 12/30/15	200	2021	Uniforms	\$ 107.93
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 01/06/16	200	2021	Uniforms	\$ 107.99
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 01/13/16	200	2021	Uniforms	\$ 112.13
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 01/20/16	200	2021	Uniforms	\$ 109.13
AT&T	Telephone Service - land lines for dialers and pump stations from 11/20/15-12/19/15	100	2534	Telephone service	\$ 241.93
AT&T	Telephone Service - land lines for dialers and pump stations from 12/20/15-1/19/16	100	2534	Telephone service	\$ 242.03
AT&T MOBILE	Telephone Service - cell phones service from 11/04/15-12/03/15	100	2534	Telephone service	\$ 864.44
AT&T MOBILE	Telephone Service - cell phones service from 12/04/15-1/03/16	100	2534	Telephone service	\$ 671.78
BWS DISTRIBUTORS	Safety Equipment - oxygen sensor for gas detector	200	2365	Safety equipment and supplies	\$ 120.18
CALIFORNIA SANITATION RISK MGMT ATH	General Insurance - 2016 primary insurance program renewal	100	1310	General Insurance	\$ 108,764.88
CAL-STEAM CO INC	Pump Stations - air release valves	200	2359	Maint- pump sta's & force mains	\$ 215.55
CAL-STEAM CO INC	Pump Stations - stand pipe parts	200	2359	Maint- pump sta's & force mains	\$ 371.89
CENTRAL MARIN SANITATION AGENCY	Debt Service - semi-annual payment on CMSA revenue bonds for March 1, 2016	400	4113	Sewage treatment - debt service	\$ 420,949.44
CENTRAL MARIN SANITATION AGENCY	Sewage Treatment - third quarter service charges from 1/01/16-3/31/16	400	4112	Sewage treatment	\$ 1,096,728.30
CITY OF SAN RAFAEL	H Street - roadway improvement project progress payment #2	300	4317	H Street, Fourth to Forbes	\$ 184,603.93
CITY OF SAN RAFAEL	Manhole Raising - adjustment of manhole covers and rodholes to new roadway grades	100	4045	Manhole raising	\$ 8,200.00
CITY OF SAN RAFAEL	Vehicles - repair unit 8149	200	2083	Parts and repairs vehicles	\$ 221.95
CITY OF SAN RAFAEL	Vehicles - repair unit 8154	200	2083	Parts and repairs vehicles	\$ 350.71
CITY OF SAN RAFAEL	Vehicles - repair unit 8155	200	2083	Parts and repairs vehicles	\$ 2,339.07
CITY OF SAN RAFAEL	Vehicles - repair unit 8180	200	2083	Parts and repairs vehicles	\$ 748.39
CITY OF SAN RAFAEL	Vehicles - repair unit 8191	200	2083	Parts and repairs vehicles	\$ 196.08
CITY OF SAN RAFAEL	Vehicles - repair unit 8200	200	2083	Parts and repairs vehicles	\$ 620.35
CITY OF SAN RAFAEL	Vehicles - repair unit 8202	200	2083	Parts and repairs vehicles	\$ 111.93
COUNTY OF MARIN	Director's Fees - Katie Rice board meeting on 12/09/15	100	2282	Director's fees	\$ 100.00
CRATUS INC.	Sun Valley - sewer replacement project-phase1, progress payment #2	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 489,430.20
CSW/STUBER-STROEH ENGR GROUP INC.	Cayes - professional fees through 1/03/16	300	4143	Cayes Pump Station (10 Yr)	\$ 2,633.63
CSW/STUBER-STROEH ENGR GROUP INC.	H Street - professional fees through 12/13/15	300	4317	H Street, Fourth to Forbes	\$ 1,231.00
EVOQUA WATER TECHNOLOGIES, LLC	Odor Control - chemicals for pump stations 12/17/15	200	2106	Odor control chemicals	\$ 8,086.43
FASTENAL	Pump Stations - bolt cutters	200	2359	Maint- pump sta's & force mains	\$ 271.50
FASTENAL	Pump Stations - bungee cords for tarps	200	2359	Maint- pump sta's & force mains	\$ 15.30
FASTENAL	Pump Stations - standpipe bolts	200	2359	Maint- pump sta's & force mains	\$ 11.83
FASTENAL	Pump Stations - standpipe parts	200	2359	Maint- pump sta's & force mains	\$ 39.46
FASTENAL	Pump Stations - standpipe parts	200	2359	Maint- pump sta's & force mains	\$ 26.27
FASTENAL	Safety - noise blocking earmuffs	200	2365	Safety equipment and supplies	\$ 54.84
FASTENAL	Safety - noise blocking earmuffs	200	2365	Safety equipment and supplies	\$ 118.94
GENE FORD COMPANY, INC.	Pump Stations - air release valves for San Pedro	200	2359	Maint- pump sta's & force mains	\$ 2,238.63
JACKSON'S HARDWARE	Pump Stations - gasket adhesive	200	2359	Maint- pump sta's & force mains	\$ 18.56
JMB CONSTRUCTION, INC.	Glenwood - improvement project, Progress Payment #2	300	4146	Glenwood Pump Station (10Yr)	\$ 31,293.00
JRL MACHINE & DRIVELINE	Pump Stations - driveline repair for West Railroad PS	200	2359	Maint- pump sta's & force mains	\$ 378.10
MAGGIORA & GHILOTTI INC	Lincoln Ave. - sewer improvement project, progress payment #5	300	1210	Lincoln, Paloma/Mission (80)	\$ 39,858.78
MAHER ACCOUNTANCY	Accounting Services - December	100	2717	Accounting services	\$ 3,600.00
MAHER ACCOUNTANCY	Accounting Services - January	100	2717	Accounting services	\$ 3,600.00

SAN RAFAEL SANITATION DISTRICT
PAYMENT SUMMARY
January 1, 2016 - January 31, 2016

Vendor/Payee	Memo	Class	Acct #	Account Name	Amount
MARIBETH BUSHEY	Director's Fees - board meetings on 12/09/15	100	2282	Director's fees	\$ 100.00
MARIN MUNICIPAL WATER DIS	Water - 44 Lagoon Rd. from 10/15/15-12/15/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - 1271 Andersen Dr. from 10/09/15-12/09/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - 3106 Kerner Bl. from 10/14/15-12/15/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - Andersen Dr. from 10/09/15-12/09/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - Castro St. from 10/13/15-12/14/15	200	2536	Water utility costs	\$ 264.76
MARIN MUNICIPAL WATER DIS	Water - Catalina Bl. from 10/13/15-12/14/15	200	2536	Water utility costs	\$ 36.62
MARIN MUNICIPAL WATER DIS	Water - E Francisco Bl. from 10/13/15-12/14/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - E Francisco Bl. from 10/14/15-12/15/15	200	2536	Water utility costs	\$ 86.59
MARIN MUNICIPAL WATER DIS	Water - Montecito Rd. from 10/14/15-12/15/15	200	2536	Water utility costs	\$ 27.55
MARIN MUNICIPAL WATER DIS	Water - Peacock Dr. from 10/15/15-12/15/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - Pt. San Pedro Rd. from 10/14/15-12/15/15	200	2536	Water utility costs	\$ 23.81
MARIN MUNICIPAL WATER DIS	Water - N. San Pedro Rd. from 10/15/15-12/15/15	200	2536	Water utility costs	\$ 32.75
MARIN MUNICIPAL WATER DIS	Water - Riviera Dr. from 10/15/15-12/15/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - Simms St. from 10/09/15-12/09/15	200	2536	Water utility costs	\$ 21.53
MARIN MUNICIPAL WATER DIS	Water - Vactor truck, 220 Tamal Vista Bl. from 10/31/15-12/29/15	200	2536	Water utility costs	\$ 643.58
MARIN MUNICIPAL WATER DIS	Water - Woodland Ave. from 10/09/15-12/09/15	200	2536	Water utility costs	\$ 21.53
MICHAEL PAUL COMPANY INC.	Collection Systems - various sewer repairs at Hubbel, Jewell, Kinross and encroachment permits	200	2360	O&M - collection systems	\$ 15,952.00
MILLER PACIFIC ENGINEERING GROUP	Sun Valley - geotechnical construction and observations services from 11/02/15-12/20/15	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 4,641.70
MUNICON CONSULTANTS	Glenwood - vibration monitoring from 11/1/15-11/30/15	300	4146	Glenwood Pump Station (10Yr)	\$ 3,700.00
MUNICON CONSULTANTS	Glenwood - vibration monitoring from 12/1/15-12/31/15	300	4146	Glenwood Pump Station (10Yr)	\$ 4,000.00
NUTE ENGINEERING	Consulting - Loch Lomond Village plan review services from 11/01/15-11/30/15	100	2325	Consulting services	\$ 772.00
NUTE ENGINEERING	Consulting - Loch Lomond Village plan review services from 12/01/15-12/31/15	100	2325	Consulting services	\$ 470.00
NUTE ENGINEERING	Consulting - revise standard specs services from 11/01/15-11/30/15	100	2325	Consulting services	\$ 2,502.00
NUTE ENGINEERING	Glenwood - construction review services from 11/01/15-11/30/15	300	4146	Glenwood Pump Station (10Yr)	\$ 9,134.00
NUTE ENGINEERING	Glenwood - construction review services from 12/01/15-12/31/15	300	4146	Glenwood Pump Station (10Yr)	\$ 12,161.50
NUTE ENGINEERING	Lincoln - sewer improvement services from 11/01/15-11/30/15	300	4319	Lincoln, Prospect/Paloma (80)	\$ 37,870.00
NUTE ENGINEERING	Lincoln - sewer improvement services from 12/01/15-12/31/15	300	4319	Lincoln, Prospect/Paloma (80)	\$ 14,127.25
NUTE ENGINEERING	Sun Valley - construction review services from 11/01/15-11/30/15	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 15,217.25
NUTE ENGINEERING	Sun Valley - construction review services from 12/01/15-12/31/15	300	4309	Sun Valley-Cal, Humboldt, Nev	\$ 8,156.75
ONGARO & SONS	Claims - plumbing services due to blockage in sewer main	100	2051	Claims and deductibles	\$ 400.00
PAC MACHINE CO	Vehicles and Equipment- training on doosan G325 genset	100	4830	Vehicle equipment & acquisition	\$ 880.00
PAC MACHINE CO	Vehicles - replace battery charger in Doosan G70 genset	200	2083	Parts and repairs vehicles	\$ 748.30
PG&E a/c 2480926202-5	Power - service for pump stations 11/09/15-12/10/15	200	2535	Electric utility costs	\$ 7,147.42
PG&E a/c 2480926202-5	Power - service for pump stations 12/11/15-1/10/16	200	2535	Electric utility costs	\$ 13,446.34
PHILLIPS, GARY	Director's Fees - board meeting 12/09/15	100	2282	Director's fees	\$ 100.00
PUMP REPAIR SERVICE CO	Pump Stations - pump repair at North Francisco P.S.	200	2359	Maint- pump sta's & force mains	\$ 2,300.00
ROTO-ROOTER SEWER SERVICE	Collection Systems - work at 42 Treehaven Dr.	200	2360	O&M - collection systems	\$ 4,376.35
ROTO-ROOTER SEWER SERVICE	Stand By - work at 15 Circle Dr.	200	2363	Standby services	\$ 1,897.50
ROTO-ROOTER SEWER SERVICE	Stand By - work at 204 Bungalow Ave.	200	2363	Standby services	\$ 230.00
ROTO-ROOTER SEWER SERVICE	Stand By - work at 227 Marin St.	200	2363	Standby services	\$ 460.00
ROTO-ROOTER SEWER SERVICE	Stand By - work at Rollingwood and Lindenwood Drive	200	2363	Standby services	\$ 471.25
SEQUOIA SAFETY SUPPLY COM	Safety Supplies - gloves	200	2365	Safety equipment and supplies	\$ 112.42
STAPLES INC	Office Supplies - ink cartridges and blank CD's	100	2133	Office & shop supplies	\$ 115.77
STAPLES INC	Office Supplies - various office supplies	100	2133	Office & shop supplies	\$ 95.34

SAN RAFAEL SANITATION DISTRICT
 PAYMENT SUMMARY
 January 1, 2016 - January 31, 2016

Vendor/Payee	Memo	Class	Acct #	Account Name	Amount
TIFCO INDUSTRIES	Pump Stations - supplies	200	2359	Maint- pump sta's & force mains	\$ 137.50
US BANK CORPORATE PAYMENT	Collection Systems - pipe plug fittings	200	2360	O&M - collection systems	\$ 43.63
US BANK CORPORATE PAYMENT	Pump Stations - Cayes float anchors	200	2359	Maint- pump sta's & force mains	\$ 21.78
US BANK CORPORATE PAYMENT	Pump Stations - hand cranking assembly for megger	200	2359	Maint- pump sta's & force mains	\$ 29.31
VERIZON WIRELESS	Telephone Service - wireless service for laptops 11/21/15-12/20/15	100	2534	Telephone service	\$ 266.73
WATER COMPONENTS & BLDG SUPPLY	Pump Stations - sump pump parts for Bret Harte	200	2359	Maint- pump sta's & force mains	\$ 27.45
WECO INDUSTRIES LLC	Collection Systems - continuous rod for power rodder	200	2360	O&M - collection systems	\$ 4,320.99
WECO INDUSTRIES LLC	Collection Systems - installation of CCTV cable	200	2360	O&M - collection systems	\$ 3,638.03
Total					\$ 2,582,020.34

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 5.a.

DATE: February 11, 2016
TO: Board of Directors, San Rafael Sanitation District
FROM: Doris Toy, District Manager/District Engineer *DT*
SUBJECT: Adopt Resolution Authorizing the District Manager/District Engineer to execute a Professional Services Agreement with WorkSmart Automation, Inc., for Programming Related Services for The Village at Loch Lomond Marina Sewage Pump Station

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with WorkSmart Automation, Inc., for programming related services for The Village at Loch Lomond Marina Sewage Pump Station.

BACKGROUND:

The subdivision construction of The Village at Loch Lomond Marina is currently underway. The sewer facilities, which include approximately 4,200 LF of 6-inch to 8-inch sewer pipe (gravity and force main) and a pump station, are being installed by the owner; and after their completion, the sewer facilities will be owned and maintained by the District.

As part of the pump station construction, the District is providing the programming portion of the work, since District staff wants this work to be performed by the District's consultant, who is familiar with the programming of District pump stations.

District staff has asked WorkSmart Automation, Inc., to submit a proposal to perform the programming work for The Village at Loch Lomond Marina Sewage Pump Station.

ANALYSIS:

WorkSmart Automation, Inc., performed the programming for our recent pump station projects (the Cayes Main Pump Station and the Glenwood Pump Station) and also installed the District's Supervisory Control Data Acquisition (SCADA) system. The SCADA system is used to monitor and control the equipment at our pump stations remotely and can be used to gather data, i.e. the amount of flow in a given period.

WorkSmart is proposing to perform this work for a cost of \$28,500, which is the same amount as the Agreement for the Glenwood Pump Station Project.

FISCAL IMPACT:

This project will be funded under the Pump Station and Force Main Capital Improvements Program from the current 2015-16 Budget. However, staff has requested that The Village at Loch Lomond Marina reimburse the District for the programming work in the amount of \$28,500.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with WorkSmart Automation, Inc., for programming related services for The Village at Loch Lomond Marina Sewage Pump Station.

Attachment: Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 16-1126

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT
WITH WORKSMART AUTOMATION, INC., FOR
PROGRAMMING RELATED SERVICES FOR THE
VILLAGE AT LOCH LOMOND MARINA SEWAGE PUMP STATION
FOR AN AMOUNT NOT TO EXCEED \$28,500**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION
DISTRICT, COUNTY OF MARIN, hereby resolves as follows:**

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with WorkSmart Automation, Inc., for programming related services for The Village at Loch Lomond Marina Sewage Pump Station, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 11th day of February, 2016, by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

Gary O. Phillips, Chairman

ATTEST:

Maribeth Bushey, Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR PROGRAMMING SERVICES FOR THE
VILLAGE AT LOCH LOMOND MARINA SEWAGE PUMP STATION**

This Agreement is made and entered into this 11th day of February, 2016, by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and *WORKSMART AUTOMATION, INC.* (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected *WORKSMART AUTOMATION, INC.*, to perform the required programming related services for "The Village at Loch Lomond Marina Sewage Pump Station" (hereinafter "PROJECT") for the DISTRICT; and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this PROJECT.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Senior Civil Engineer is hereby designated as the PROJECT MANAGER for the DISTRICT, and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. DAN JONES is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as a Programming Consultant to perform work outlined in the Proposal from CONSULTANT dated October 29, 2015, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a lump-sum basis for services rendered as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed the amount of \$28,500 as shown on the Proposal Budget, set out in Exhibit "A".

Payment will be made upon receipt by PROJECT MANAGER of an invoice submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A. shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Council.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Council. At District's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Ms. Karen Chew (Project Manager)
San Rafael Sanitation District
111 Morphew Street
P.O. Box 151560
San Rafael, CA 94915-1560

TO CONSULTANT: Mr. Dan Jones (Project Director)
WorkSmart Automation, Inc.
3112 O Street, Suite 11
Sacramento, CA 95816

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is 68-0486438, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day, month and year first above written.

SAN RAFAEL SANITATION DISTRICT

CONTRACTOR

Doris Toy, P.E.
District Manager/District Engineer

WORKSMART AUTOMATION, INC.

ATTEST:

By: _____
Dan Jones

Cynthia Hernandez
District Secretary

Title: Director of Business Development

APPROVED AS TO FORM:

Jack F. Govi
Assistant County Counsel



WorkSmart Automation, Inc.
Software Automation Specialists
3112 O Street, Suite 11
Sacramento, CA 95816

Phone (916) 454-1718
Fax (916) 454-1819

October 29, 2015

Quote: SRV15-2951.2

TO: Doris Toy, P.E.
District Manager/District Engineer
San Rafael Sanitation District
Doris.Toy@cityofsanrafael.org

**EXHIBIT
A**

FROM: Dan Jones
WorkSmart Automation, Inc.

SUB: Quotation for Services – Loch Lomond Pump Station Programming Services

Hi Doris,

Pursuant to your request, WorkSmart Automation is pleased to submit this quotation for the above mentioned project. This quotation was generated based the contract documents we received from Matt Smith via *DropBox* dated 8-20-15 and our conference call with Matt Smith on 10-28-2015.

WorkSmart Automation is not aware of any contract addendums or changes.

Overview

WorkSmart Automation shall supply the programming and startup of the PLC and OIT Panel system in accordance with the contract documents specified in Section 16990 –Programmable Logic Controller and 17010 –General Instrumentation Requirements. We shall utilize our own licensed copies of the development software required to program these devices.

The following outlines WorkSmart’s scope of work for this project:

Programming

The programming scope of tasks for WorkSmart Automation involves the following:

- **PLC Ladder Logic Programming**
Provide programming for the new PLC in order to provide the control features specified and required to operate the new pump station and as specified.
- **OIT Programming**
Provide programming for the new OIT (operator interface terminal) located at the new MCC panel to provide graphical control, alarm and indication features specified and required to operate the new pump station locally.
- **SCADA Programming**
Provide programming and configuration for the new FactoryTalk SCADA system to provide graphical control, alarm, and indication features specified and required to operate the new pump station from a remote location such as the corporate yard.

Testing

A representative of WorkSmart Automation will attend and participate in the required testing as specified and required for pump station operation for the following specified tests:

- **Factory Test**
WorkSmart Automation will attend and participate in the factory testing as specified and required for pump station operation.
- **Operational Readiness Test (ORT)**
WorkSmart Automation will attend and participate in the Operational Readiness testing as specified and required for pump station operation.
- **Functional Acceptance Test (FAT)**
WorkSmart Automation will participate in the field functional acceptance testing as specified and required for pump station operation.

Training

WorkSmart Automation shall provide operator/user training on the devices we program (PLC, OIT, and SCADA) during a 1 –day visit consisting of two sessions. The first session shall be on-site at the pump station where we will review the program logic and discuss the operation and review the OIT graphics and how to operate the station using the available OIT displays. The second session will be on-site at the Corp yard where we will review the SCADA displays for the pump station and how to operate the station using the available SCADA displays.

Project Meetings

WorkSmart Automation will attend up to three (3) project meetings on-site as requested by CONTRACTOR or DISTRICT throughout the course of the project.

Warranty

WorkSmart Automation will warrant our programming and SCADA configuration for a period of one year from the date of acceptance as specified. We will correct any programming errors uncovered during this time at no additional charge. This warranty excludes operational changes and new features or changes to the PLC program, OIT and SCADA displays.

Assumptions / Exclusions

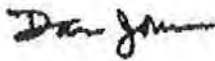
- WorkSmart will contract directly with owner (DISTRICT).
- No hardware or installation of hardware or wiring is included in this quote.
- No PLC or OIT programming and development software licensing is included in this quote.
- All Testing Plans and Testing Forms required throughout the course of the project are to be provided by the CONTRACTOR.
- All Training manuals and study materials required for training throughout the course of the project are to be provided by the CONTRACTOR.
- No O&M material or Submittals are included in this quote. We assume these tasks will be provided by the CONTRACTOR.
- Any work requested outside the scope of this project will be quoted separately at WorkSmart's current labor and travel rates.
- WorkSmart takes exception to the specified training. We are quoting only the training time described herein.

- WorkSmart takes exception to the specified meetings. We believe our participation and scope doesn't warrant more than three on-site meetings during the course of the project.
- WorkSmart carries \$1,000,000 in General liability insurance, \$1,000,000 in Professional Liability, and \$1,000,000 in Automobile Liability insurance for our clients. Amounts requested above these limits may require a change in contract price.

Total costs for these services shall be \$28,500 lump sum.

Please give me a call if you have any questions.

Best regards,



Dan Jones
Director of Business Development
WorkSmart Automation, Inc.

5.b.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 5.b.

DATE: February 11, 2016

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer *DT*

SUBJECT: Adopt Resolution Authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Ewers Engineering for Engineering Related Services for the Force Main Condition Assessment Program Development, Phase 1

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Ewers Engineering for engineering related services for the Force Main Condition Assessment Program Development, Phase 1.

BACKGROUND:

The District has approximately 13 miles of force main pipe, ranging from 8 inches to 45 inches in diameter, which is composed of various types of material, including ductile iron, cast iron, high-density polyethylene (HDPE), and polyvinyl chloride (PVC). The pipes that were installed back in the 1950's have either been replaced or are being used as secondary pipes. The oldest active pipe is approximately 30 years old. Force main pipe is pressurized pipe, and it is more difficult to perform a condition assessment on it than on gravity pipe. Unlike gravity pipe, active force mains remain full of wastewater and very rarely have manholes for access. Force mains can only be offline for a certain amount of time before the pump stations begin reaching capacity.

In California, the average lifespan of a force main is approximately 32 years. Many agencies have not performed condition assessments on their force mains because of access issues, expensive testing methods, and because force mains make up only a small percentage of their facilities; however, a force main break can be very costly due to Regional Water Board/State Water Board fines. The Water Board can impose fines of up to \$10 per gallon and/or \$1,000 to \$10,000 per day for sanitary sewer overflows (SSOs).

ANALYSIS:

Staff recommends that the District develop a Force Main Condition Assessment Program in order to help preclude future force main failures and SSOs. Since the District does not have the staffing or the expertise to develop this program on its own, staff has asked Ewers Engineering to submit a proposal to assist staff with the development of a condition assessment program for force mains.

Ewers Engineering recommends that the program be developed in three phases. Phase 1 involves gathering and evaluating data for each force main, prioritizing the locations, determining pipe lengths that have a higher risk for failure, and developing a plan that includes the costs and scheduling of the condition assessments along with various inspection methods. Phase 2 involves implementing the inspection methods, and Phase 3 involves implementing additional inspections and possibly more aggressive inspection methods, depending upon the results from Phase 2.

Ewers Engineering is owned by Chris Ewers, who will act as an extension of our staff. District staff will also assist Mr. Ewers in gathering data, as-built plans, and with site visits.

Since Ewers Engineering is a single-person consulting engineering firm, it can offer a palatable billing rate with lower overhead costs and a more personable and flexible approach.

Ewers Engineering is proposing to perform the Force Main Condition Assessment Program Development, Phase 1, on a time-and-material basis, for an amount not to exceed \$63,500.

FISCAL IMPACT:

This project will be funded under the Pump Station and Force Main Capital Improvements Program from the current 2015-16 Budget.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Ewers Engineering for engineering related services for the Force Main Condition Assessment Program Development, Phase 1.

Attachment: Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 16-1127

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH
EWERS ENGINEERING FOR ENGINEERING RELATED SERVICES
FOR THE FORCE MAIN CONDITION ASSESSMENT
PROGRAM DEVELOPMENT, PHASE 1
FOR AN AMOUNT NOT TO EXCEED \$63,500**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN, hereby resolves as follows:**

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with Ewers Engineering for engineering related services to for the Force Main Condition Assessment Program Development, Phase 1, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 11th day of February, 2016, by the following vote,
to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Gary O. Phillips, Chairman

ATTEST:

Maribeth Bushey, Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR ENGINEERING SERVICES FOR THE
FORCE MAIN CONDITION ASSESSMENT PROGRAM DEVELOPMENT, PHASE 1**

This Agreement is made and entered into this 11th day of February, 2016, by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and *EWERS ENGINEERING, INC.* (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected *WORKSMART AUTOMATION INC.* to perform the required programming related services for the "**Force Main Condition Assessment Program Development, Phase 1**" (hereinafter "PROJECT") for the DISTRICT; and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this PROJECT.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Sewer Maintenance Superintendent is hereby designated as the PROJECT MANAGER for the DISTRICT, and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. CHRIS EWERS is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as a Programming Consultant to perform work outlined in the Proposal from CONSULTANT dated January 12, 2016, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a lump sum basis for services rendered as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed the amount of \$63,500 as shown on the Proposal Budget, set out in Exhibit "A".

Payment will be made upon receipt by PROJECT MANAGER of an invoice submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A. shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At District's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Mr. Matt Smith
San Rafael Sanitation District
111 Morphew Street
P.O. Box 151560
San Rafael, CA 94915-1560

TO CONSULTANT: Mr. Chris Ewers
Ewers Engineering, Inc.
209 Donner Avenue
Roseville, CA 95678

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is XX-XXXXXXX, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day, month and year first above written.

SAN RAFAEL SANITATION DISTRICT

CONTRACTOR

Doris Toy, P.E.
District Manager/District Engineer

EWERS ENGINEERING, INC.

ATTEST:

By: _____
Chris Ewers

Cynthia Hernandez
District Secretary

Title: Owner, Principal Engineer

APPROVED AS TO FORM:

Jack F. Govi
Assistant County Counsel

EXHIBIT A

UPDATE January 12, 2016



Ms. Doris Toy, District Manager/District Engineer
San Rafael Sanitation District
111 Morphew Street
San Rafael, California 94915-1560

**Subject: Proposal for Staff Extension Engineering Services
Phase 1 Force Main Condition Assessment Program Development**

Ms. Toy:

It was a pleasure to get to meet you and Matt Smith at the district offices last week. We discussed the approaches appropriate for the District to develop a force main condition assessment program. This proposal is intended to document the specifics of what we discussed as an approach, a proposed scope of work, approximate schedule, and estimated fee for developing the first phase of the program.

As we talked last week, a picture emerged of where the project should begin and a logical point at which to end the first phase of the program to allow us to evaluate the progress and make changes if necessary.

We discussed how your project would work well as a staff extension project, so the schedule provided here is flexible to accommodate staffing loads. In general, this proposal is provided as a roadmap for the first phase of the program, with milestones to meet.

An introduction

The condition assessment portion of your project requires an understanding of pipeline condition assessment tools for evaluating force mains, the costs associated with them, and their suitability to the District's needs. Design and construction experience will lend a practical approach that will allow you to adapt condition assessment tools to available budgets and timelines to achieve your goals. As we discussed last week, I propose to provide that understanding and experience to your project. I have more than 17 years of experience in wastewater and water infrastructure planning, design, operational support, and construction management for large- and small-scale community systems.

Most recently, that experience has culminated in presentations to managers and regulators on force main condition assessment (FMCA). I have worked with corrosion protection for pipelines throughout my career, including passive cathodic protection systems like those we specified for the City of Fresno's potable water transmission mains three years ago, and impressed current systems for transmission pipelines like those we designed for installation in Power Inn Road beneath light rail. Force main condition assessment promises an evaluation of our efforts to make our pipelines durable, and I began asking clients to conduct assessments of their systems 12 years ago in developing designs for them. Since then, I have become acquainted with condition assessment techniques and technologies that make much more sense than simply excavating a suspect section of pipeline and removing a sample spool for evaluation. I have also become acquainted with their cost in time and money, the relative value of their results, and have made a habit of comparing the cost of assessments with the replacement cost to keep assessments in perspective.

I helped Sacramento Suburban Water District to evaluate the opportunities and costs associated with applying condition assessment technology – specifically, field hydrophones for pipeline structural assessment of aging and corroding asbestos-cement pipe. In that case, the agency decided against further condition assessments because the results were too indeterminate and the risk involved in their failure too small to justify the cost of assessment. That experience provided the impetus to evaluate other assessment technologies available and to temper the potential of their results with the risk of failure. Since then, I have worked with several clients to develop FMCA techniques and standards, particularly Fairfield-Suisun Sewer District.

Similar analyses became the bases for presentations to the members of the California Sanitation Risk Management Authority at the California Association of Sanitation Agency meeting, to the Enforcement Unit at the Division of Water Quality, California State Water Resources Control Board, and to California Sanitation Risk Management Agency's members in seminars and a webinar. Condition assessment holds promise for planning and effective prioritization, and with research and experience, it can be adapted to work on a tight budget for an important pipeline.

The attached resume will show that I have provided engineering support services for a number of community service districts, special districts, public utility districts, and municipalities. I understand small California utilities' regulatory, community, and funding constraints. My background includes field experience with trenchless and trench-based installation of a variety of pressurized and gravity pipelines, treatment, storage, and distribution systems and wastewater collection, treatment, disposal, and re-use systems. I have conducted permit negotiation and support, master planning, system evaluation, detailed design, construction management, the operation and maintenance of water supply, subconsultant management, development of capital improvement plans, and communication with district boards and the public.

It may be most convenient to the District to arrange an on-call consulting engineering contract to incorporate my work on a staff extension basis. I have included a brief description of these services below for your information.

ON-CALL CONSULTING ENGINEERING

On-call consultant services provides a quick, reliable method for obtaining planning, operations, design, permit support, and other engineering services for multiple projects with a trusted engineering firm. On-call consulting engineering services available to the District through Ewers Engineering include the following:

- Condition assessment planning and programming
- Third-party engineering review of proposed development improvements
- Capacity analysis for existing water distribution and sewer collection systems (or portions of them)
- Rate studies and capital improvement plans
- Design engineering (storage; treatment, transmission, and distribution; pump stations and force mains; collection systems; grading & drainage)
- Construction inspection services
- Operational recommendations and troubleshooting
- Strategic planning

Additional specialty services could be provided by Ewers Engineering through use of qualified sub-consultants at the District's request.

STAFF EXTENSION

On-call consultant services provides a quick, reliable method for obtaining planning, operations, design, permit support, and other engineering services for multiple projects with a trusted engineering firm. On-call consulting engineering services available to the District through Ewers Engineering include the following:

- Condition assessment planning and programming
- Third-party engineering review of proposed development improvements
- Capacity analysis for existing water distribution and sewer collection systems (or portions of them)
- Rate studies and capital improvement plans
- Design engineering (storage; treatment, transmission, and distribution; pump stations and force mains; collection systems; grading & drainage)
- Construction inspection services
- Operational recommendations and troubleshooting
- Strategic planning

Additional specialty services could be provided by Ewers Engineering through use of qualified sub-consultants at the District's request.

Typically, staff extension arrangements work best if the on-call engineer is allocated a space within the agency offices and a set time to work with the agency project team. The primary benefit is that a staff extension arrangement makes available an experienced engineer with a needed specialty as a resource to the District or a specific project without the overhead of a new hire. Under this arrangement, Ewers Engineering would participate in projects as would a District engineer, on an as-needed basis, and across the range of capabilities.

Some of the advantages of retaining Ewers Engineering as a staff extension engineer for San Rafael Sanitation District include:

- Personal approach
- Wide range of engineering experience
- Principal involvement
- External QA/QC
- Superior client service

Personal Approach

I view myself as a partner with you in achieving the District's goals over the course of all activities and projects.

As I continue to participate in District projects, I retain a working knowledge of the pertinent issues, practices, and events. As a result, I am able to speak authoritatively on District infrastructure, service history, compliance, maintenance practice, projects, and studies. Basic letters of response to outside agencies, requests for services, review of proposals, and meetings with outside entities which require an understanding of District goals, operations, and constraints would remain simple matters.

Principal Involvement

I will be the person to serve you and the district. Whether it's research, technical reports, board interaction, subconsultant management, field visits, or inspections, I will be the person with whom you work. You will receive high-quality engineering services directly from the individual qualified to perform the work, not a junior engineer or intern on a learning curve, both behind the scenes and in person. As a friend and client noted recently, "You always send your best man."

As a single-person consulting engineering firm, I devote my full attention at a more palatable billing rate than can be provided by a larger firm. My expertise and experience under previous employers (as a senior and managing engineer)

demanded a premium billing rate at a firm with higher overhead costs and the need to leverage services by using junior engineering staff. I do not incur the high overhead costs associated with a larger firm, and as a result, I am able to pass those savings along to the District.

External QA/QC

One of the strengths of a single-person engineering firm is in its flexibility to develop teams that can most efficiently and effectively address a project's needs. Ewers Engineering has orchestrated a number of such teams for a range of clients, and a frequent collaborator will provide quality assurance/quality control (QA/QC) for designs and reports for your project. Mark Ysusi has more than 30 years of experience in design, planning, permitting, and construction of facilities, and after taking his talents overseas, has dedicated his career to California projects. His no-nonsense approach and willingness to question assumptions have made him an invaluable QA/QC reviewer and willing collaborator.

In the first phase of the work (described below), it's anticipated that Mark will provide QA/QC review for technical reports, but if the project warrants, he can provide design, permitting, and construction assistance as well.

Superior Client Service

Ewers Engineering is dedicated to service. I understand that the most effective form of marketing is meeting (and exceeding) the expectations of my current clients. Most of the work I have performed in the past and am continuing to perform has been by direct referral or repeat work for the same client. On request, I will provide the District with references for Ewers Engineering's work.

PROPOSED SCOPE OF WORK

Ewers Engineering understands the District's force mains range from 8-45 inches in diameter and are composed of a range of materials that includes AWWA C303 cylinder pipe, HDPE, and cast iron. The pressures in those pipelines exceeds 80 psi in some places, there has been no effort to clean the force mains, and no information is available on the condition of the pipelines.

The District is interested in evaluating its force mains to preclude future failures and SSOs. The length of force mains in the District's system requires a systematic approach that will focus effort and resources where they are needed. The following scope of work has been developed to systematically and cost-effectively implement condition assessment tools so that reasonable repair and replacement timelines can be developed to integrate into the District's Capital Improvements Program.

The following assumptions and conditions from our discussions include:

- Ewers Engineering will work on a staff extension basis, working side-by-side with District staff in the District offices for a pre-scheduled number of hours each week. (Ewers Engineering team members will bring laptop computers and other equipment to permit independent operation and continued work on your project in their offices.) To begin, we suggest the in-office time be Tuesdays from 10 a.m. to 6 p.m. These hours can be adjusted to accommodate more intensive work with District staff and on District facilities and for times when the District staff have other, more urgent priorities.

Our efforts will be guided by the following principles:

- **Prioritize the effort.** – Review force mains to determine which are likely to produce the greatest liability in the event of failure and prioritize the effort beginning with them. Phase the approach so that lower-priority assessments can be handled with the lessons learned from the highest-priority ones.
- **Start simple, invest more as more is known.** – Start by investing in basic information that staff can help collect: locations of force mains, air-vacuum valve function checks, pump station outlet pressures, and even surge pressure minima and maxima. Organize an approach to maximize the impact of that information in the condition assessment and replacement/rehabilitation decision process. Fill in critical information from specific condition assessment technologies we have discussed on an as-needed basis until the District has a sufficient picture of the condition of the force mains to make educated decisions.
- **Pick the technology that fits the District's needs and budget.** – The range of technologies available is increasing every year, but the District's goals can be met with a small subset of those condition assessment technologies. Meet the information goals within the District's budget or choose other technologies.
- **Develop the staff.** – Incorporate District staff as much as possible in the condition assessment planning and development to ensure a long-term condition assessment capability is in place after the project is complete.
- **Avoid big data dump from vendors.** – Hire vendors to do the signal processing from their technologies and make the expectations about the results of analysis clear before contracts are approved.

This scope of work approach defines the first phase of work, as we discussed. We propose the following effort for the first phase of your project:

- **Phase 1: Force Main Baseline Assessments**
 1. Administration
 - a. Status meetings – Conduct telephone or in-person meetings weekly with Doris Toy and staff as available and necessary to discuss project

status, coordinate efforts, and enhance work flow. Each meeting will include discussions of project timelines, expenses, and progress for individual tasks and the overall project. Meetings are anticipated to be no more than one hour long.

Deliverables: Weekly meeting notes emailed to project team.

- b. QA/QC – Senior engineer Mark Ysusi will review project deliverables before they are submitted to the District. Mark may also be called upon for his perspective on specific project elements as necessary. Each submittal review is anticipated to take him approximately four hours for review, comment, and direction.

Deliverables: Incorporated into the submittals. QA/QC checks available to the District as needed.

2. Develop Level 1 condition assessment program

a. Baseline report

- i. Review mapping – Overlay existing force main mapping with GIS layers associated with sources for failure, such as corrosion sources (rail and light rail, ferrous large-diameter gas mains, water transmission mains, oil and gas pipelines, and siphons) AVRV failures, and pipeline installations parallel to or crossing the existing force mains. Review CMMS condition reporting data and correlate force main segments with known condition issues with mains with similar age, material, and supplier, as data are available.

Deliverables: Attribute fields added to existing GIS layers reflecting factors associated with prioritization of force mains and associated system components for maintenance, replacement, and condition assessment. All to be integrated into subsequent report.

- ii. Review documentation – Evaluate repair records, record drawings, and construction documents to understand elements that could be associated with potential failures.
- iii. Plan for development/modification of GIS layers for integration of FMCA data – Develop an approach for segmentation of existing force mains, a naming convention as needed, and fields that will be needed in a memorandum. Work closely with the GIS professionals working with San Rafael to dovetail with existing conventions and needs.

Deliverables: GIS approach memorandum, results as 2.a.i above.

iv. Review operations

1. Lift stations –

- a. Field review – Visit lift stations to understand system operations and to obtain accurate inventory of existing lift station equipment and record equipment model numbers, manufacture dates, and other identification for later reference.

Deliverables: Field reports, identification data incorporated as attributes in related GIS fields and/or in project spreadsheets. All to be integrated into subsequent report.

- b. Evaluate installation of pressure transient monitoring devices on existing force mains. Document capital cost, training, recommended usage, and benefits of a programmatic use of the monitoring devices in a memorandum. If the District decides to purchase a monitor, work with District staff to develop a recording document and participate in initial installation and monitoring of pressures.

Deliverables: Two-page memo on pressure transient monitors, and potentially, a recording document.

2. Air/Vacuum valves –

- a. Review air/vacuum valve inspections data – Correlate failed vacuum valves with force main locations in the District GIS for future prioritization.

Deliverables: Modified GIS attributes, data to be integrated into subsequent report.

3. Maintenance/condition assessment practices –

- a. Document current practices conducted by the District for maintenance and assessment of its force mains. Develop general hourly costs for staff positions performing the work. Develop annual costs for current practices. Discuss air/vacuum valve current O&M practices and

design approaches with District staff and make recommendations as needed.

Deliverables: Data to be integrated into subsequent report.

- v. Review existing assessment rating system, adapt FMCA ratings to be consistent with it. – Review data already collected (CCTV runs at the least) and associated ratings generated by them. Develop a rating system to parallel the existing rating system and dovetail with risk assessment strategies.

Deliverables: Data to be integrated into subsequent report.

- vi. Query pipe manufacturers – Review comments by the pipe manufacturer on field review of the pipe failure this year, request similar batch data for correlation in the GIS and for later prioritization.

Deliverables: Data to be integrated into subsequent report.

- vii. Develop risk assessment methodology – Develop a risk assessment rating system to develop prioritization of FMCA effort and CIP projects. Integrate risk elements of primary importance to the District by working closely with District staff to determine those elements and their relative importance.

Deliverables: Risk assessment methodology to be integrated into subsequent report.

- viii. Baseline Report – Compile a report of existing system data, practices, and costs. Document roughness values, lift station performance, and other factors associated with force main condition.

Deliverables: Baseline condition assessment practices report.

b. Level 1 condition assessment program development

- i. Prioritize areas and pipe lengths judged to be higher-risk for failure.
 - 1. Integrate District's existing condition rating system to give the assessment approach familiarity and to build on it to develop predictive capacity.

Deliverables: Prioritization table to be integrated into subsequent report; data to be integrated as attributes in GIS.

- ii. Identify appropriate condition assessment tool and estimated cost of assessment and replacement. Focus on leak and gas

pocket detection technologies unless conditions indicate need for other, more site-specific technologies.

Deliverables: Condition assessment development table to be integrated into subsequent report.

- iii. Group areas for evaluation based baseline data, and based on a District budget, select the first level of project areas to be evaluated further using the condition assessment tools chosen. Develop five-year bins for future implementation of condition assessment efforts.

Deliverables: Prioritization and schedule table to be integrated into subsequent report; data to be integrated into GIS.

- iv. Estimate condition assessment timeline and investment for the first level of project areas. Estimate staff time, capital investment, and ongoing maintenance for software and hardware acquisition, if any. Compare these values on an annual basis with current practice costs and detail benefits.

Deliverables: Projected condition assessment cost/schedule table to be integrated into subsequent report.

- v. Report

1. Compile a report of the findings and determination of the level 1 project areas for condition assessment. Develop three maps from the GIS data compiled for the project so far showing the prioritization of the District's force mains and associated facilities based on the following:

- a. Maintenance
- b. Replacement
- c. Force main condition assessment

Deliverables: Level 1 condition assessment program development report.

The scope of work described above constitutes the first phase of the program. Subsequent phases of your project could include the following:

- **Phase 2: Condition assessment of the level 1 pipeline areas (pilot project) and results**

- Develop approach document with District [Depending on results of Phase 1]: Prioritized areas for investigation, budget, timeline, and resources for effort
 - Leak and gas pocket detection will be developed for higher-risk force mains. Where possible, results will be used to extrapolate to other areas of the system that have similar characteristics.
- Implement approach
 - Supervise vendor(s) contract
 - Develop scope of work for vendor
 - Obtain quote, requirements, timelines
 - Help draft vendor agreement(s) per District format
 - Prepare field work: coordinate with District forces and contractors.
 - Submit USA documents to area utilities
 - Verify field
 - Implement improvements where needed
 - Observe/supervise field work
 1. *Provide agenda*
 2. *Supervise mobilization/demobilization*
 3. *Provide on-call, 24-hour access for problem resolution*
 4. *Manage vendor submittals: timely, QA*
- Report to District, update risk assessments and risk model as necessary, estimate CIP impact
- **Phase 3: Develop condition assessment protocol for District use, implementation on level 2 pipeline areas**
 - Develop approach document with District [Depending on results of Phase 2]: Prioritized areas for investigation, budget, timeline, and resources for effort
 - Structural assessment will likely focus on small areas of significant risk, the results of which can be extrapolated to other areas of the system.
 - Implement approach
 - Supervise vendor(s) contract
 - Develop scope of work for vendor
 - Obtain quote, requirements, timelines
 - Help draft vendor agreement(s) per District format
 - Prepare field work: coordinate with District forces and contractors.
 - Submit USA documents to area utilities
 - Verify field data
 - Implement improvements where needed
 - Observe/supervise field work

1. Provide agenda
 2. Supervise mobilization/demobilization
 3. Provide on-call, 24-hour access for problem resolution
 4. Manage vendor submittals: timely, QA
- Report to District, update risk assessments and risk model as necessary, estimate CIP impact.

- **Optional task**

The following task would be beneficial to the District, but is ancillary to the project. The task has not been included in the project scope, budget, or timeline, but Ewers Engineering would work with the District to develop a scope that would serve the District, and encourages the District to do so.

1. Develop overflow emergency response plan specific to force mains

Discussion: From discussions with District staff, the District's current overflow response plan does not address force main-related SSOs. As CSRMA can attest, force mains represent one of the highest-risk elements for SSOs in a sanitary sewer system. In addition to providing District staff with the plan for responding to an SSO, a force main-specific overflow emergency response plan developed in conjunction with the FMCA program can be designed to integrate responses to structural failures in lift station and force main appurtenance or pipelines at the highest-risk areas. These steps are important to the District for intelligent management of emergency responses, compliance with the Statewide General WDRs for Sanitary Sewer Systems, and protection against regulatory penalties and against follow-on Clean Water Act lawsuits.

The following scope identifies the tasks likely to be necessary to develop a force main-specific overflow response plan:

- a. Identify elements of lift station/force main system not accommodated in current overflow emergency response plan
 - i. Review – Review current overflow emergency response plan to determine limits of considerations.
 - ii. Mapping –
 1. Locate air/vacuum valves, manhole access, outfalls, and lift station facilities that could contribute to SSOs. Map a secondary location set of force main-related facilities that could be at highest risk for failure that could result in SSOs.
 2. Locate/identify receiving facilities for each item identified above. Develop the predictable maximum flow for each source mapped above and for each receiving facility. Extend receiving facility mapping to

accommodate receiving facilities that would overflow to additional receiving facilities at maximum flows, predictable flows.

- b. Establish SSO response needs
 - i. Receiving facility capacity –
 - 1. Develop the capacity of each receiving facility prior to uncontrolled discharge to a Water of the United States.
 - 2. Calculate minimum SSO response time for each of the primary and secondary SSO locations/sources. Where one receiving facility can overflow to another, calculate first and second minimum response times.
 - ii. Develop emergency response based on time necessary for response and distance from the District's corp yard, separating staff resources and skills from those that would be contracted out.
 - 1. Designate resources needed for each potential SSO location and amount of each consumable item needed.
 - 2. Itemize generator needs for each site, including space allocation available, fuel spill protection on site, site-specific sound and exhaust limitations, type of electrical connection, amperage required, and minimum time to full generator power required.
 - 3. Establish minimum amounts of materials and equipment needed on hand based on an assessment of all potential SSOs analyzed. Materials to include pipe of size and type found in the force mains, butt straps, and dished heads, as necessary. For specific, high-risk force main installations, develop the design for temporary and permanent installations.
- c. Evaluate public response, stakeholder contact, and District staff training and notification measures in the current overflow emergency response plan for compliance with the requirements of the Statewide General WDRs. Provide additional material and training direction as needed.

PROPOSED SCHEDULE

The Ewers Engineering team will make itself available to the District on a part-time basis (as many as 20 hours per week) for the duration of the project. We anticipate the District will take approximately two weeks to review submittals.

Transit time

Staff extension work requires face-to-face meetings and collaboration to be effective. Development of a new organizational element like the FMCA program implicitly depends on the leadership provided by Ewers Engineering at the onset of the program development, and if the program is successful, will transfer that leadership into the District. Time spent face-to-face with District staff is a vital part of that transfer.

The impact of transit time to the District offices is significant, at a minimum of two hours each way to 3.5 hours each way (with rail transit). These transit times mean productive time is maximized with a single office visit per week. We recommend starting the project with a single office visit per week (of approximately 6 hours in the District offices), then working flexibly with the project demands to incorporate additional visits as they are needed and incorporating online discussions through Skype or similar video conferencing services as necessary.

Estimated milestones

Provided that we begin the project in the third week of February, we anticipate the following milestones:

- End of second week in April, 2016 – Complete review of baseline data and GIS input
- End of second week in May, 2016 – Submit final Baseline Condition Assessment Practices report
- End of third week of July, 2016 – Complete data collection and analysis for Level 1 condition assessment program
- End of second week of September, 2016 – Submit final Level 1 Condition Assessment Program Development report and assess path to Phase 2 of the program, data collection and implementation

District staff commitment during this phase will vary considerably. During field visits, it's anticipated that two staff may be involved for as many as 20 hours (combined). During the report-writing weeks, we anticipate staff commitment will be 10 hours per week. This has been intentionally left open for the District's input and to accommodate the working style of the staff. If more concrete projections are necessary, we can provide them with assumptions.

ESTIMATED FEE

The Ewers Engineering team will conduct this work on a time-and-materials basis as an extension of staff. (The billing rate sheet for this work is attached.) Over the roughly six-month period of Phase 1, we anticipate the engineering fee will be approximately \$63,500. (This assumes only vehicle mileage as direct expenses. Transit time from our

Roseville office will be invoiced.) We also assume the 2016 rates provided with this proposal will be in effect for the duration of Phase 1.

If any aspect of this proposal poses a problem for the District, we will work together to address the issue and accomplish the District's goals.

I look forward to working with you to help the San Rafael Sanitation District effectively meet its goals for serving its rate payers. Please contact me by phone (916) 521-9696 or e-mail chris@ewersengineering.com if you would like to discuss this information in greater detail.

Sincerely,



Chris Ewers, P.E.
Owner, Principal Engineer
Ewers Engineering, Inc.

Attachments:

- 2016 Billing Rates
- Resumé, Chris Ewers, P.E.
- Resumé, Mark Ysusi, P.E.

2016 Billing Rate Sheet

Ewers Engineering, Inc.

Staff	Labor Rate (dollars per hour)
Principal engineer/project manager	\$175
Senior engineer/staff extension engineering	\$130
CAD Drafter	\$95
Administrative	\$70

Outside Services such as vendor reproductions, prints, shipping, and major reproduction efforts, as well as Engineering Supplies, Travel, etc. will be billed at the actual cost plus 10%

Direct Costs including routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses will be billed at 2% of labor charges.

Mileage will be billed at 57.5 cents per mile. Subconsultants will be billed at actual cost plus 15%.

A finance charge of 1.5 percent per month (an Annual Rate of 18 percent) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

The standard billing cycle for Ewers Engineering is from the first day of the month through the last day of the month (monthly billing cycle). Invoices will be dated and mailed on the fifth day of the month, for the preceding month's labor charges. Special invoicing schedules and timing to match with client's billing schedule is available upon request.

M Ysusi EIZ, Inc.

Staff	Labor Rate (dollars per hour)
QA/QC	\$145

Ewers Engineering
 Estimated Project Budget
 Phase 1, Force Main Condition Assessment Program Development

Project Role Staff Hourly Rate	Ewers Engineering Expenses							Subcontractor Expenses			Total Costs	
	Princ. Eng. C. Ewers	Admin.	Labor		Drafting		Other Direct Costs	M. Ysusi Hours	QA/QC M. Ysusi \$ 145	Subs. w/ markup 15%		
	\$ 130	\$ 70	Hours	Fee	Hours	Fee	10					
Part 1 -- Administration												
1.01 Kickoff Meeting	4	2	6	\$ 660					\$ -	\$ -	\$ 660	
1.02 Status Meetings	26		26	\$ 3,380					\$ -	\$ -	\$ 3,380	
1.03 QA/QC			0	\$ -			-	\$ -	4	\$ 580	\$ 668	\$ 668
1.04 Monthly invoicing/reporting	24		24	\$ 3,120					10	\$ 1,450	\$ 1,670	\$ 4,790
1.05 Travel	117		117	\$ 15,210						\$ -	\$ -	\$ 18,148
Part 1 hours	171	2	173			0			14			
Part 1 expenses	\$ 22,230	\$ 140		\$ 22,370				\$ -	\$ 2,030	\$ 2,338	\$ 27,646	
Part 2 -- Develop Level 1 Condition												
2.01 Review mapping	16		16	\$ 2,080					\$ -	\$ -	\$ 2,080	
2.02 Review documentation	16	4	20	\$ 2,360					2	\$ 290	\$ 334	\$ 2,694
2.03 Plan for GIS	8		8	\$ 1,040						\$ -	\$ -	\$ 1,040
2.04 Lift sta. operations	10	3	13	\$ 1,510						\$ -	\$ -	\$ 1,510
2.05 Air/vac valves	6	1	7	\$ 850						\$ -	\$ -	\$ 850
2.06 Maint. practices	16	3	19	\$ 2,290					2	\$ 290	\$ 334	\$ 2,624
2.07 Est. condition rating system	6	1	7	\$ 850						\$ -	\$ -	\$ 850
2.08 Develop pipe data	10	1	11	\$ 1,370						\$ -	\$ -	\$ 1,370
2.09 Risk assessment methodology	16	2	18	\$ 2,220					2	\$ 290	\$ 334	\$ 2,554
2.10 Draft report	24	8	32	\$ 3,680					6	\$ 870	\$ 1,002	\$ 4,682
2.11 Edit per comments, submit	8	4	12	\$ 1,320						\$ -	\$ -	\$ 1,742
Part 2 hours	136	27	163			-			12			
Part 2 expenses	\$ 17,680	\$ 1,890		\$ 19,570				\$ -	\$ 1,740	\$ 2,004	\$ 21,996	
Part 3 -- Level 1 Condition Assessment Plan												
3.01 Prioritize pipes	6	2	8	\$ 920					\$ -	\$ -	\$ 920	
3.02 ID tools to use	24	6	30	\$ 3,540						\$ -	\$ -	\$ 3,540
3.03 Group evaluation areas, effort	8	4	12	\$ 1,320					2	\$ 290	\$ 334	\$ 1,654
3.04 Est. assessment time, cost	12	4	16	\$ 1,840						\$ -	\$ -	\$ 1,840
3.05 Draft report	20	8	28	\$ 3,160					6	\$ 870	\$ 1,002	\$ 4,162
3.06 Edit per comments, submit	8	4	12	\$ 1,320						\$ -	\$ -	\$ 1,742
Part 3 hours	78	28	106			-			8			
Part 3 expenses	\$ 10,140	\$ 1,960		\$ 12,100				\$ -	\$ 1,160	\$ 1,336	\$ 13,858	
Total project hours	385	57	442			-			34			
Total project expenses	\$ 50,050	\$ 3,990		\$ 54,040				\$ -	\$ 4,930	\$ 5,678	\$ 63,500	

Christopher R. Ewers, P.E.

Professional Registration

Professional Civil Engineer, 2006;
California No. 69612

Professional Civil Engineer, 2004;
Wyoming No. 10234

Education

B.S., Civil Engineering, University of
Wyoming, Laramie, 1999

B.A., Journalism, University of Oregon,
Eugene, 1991

Professional Affiliations

American Society of Civil Engineers

American Water Works Association

National Society of Professional
Engineers

California Water Environment
Association

Water Environment Federation

Chris Ewers has 17 years of experience in planning and designing civil engineering projects and providing construction phase services. He has prepared plans and specifications conforming to the contracting requirements of federal and state agencies, municipalities, and water and wastewater agencies, and has administered construction projects for these same clients. His experience includes designs for gravity sewer trunk lines, water transmission mains, trenchless pipeline installations, raw water conveyance systems, grading and drainage plans for site development projects, pump stations, and potable water storage tanks, planning for surface water treatment plants, developing capital investment programs, and hydraulic modeling. Chris has also provided construction administration services for the construction of water transmission pipelines, sanitary sewers, and roads and conducted control surveys in federal forests. He is principal engineer and CEO of Ewers Engineering, Inc., a water-focused consulting engineering firm.

REPRESENTATIVE PROJECT EXPERIENCE

Wastewater

Benchmarking Study, Tulare Sewer and Storm Drain Division, City of Tulare, California (ongoing): Project manager and engineer for assessing the regulatory and employment constraints, the technical requirements of operating and maintaining 240 miles of sewer collection pipeline and appurtenances and 240 miles of storm drain pipeline and 35 storm drain percolation basins. The city asked that Ewers Engineering study the system to assess how to accommodate obvious backlogs of

maintenance and capital programs and regulatory compliance issues against the backdrop of tight fiscal constraints. This work is being conducted with Randall Musgraves, a public works administrative expert.

Phase 1 Force Main Condition Assessment Program Development, Fairfield-Suisun Sewer District, California: The District asked that Ewers Engineering develop an in-house capacity and program for condition assessment of 12 miles of force mains from 18-48 inches in diameter following the rupture of a 36-inch-diameter RCCP force main. This phase of the program development provided the District with a database on its force mains; developed 15 recommendations split between operations, engineering, and maintenance practices; and devised a risk assessment methodology to guide prioritization of the District's assessment and rehabilitation/replacement efforts and a GIS-based tool for implementation. (Completed August 2014.)

Benchmarking Study, Tulare Wastewater Treatment Facility, City of Tulare, California: Project manager and engineer for assessing the regulatory and employment constraints, the technical requirements of operating the WWTF, and how other, similar agencies accommodate those needs. Tulare asked Ewers Engineering to conduct this work on understanding the management of the five-year-old, \$192M facility composed of two parallel treatment plants was undergoing censure from regulators for not meeting minimum standards. This work is being conducted with Randall Musgraves, a public works administrative expert. The city received a report including 58 recommendations establishing critical support, staff, and plant performance criteria, timelines for execution, and potential budget impacts for complying with those benchmarks. The city asked Ewers Engineering to develop these benchmarks into a full-fledged business strategic plan. The document has become a basis for external and self-evaluation for staff and management. (Completed August 2014.)

Dry Creek Wastewater Treatment Plant Preliminary and Final Design, City of Roseville, California: Design and provide construction documents for washdown system for concrete-lined wastewater overflow basin.

Dry Creek Wastewater Treatment Plant Storage Tank Evaluation, City of Roseville, California: Project engineer responsible for predesign of an above-ground, 18-MG tank to be used for plant overflow during flooding/high I&I periods. The evaluation included an analysis of the tank's integration into the hydraulics of the plant; its design required consideration of automatic washdown and covering.

City of Folsom Basin 6 Flow Diversion, City of Folsom, California: Engineer of record for design, construction documents, and construction inspection services for a sewershed rerouting project installing two 12-inch-diameter pipelines in busy urban roadways. The project included installations as deep as 23 feet and a mixture of open-cut and pipe-bursting installation methods.

Stormwater

Airport Way/Daniels Street Area Phase III Improvements, City of Manteca, California: Lead engineer for the design of a stormwater pump station as part of the drainage for a proposed mall development. Incorporate local drainage district requirements for outlet and spill.

Water

Anooshvan Park and Alhambra Water Main Replacement Project, City of Fresno, California: Lead engineer on a water main replacement project to replace 2,500 feet of small-diameter water mains in residential parts of the City and County. Estimated construction cost: \$503,000. Construction planned late summer 2013.

Howard Heights Water Main Replacement Project, City of Fresno, California: Lead engineer on a water main replacement project to replace 30,000 feet of 8- and 12-inch-diameter water mains in residential parts of the City and County. Initial construction bid: \$4.95 million. Construction to conclude in summer 2013.

Fresno Large-Diameter Transmission Mains, City of Fresno, California: Lead engineer developing approach for new transmission mains in the northeast and southwest of the City to accommodate a transition from groundwater-only to conjunctive use supply. The 30- and 36-inch-diameter northeast pipeline spans multiple pressure zones and requires pressure-reducing connections to the existing distribution system. The 16- to 24-inch-diameter southwest pipeline will initially be used to supply water from an existing well northwest of downtown Fresno to the new 3 MG T4 tank in the downtown area. The southwest pipeline will eventually be reversed to supply water from a future water treatment plant to the northwest portion of the City. The northeast pipeline bid March 2013, with an estimated construction cost of \$9.9 million. The southwest pipeline bid May 2013, with an estimated construction cost of \$8.2 million.

Country Club Vista Water Main Relocation Project, Sacramento Suburban Water District, California: Project manager for \$7.5M urban main replacement project including more than 500 residences, numerous commercial buildings, and large apartment complexes. More than 11,800 feet of 12-inch-diameter pipeline and 17,000 feet of 8-inch-diameter pipeline comprise the project, so the client required that the project be separated into three phases for simultaneous bidding and construction under separate contracts to allow smaller local contractors to compete for the construction work. Each service was given a meter and a new, street-side location, and each service's in-tract pipeline alignment was detailed. Conducted negotiations with numerous private landowners to determine mutually agreeable solutions to problematic in-tract routing issues throughout the design phase and completed a

survey of all landowners in the project area to obtain agreements for meter locations. Completed construction phase in February 2012.

Southeast Transmission Main Preliminary Design, City of Sacramento, California: Project engineer helping design and route a 66- and 54-inch-diameter potable water transmission main from the Fairbairn Water Treatment Plant south to the Florin Reservoir and Pump Station. Provide preliminary design for three crossings in tunnels, preliminary routing, and design criteria.

Hydraulic Model Training, Sacramento Suburban Water District, California: Continue to develop the InfoWater model completed for SSWD while conducting training sessions with District staff. In addition to ensuring staff can analyze small system changes, help the staff develop a systematic approach for updating the model with system changes and develop policy for those changes. Provide water modeling engineering services. Help provide a unified InfoWater hydraulic model for the District.

Mitchell Ranch Impact Modeling, City of Ceres, California: Analyze a calibrated H2ONet hydraulic model of the City of Ceres to determine the impacts of two proposed large retail developments. Develop solutions to inadequate pressures in low-pressure system made complex by requirements for reduction of well contaminants in system entirely supplied by well water.

Water Model Update, City of Roseville, California: While updating the City's hydraulic model to develop buildout analyses, train a City employee in executing such analyses.

Davis-Woodland Water Supply Project Modeling, City of Davis, California: Project engineer responsible for hydraulic analysis and mapping of effects of new surface-water transmission delivery system and various scenarios involving differing distribution and consumption points within the Davis system. Use the hydraulic model to minimize pressure fluctuations and water quality impacts from a new surface water source. Project is part of larger effort to improve water supply to the City's outlying growth areas through development of a cooperative pipeline with the City of Woodland.

System Planning and Design, Wallace Lake Estates, Wallace, California: Provide conceptual and preliminary design and hydraulic analysis for new potable water distribution system for proposed 124-lot development surrounding Wallace Lake as part of master plan process. Work closely with Wallace Community Services District to analyze its existing system and provide short-term improvements for fire protection flows.

Greenfield Energy Centre Raw Water Pipeline, Saskatchewan, Canada: Provide metric pipe design for energy production company's main plant feed from a pumping station on an adjacent river to the plant intake. Challenges included equivalents for

48- and 60-inch-diameter pipe restraint in saturated and frozen soils, corporate preferences for design standards, and local codes.

Group 1 Water Main Replacement Project, Sacramento Suburban Water District, Sacramento, California: Project manager for design of approximately 18,100 feet of 8- and 12-inch-diameter DIP mains and appurtenant service interconnections in the street to replace a decaying backyard main system in three older Sacramento County subdivisions. Develop cost-saving alternatives to conventional routing in utility-clogged corridors and multiple slough crossings. Design bridge crossings for county and District as alternative to expensive bore-and-jack slough crossings. Provide plans, specifications, and construction cost estimates so that projected \$8.4 million project can be bid as a whole or split into three contracts.

Island Area Planning and Preliminary Design, Sacramento Suburban Water District, California: Project manager charged with modeling and preliminary design of distribution system improvements to an area of the SSWD distribution system isolated from the rest of the Southern Service Area by the Capital City Freeway and as a result, unable to provide fire flows.

Baltimore Ravine Impact Modeling, Placer County, California: Work with Placer County Water Agency and developer Diamond Creek Partners to analyze and model the impacts to the PCWA system of the last large development (1,200 homes on 264 acres) available in the PCWA Upper Zone 1 system. Perform land use analysis and pressure zone establishment during modeling phase. Design and size an on-site storage system to alleviate peaking from the PCWA distribution system and to deliver fire protection flows to either pressure zone in preliminary design phase.

Surface Water Treatment Facility Conceptual Design and Feasibility Study, City of Lodi, California: Project manager for the conceptual design of a SWTF capable of peak production of 25 MGD from the clearwell. Led the examinations of regulatory review, water chemistry impacts of blending surface water in a system previously fed entirely by groundwater, the operations and maintenance requirements for the new facility, the capital costs estimation, and the existing supply and distribution system modifications required as subcontractor to HDR.

Stoneridge Water Storage Facility, City of Roseville, California: Project engineer for design of stormwater and potable water pipelines, site, and public outreach efforts; resident engineer during construction. Coordinating all work with subcontractors on a \$4 million project bringing water from two adjacent delivery systems onto a 2.1-acre site for storage in 2.6- and 2.9-MG tanks connected by an emergency bypass. The Phase 1 required delicate public outreach efforts and considerable analysis to avoid crippling CEQA compliance requirements because the site is on a small, residential street in a built-out, higher-end neighborhood with constraints from a protected Open Space Preserve populated by endangered species.

Marconi Gardens Water Main Replacement Project, Sacramento Suburban Water District, Sacramento, California: Project engineer for the design and construction services associated with approximately 7,000 feet of 8- and 12-inch-diameter DIP main installed in residential areas to replace decaying backyard mains. The \$1.71 million project required working closely with landowners and the client to establish the most painless means of moving house services from the back of the house to the front.

Downer Neighborhood Improvement District, Sheridan, Wyoming: Serve as lead water system design engineer on neighborhood consensus-driven \$3.5 million improvements, including water and sanitary sewer installation and replacement. Design distribution system for mixed residential/industrial area in county as a single service on municipal system; model the system's effect on municipal source system and perform fire flow analysis; produce specifications, plans, and profiles, and then perform construction, inspection, and administration. Coordinate sanitary sewer and water line installation for simultaneous construction, detailed specifications and plans for water line, coordinate construction activities with funding agencies and contractor, and carefully monitor and balance three sometimes-overlapping funding sources.

Hydraulic Modeling Services, Sacramento Suburban Water District, Sacramento, California: Project engineer charged with various tasks in obtaining base data, mapping, database population, modeling, and calibration of new model for potable water transmission and distribution system.

Wallace Lake Estates Potable Water Plan, Reynen & Bardis Development, Wallace, California: Project engineer charged with analysis and planning for water supply and distribution for a small, existing community services district. Develop strategies to align the distribution system with California Department of Health Services requirements and integrate the District's resources into plans for system improvements ranging from new water treatment and storage facilities to hydrant flushing plans.

Rocklin Crossings Development Area Hydraulic Analysis, Placer County Water Agency, Auburn, California: Project engineer for hydraulic analysis of system impacts of three commercial developments and associated residential developments within the Placer County Water Agency's model (H2ONet).

Full Surface Water Implementation Study, City of Lodi, California: Project engineer responsible for providing cost estimates for constructing groundwater percolation basins and raw-water irrigation facilities for the City of Lodi as a means of utilizing 6,000 AF of water per year available to the City through an agreement with Woodbridge Irrigation District and incorporating treatment facility analyses performed by others.

Folsom Dam Water Supply Reliability Alternatives Analysis, Placer County, California: Project engineer for a study designed to summarize, vet, and condense five other major studies and numerous reports into a single, coherent view of the optimal

solution to creating a redundant path for the vulnerable Folsom Dam supply. This study's ratings matrix was used to convince federal officials in Washington, D.C., to allow the process to move toward construction of the optimal solution.

Auburn Tunnel Outlet Modifications, Placer County Water Agency, Auburn, California: Engineer charged with understanding and design modifications for an existing, 15,000-foot-long, 12-foot-diameter horseshoe-shaped tunnel originally designed as an outlet for the Auburn Dam. Calculate the effects of various flows through the tunnel and its plug/valve vault and projections of maximum uses of the tunnel. Recommendations included removal of the valve vault and upstream concrete plug.

Big Horn Regional Water System, Big Horn Basin, Wyoming: Plan and design for Level III (construction) phase of 80-mile-long, \$28 million rural water distribution project combining five municipalities for supply from the largest artesian well west of the Mississippi. As the project planning engineer, perform route selection, hydraulic modeling, and cost analyses. Model the system with Haestad Methods' WaterCAD linked with a GIS geodatabase accessed through ESRI's ArcEditor. Configure the system in ArcEditor and perform physical changes like storage configuration and route changes through changes in the geodatabase. Then combine these results with operational alternatives for modeling in WaterCAD. The combination allows porting hydraulic model results such as pressures and flows back to the geodatabase for production of hydraulic model outcome mapping for each scenario for federal and state officials. Use existing aerial mapping for initial routing, then fine-tune critical issues like municipal interconnections by assigning an in-house surveyor to gather more detailed information. Work closely with funding agencies, Wyoming Water Development Commission, and the federal USDA RD/RUS to phase funding and minimize funding impact on system users, and work with legislative/administrative directives and those agencies' requirements.

Sicangu Mni Wiconi Rosebud Sioux Rural Water System, Rosebud Indian Reservation, South Dakota: Staff engineer charged with inspection, hydraulic modeling, mapping, and progress payments for several phases of project consisting of more than 400 miles of rural transmission mains, service distribution lines, lift station, pressure reducing valves, and other appurtenances. Nature of project demands intelligent establishment and integration of GIS geodatabase and WaterCAD shapefile exchanges as a gateway to a comprehensive system overview while making the system more immune to upsets from turnover (and subsequent data loss) in tribal authority or firm. Also provide monthly pay estimate services to as many as six simultaneously ongoing projects.

Raw Water

Lake Alta Outlet Works Rehabilitation Phases III and IV, Placer County Water Agency, California: Staff engineer for the repair and update of the aging outlet works

from Lake Alta, a small, man-made lake in the Sierra Nevada foothills. The project involves reestablishing the lake outlet from the lowest point in the lake through a collapsed section of an underwater timber tunnel to the intake gate shaft (Phase III) and replacing the outlet from a downstream gate valve beneath the railroad to the existing canal outfall (Phase IV). Because the lake cannot be drained for the work, the Phase III work requires underwater construction of the repair of the tunnel, new outlet piping and new intake.

Raw Water Master Plan Phase 2, Nevada Irrigation District, California: As a staff engineer, devised an approach for developing the Capital Improvement Program (CIP) as part of the District's Master Plan Update. The work included analyzing the District's existing 430-mile system of canals and creating typical project component designs to generate conceptual-level cost curves, creating a prioritization scheme for all capital projects, and finalizing the project list using categorically or statutorily exempt and non-exempt groups. The CIP, developed from the non-exempt group, will fall under a programmatic EIR developed by the District. The CIP will be used to renovate the District's facilities, many of which have deteriorated significantly and come under additional stress from new, critical users including new water treatment facilities. The Raw Water Master Plan was completed in December 2011 for implementation in 2013.

Foothill Raw Water Supply Pipeline Project, Placer County Water Agency, Auburn, California: Engineer working with surveyor and agency officials to create plats and descriptions necessary to secure temporary, permanent, access, drainage, and slope-protection easements; applications for Union Pacific Railroad and Caltrans bore-and-jack crossings.

Foothill Raw Water Supply Pump Station, Placer County Water Agency, Auburn, California: Integrating the specifications from numerous sources to establish a coherent, cohesive set of specifications for a 150-cfs pump station pulling water through a 200-plus-foot vertical bore into an existing tunnel. Provide site design for pump station's discharge pond and site pipeline interference analysis. Coordinate with surveyor to establish permanent and construction easements, fee parcels, and encroachment permits necessary to construct the 60-inch-diameter raw water transmission main and 18-inch-diameter potable water distribution pipeline from the pump station to the site of a proposed water treatment plant on approximately one mile of Ophir Road.

Other

Multiple-Utility Rate Study, Kirkwood Meadows Public Utility District, Kirkwood, California: Lead engineer to develop the capacity analysis performed early in 2013 into a rate study for each of the utilities covered in the capacity analysis: water, wastewater, propane, electricity, fire fighting, and housing. Work from staff calculations for one-year expense projections into a five-year projection incorporating capital improvements and assumptions about the timing of growth for each utility's

demands for this small utility district. Currently developing a stepwise progression of rate increases for water and wastewater to accommodate the requirements of a Proposition 218 approval effort late in 2013.

Multiple-Utility Capacity Analysis, Kirkwood Meadows Public Utility District, Kirkwood, California: Perform capacity analysis and recommendations for water, wastewater, electrical, propane, fire fighting, and housing capacities for the District. Evaluate water system Title 22 compliance, investigate potential for and impacts of perfecting surface water rights. Integrate new membrane units into wastewater system capacity and project replacement and maintenance impacts to buildout.

PCWA Standard Specifications Update, Placer County Water Agency, Auburn, California: Project manager charged with working closely with PCWA to renovate its construction and design standard specifications and drawings. Oversee the efforts of two contract drafters and an office drafter to complete the standard drawings. Provide cold-weather expertise in developing high-country specifications and drawings.

Flathead Reservation Engineering Assessment, CS&KT Reservation, Montana: Manage two field crews in their assessment of selected areas of an 800-mile long series of canals and ditches comprising the Flathead Area Irrigation District. Create a system for data management and process data as it was generated in the field to create cost estimates for eventual takeover of the system from the BIA.

Ahtanum North Side Case, Yakima, Washington: Finalize and map constantly shifting representations of water and land usage in an ongoing legal battle over treaty-granted water for Yakima Indian Reservation.

Kendrick Golf Course, Sheridan, Wyoming: Design facilities for a new pump station and tie into an irrigation system. Perform construction administration and management for installation of the station and appurtenances.

Wyoming State Basin Planning Process, Powder/Tongue and Northeast River Basins, Wyoming: Collect and collate data for surface water model of northeast quarter of the state. Quantify usage and application of water rights, ditch capacities, headgate and pump diversions, reservoir storage, and operations. Create surface water, storage, industrial, and recreation memoranda and submit it to planning agencies and public in series of public meetings.

Mark A. Ysusi, PE
Professional Civil Engineer
President
M Ysusi EIZ, Inc.



Fields of Special Competence

Mr. Ysusi brings a unique combination of a technical engineer with a broad background of successful capital improvement project execution and client satisfaction coupled with a long history of successful marketing efforts.

His technical career has included analysis, design and construction of water and wastewater treatment facilities and infrastructure facilities. His extensive marketing experience includes project identification, client relationship building, win strategy development, proposal and qualification preparation, interview participation, project scope development and contract negotiation.

Education

Undergraduate Civil Engineering, San Jose State, 1974

Structural Engineering Graduate Studies,
California State University, Long Beach

BS & MS/Civil Engineering,

Registration

Professional Civil Engineer/CA Lic. C23526

Years of Experience

Over 40 Years

Professional Affiliations

Water Environmental Federation
California Water Environmental Association

Pertinent Experience Overview

Marketing

An overview of Mr. Ysusi's selected project marketing and assignment history is briefly listed below.

- While with CDM (2008 – 2011), Mr. Ysusi was responsible for developing a CDM presence in Central California resulting in obtaining a Master Services Agreement with the City of Coalinga for exclusive supply of all of the City's water and wastewater related engineering needs. Significant work included a \$3M above ground steel reservoir project.
 - Also while with CDM, Mr. Ysusi was an active participant in the pursuit, scope development, interview, and selection for design of the \$80M Los Osos, CA wastewater project and being selected for management of the South Bayside System Authority (SBSA) energy management plan in Redwood City, as an initial part of the authority's overall **multi-million dollar** 10-year capital improvement plan (CIP).
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Mark A. Ysusi, PE
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Pertinent Experience Overview—continued

- While employed by Boyle Engineering Corporation (2002 – 2008), Mr. Ysusi, as Central Valley Director of Wastewater Services, directed project identifications and pursuits and was responsible for winning the City of Madera \$35M WWTP improvement project, a \$5M chloramination project for the City of Coalinga, and the \$5M City of Los Banos WWTP improvement project.
- Also while with Boyle, Mr. Ysusi identified, assembled a proposed team, pursued and won the \$25M Salinas River Diversion Facility project. This project is of particular note because it was not a project that had been previously identified by Boyle as a project of interest and the win was primarily due to the efforts and previous relationships that Mark had with the Monterey County Water Resources Agency.
- While employed by Montgomery Watson (1992 – 2000), Mr. Ysusi was an active participant in the pursuit, team development, interview, contract negotiation, and execution of the \$40M City of Fresno northeast Surface Water Treatment Facility. Mr. Ysusi was also an active participant in the pursuit, interview, contract negotiation and execution of the \$5M USAID Canal Cities Water Master Plans in the cities of Suez, Ismailia, and Port Said, Egypt.
- Since 1992, Mark has typically worked as the manager of satellite offices of medium to large engineering firms. As such, he is very familiar with the effort required to identify projects, develop relationships with decision makers, writing SOQs, Proposals, Project Interviews, and generally all of the work required to win project assignments. As a result he has become very proficient with presentation software such as PowerPoint and others.

General

Mr. Ysusi has over 40 years of varied civil/structural engineering experience on public works projects that include the analysis, design, and construction of water and wastewater treatment, distribution and collection facilities. Mr. Ysusi's project management participation on a number of significantly sized improvement projects began during project identification and marketing, often the initial master planning phase, continued through the project design and preparation of construction documents, and culminated with construction administration services.

Professional Summary

2011 to Present, President, M Ysusi EIZ, Inc., Dinuba, CA

Mr. Ysusi is lead designer for a new 3 mgd surface water treatment plant for the City of Huron. The project includes analysis and design engineering services for the City of Huron with funding through a California Department of Public Health (CDPH) grant funds. Huron takes their raw water from the California Aqueduct. One-hundred percent plans and specifications have been delivered to CDPH for review and approval of funding.

Mr. Ysusi is also assisting the City of Coalinga with construction phase engineering services (submittal reviews) for a new 3-million gallon above ground welded-steel water storage reservoir and, at the City's request, has prepared a Request for Proposals for quality assurance testing for the

Mark A. Ysusi, PE
Professional Civil Engineer
President
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Professional Summary—continued

reservoir project.

Mr. Ysusi was also recently awarded a contract for an update of the City of Coalinga surface water treatment plant Watershed Sanitary Survey.

Mr. Ysusi assisted with preliminary and final design for nitrogen reduction facilities at the Malaga Water District wastewater treatment plant. After preliminary analysis, Mr. Ysusi recommended upgrading the existing aeration blowers to high-speed, high-efficiency turbo blowers and a new dissolved oxygen system in the existing aeration basins. The new equipment allows for nitrification and denitrification to occur within the aeration basins, reducing the total nitrogen discharge.

2008 to 2011, Senior Project Manager, CDM, Fresno CA

Mr. Ysusi provided design and project management for the design of new Well No. 37 and rehabilitation of existing Well No. 18. Each project included pump equipment for the completed well, on-site generation chemical feed facilities for sodium hypochlorite, electrical service and SCADA system design, and off-site street improvements as required.

Mr. Ysusi was also project manager for the design of approximately two miles of 12-inch diameter transmission water lines in Madera. These pipelines were recommended in the 1997 Water System Master Plan done by Mr. Ysusi. Their primary purpose is to strengthen the weaker easterly side of the Madera water distribution system. The project includes sections that will be jacked and bored under State Highway 145, the UPRR, and the Fresno River.

Mr. Ysusi was the Project Manager for the design of a 3-MG steel above ground steel water storage reservoir for the City of Coalinga. The project also included around 1,320 feet of cement mortar lined and coated welded steel pipe as well as electrical and SCADA system design.

Mr. Ysusi was the project manager the South Bayside System Authority (SBSA) energy management plan in Redwood City, as an initial part of the authority's overall 10-year capital improvement plan (CIP). The wastewater treatment plant energy master plan serves as a branch of the overall CIP and lays the groundwork for all future energy projects at the 29.6 mgd wastewater treatment plant. Energy generating alternatives evaluated included internal combustion engines, microturbines, photovoltaic units, and wind turbines. The final primary recommendations: biogas-fueled combined heat and power (CHP) systems using internal combustion engines; increased biogas production through codigestion of food waste, building upon SBSA's already successful fats, oils, grease (FOG) codigestion program; and improving electrical reliability by upgrading the existing electrical system.

Other activities performed by Mr. Ysusi included being responsible for development of a CDM presence in the Central California area and being primarily responsible for a Master Services Agreement with the City of Coalinga for their water and wastewater engineering needs.

Mark A. Ysusi, PE
Professional Civil Engineer
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Professional Summary—continued

2002 to 2008, Central Valley District Director of Wastewater Services and Assistant Managing Engineer, Boyle Engineering Corporation, Fresno, CA

Mr. Ysusi was the Project Manager for design and preparation of construction documents for expansion of the City of Madera wastewater treatment plant from 7- to 10-MGD. Even though the flows were only 5-MGD and the plant was permitted for 7-MGD, the plant was unable to meet discharge requirements approximately 50 percent of the time. The RWQCB informed the City that nitrogen discharges were to be reduced. The project, therefore, included a revised process from trickling filters to oxidation ditches, new clarifiers, rehabilitation of an existing digester, one new digester, solids handling facilities (sludge centrifuges), a septage receiving station, various plant upgrades, and a groundwater extraction system that will deliver percolated effluent to Madera Irrigation District for unrestricted irrigation use.

Mr. Ysusi was Project Manager for preparation of water, sewer, and storm drain master plans for the City Coalinga. The water master plan included an audit of the Coalinga 12-MGD surface water treatment plant and the city distribution system. The water treatment plant audit included review of the entire conventional filtration plant including chemical feed (including fluoridation using hydrofluosilicic acid), sedimentation, filtration, and disinfection facilities. Boyle recommended that the City convert from hydrofluosilicic acid to sodium fluoride as a safer method of fluoride injection. The sewer master plan included a detailed evaluation of the potential benefits of relocating the wastewater treatment plant to a location outside the path of growth.

Mr. Ysusi was the project manager for design of chloramination facilities at the city's surface water treatment plant using on-site generation of sodium hypochlorite and aqueous ammonia. The design included a new air conditioned building to house the sodium hypochlorite generation and ammonia storage and refrigeration facilities. Mr. Ysusi designed nearly all elements of this project including the building. The chemicals are injected into the 27-inch transmission main leaving the plant at pressures up to 300 psi.

In a design/build project, Mr. Ysusi was the project manager for the upgrade of a 4,500-gpm iron/manganese removal plant at Camp Pendleton, California. The project included complete upgrade of existing chemical feed pumps and storage as well as the addition of aqueous ammonia feeding facilities for future chloramination for the Camp Pendleton potable water residual disinfectant. The project also included preparation of an Operations and Maintenance manual in accordance with Navy standards.

Mr. Ysusi was Project Manager for Well 31 for the City of Madera. The project included pump equipment for the completed well, on-site generation chemical feed facilities for sodium hypochlorite, electrical service and SCADA system design, and off-site street improvements.

Mr. Ysusi performed structural and process engineering for the City of Richmond WWTP repair and upgrade. The project was performed as a fast-track design-build project. The work included complete repair of the primary clarifiers, new wet well screens and influent gates, and complete rehabilitation of two existing anaerobic digesters including mixing facilities and floating covers.

Mark A. Ysusi, PE
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Professional Summary—continued

Mr. Ysusi was the project manager for a Nitrate Management Plan for the City of Fresno Metropolitan Area. The project, performed for the City Public Utilities Department, Water Division, evaluated the history and sources of nitrate in the groundwater in the Fresno Metropolitan Area and developed remediation projects and nitrate management policies. The project included development of a data management system along with an integrated GIS mapping system.

Mr. Ysusi's other significant Project Manager and design duties included the following major projects:

- Salinas River Diversion Facility - a project including an inflatable dam, a 36 cfs pumping station, and approximately 1-3/4 miles of 36-inch pipeline, which will ultimately use Salinas River water to supplement recycled water to irrigate 12,000 acres of prime agricultural land in the Castroville area.
 - Design of units C and C1 of the 45-mile Nacimiento Water Project in San Luis Obispo County – these two units total 12 miles of 30-inch diameter welded steel pipeline beginning at Camp Roberts and running through the City of Paso Robles. Other project work included development of project plans and specifications for mitigation of environmental impacts for the entire 45 miles.
 - Design of a new Raw Water Pipeline for the City of Fresno from the Friant-Kern Canal to the City's Surface Water Treatment Facility. The 60-inch diameter pipeline is approximately 5 miles long. The project is being designed as joint venture with a local consultant. Mr. Ysusi's responsibilities will include developing the pipeline design criteria for both firms, oversight of environmental mitigation measures and their incorporation into the contract documents, design of the connection to the SWTF along with necessary hydraulic transient reduction measures, oversight of the electrical and SCADA system design, and general coordination between the two firms.
 - Design and preparation of construction documents for upgrade of the City of Los Banos WWTP, which is a facultative lagoon treatment plant with crop irrigation as the primary method of disposal. The design included additional aeration and mixing of the upper levels of the lagoons, additional irrigation facilities, and a Title 22 report for the RWQCB and CDPH.
 - Mr. Ysusi designed and managed the design of Wells 32 and 34 for the City of Madera. Each project includes pump equipment for the completed well, on-site generation and chemical feed facilities for sodium hypochlorite, electrical service and SCADA system design, and off-site street improvements.
 - For the City of Hollister, design of a recycled water pump station to return temporarily stored Title 22 water in percolation ponds to a recycled water storage reservoir and pump station at a Membrane Bioreactor WWTP that was under construction.
 - Project Manager for expansion of the WWTPs for the Planada Community Services District and for the City of Los Banos and for evaluation of wastewater reuse opportunities for the Delhi
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Mark A. Ysusi, PE
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Professional Summary—continued

Water District.

- As a follow-up project to the City of Coalinga Sewer System Master Plan, Mr. Ysusi completed an interceptor alignment study for the City who has decided to relocate their WWTP four miles outside of town and out of the way of current growth.
- Responsible for development of the wastewater treatment capabilities of Boyle within the Central California District. Also responsible to provide quality control review of wastewater-related designs throughout the District.

2000 to 2002, Project Manager, Azurix Madera Corporation, Madera, CA

Mr. Ysusi was Project Manager for the \$100 million Madera County Water Bank, a proposed 400,000 acre-foot capacity groundwater storage facility to be located in western Madera County. Mr. Ysusi's duties included management of technical, environmental, public relations, and legal consultants. He also acted as local liaison for all project-related communications including governmental agencies, local press, and service clubs.

1996 to 2000, Principal Engineer, Montgomery Watson, Fresno, CA

Mr. Ysusi provided program management services to the community of Los Osos, California. Los Osos is an unincorporated, unsewered community of approximately 15,000 located on the California central coast. Mr. Ysusi provided general oversight of the project to develop appropriate collection and treatment of the community's wastewater. He coordinated the activities of technical, financial, and legal consultants toward the preparation of a facilities plan, obtaining a State Revolving Fund loan, and preparation of construction documents for an approximately \$100 million project.

As project engineer for a United States Agency for International Development (USAID) project, Mr. Ysusi supervised the completion of the Canal Cities Water Systems Master Plans in Egypt. The population of the three cities involved, Suez, Ismailia and Port Said, range from 250,000 to 450,000. Evaluation of the systems included the development of digitized, GIS mapping and computer hydraulic models for each of the three systems.

The City of Fresno selected Mr. Ysusi to provide special consulting services for the design of the City's planned 36-inch diameter water transmission pipeline that is planned to encircle the city and be over 20 miles long. Mr. Ysusi supervised the design of approximately 1-½ miles of 36-inch AWWA C303 concrete cylinder pipe. The project specifications included CMLC steel and CCP as alternative pipe materials.

Mr. Ysusi managed a project for the Goleta Water District to evaluate the District's 42-inch water main transmission pipeline from the Corona Del Mar water treatment plant, which had been damaged by a landslide. The report findings detailed appropriate methods of repairing the line and making it less vulnerable to future outages. He also worked with the District to develop the design of repairs to four locations on another key transmission line known as the 33-inch Goleta West Conduit.

Mr. Ysusi prepared the Operations and Maintenance manual for the Castroville Seawater Intrusion

Mark A. Ysusi, PE
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Professional Summary—continued

Project and provided technical oversight of the system start-up. Initiated by the Monterey County Water Resources Agency, the Castroville Seawater Intrusion Project at over 12,000 irrigated acres, is the largest recycled water project for agriculture in California consisting of approximately 46 miles of reclaimed wastewater transmission and distribution pipeline, 21 supplemental groundwater wells, nine monitoring stations a flow control station, and three booster pumping stations. Mr. Ysusi assisted with engineering support services during construction and start-up by development of a computer hydraulic model of the system.

Mr. Ysusi was the project manager for preparation of water, sewer, and storm drain master plans for the City of Madera. The work included GIS mapping, growth projections, and developing computer models for the three systems that were then used to identify deficiencies in the systems and in the preparation of a Capital Improvement Program for the next 20 years.

1994 to 1996, Principal Engineer, Montgomery Watson, Cairo, Egypt

Mr. Ysusi provided construction phase engineering services to the Egyptian government in Montgomery Watson's Cairo office. This USAID project consisted of construction of wastewater plants in the three main cities on the Suez Canal, the cities of Port Said, Ismailia, and Suez. All three wastewater treatment plants included grit removal chambers, aerated and facultative lagoons, and polishing ponds with capacities of approximately 50 MGD. All three also included administration/laboratory/maintenance buildings and sludge dredge and handling facilities. The Suez project included an influent pump station (Ataka PS) using line shaft, vertical mounted over-hung pumps and an ocean outfall to the Gulf of Suez. The Ismailia project included the design and installation of over 5 miles of 1200 mm (48-inch) force main using AWAA C300 pipe and over 10 miles of 1700 mm (68-inch) effluent pipeline to a portion of the Suez Canal known as Bitter Lake using AWWA C302 (low head) pipe. The Ismailia project also included a \$2 million rehabilitation of a 10-MGD raw wastewater pumping station. The Port Said WWTP project included an open Archimedes screw-type pump station and a treated water discharge pump station using mixed flow pumps to the Mediterranean Ocean. The Port Said project was unique in that the aerated lagoons, facultative lagoons, and polishing ponds were constructed within Lake Manzalla using driven sheet piles to create walls within the lake. The combined total cost of the three projects was approximately \$300 million.

1992 to 1994, Principal Engineer, Montgomery Watson, Fresno, CA

As project manager, Mr. Ysusi was responsible for the design of the Chorro Valley Water Transmission Pipeline in San Luis Obispo County, California. The purpose of the 12-mile pipeline is to deliver potable water to the central California coast community of Morro Bay from the California Central Coast Aqueduct. Design considerations included pipeline pressures of over 450 psi, extremely rough terrain, and plans and specifications for mitigation of numerous environmental issues including protection of several endangered species. The project also included a feasibility study for the installation of a turbine generator on the pipeline.

Mark A. Ysusi, PE
Professional Civil Engineer
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M Ysusi EIZ, Inc.



Professional Summary—continued

Mr. Ysusi was the project manager for development of a computer model of the City of Fresno water transmission system. The model included incorporation of well and pump data for over 250 wells. Once the model was developed, it was calibrated against known flow and pressure data taken from the City's SCADA system.

Mr. Ysusi prepared a water system master plan for the City of Tulare. The project included an analysis of the City's water source and distribution system. In related work, the project also included an analysis of alternative methods of water meter reading equipment and computer operation of the water system. Mr. Ysusi also worked on a comparative analysis of water treatment alternatives for the Carmichael Water District in Sacramento.

1988 to 1992, Senior Engineer, Boyle Engineering Corporation, Fresno, CA

Mr. Ysusi was the Project Manager for expansion of the City of Coalinga conventional surface water treatment plant from 8- to 12-MGD. The expansion included addition of a third treatment train of coagulation, flocculation, sedimentation, filtration, and disinfection. The expansion also included a complete replacement of the existing chemical receiving, storage, and feed facilities including alum, polymers, gaseous chlorine, zinc orthophosphate, and fluoride (hydrofluosilicic acid).

In a subsequent project for Coalinga, Mr. Ysusi was the Project Manager for the design of a 5-MG steel water storage reservoir.

Mr. Ysusi was the Project Manager for a siting analysis for the University of California 11th campus to be sited in the Central California San Joaquin Valley. The analysis included comparing anticipated infrastructure costs, availability, and constraints to providing utilities to the potential campus sites. The first level compared 21 sites and the final evaluation was a detailed analysis of eight potential sites.

Mr. Ysusi was the Project Manager and principal designer of a major water system improvement project for the City of Tehachapi which included a 1.5-MG steel storage reservoir, a new city production well, a 4,000-gpm booster pumping station, and approximately 12,000-feet of transmission pipeline.

Mr. Ysusi was the project manager for the preparation of a sewer system master plan for the City of Hanford, California. The master plan involved the development of a computer model for the City's sewer collection system. Actual flow measurements were obtained and used to calibrate the model.

For the County of San Diego, Mr. Ysusi was the project manager for preparation of sewer system master plans for the Lakeside, Alpine, and Winter Gardens county sanitation districts east of the City of San Diego. As a supplemental amendment, at the request of the county, the master plan report also analyzed the feasibility of reactivating and upgrading the existing decommissioned Lakeside wastewater treatment plant to allow a live stream discharge to the San Diego River or to provide wastewater for reclamation uses.

Mark A. Ysusi, PE
Professional Civil Engineer
President
M Ysusi EIZ, Inc.



Professional Summary—continued

1986 to 1988, Vice President, QUAD Engineering Corporation, Bakersfield, CA

As manager of the QUAD Bakersfield office, Mr. Ysusi was the contract City Engineer for the Cities of Dinuba, Tehachapi, Wasco, and Maricopa. He was responsible for the design of a variety of public works improvement projects in a number of cities in Kern County. He supervised the design of several street improvement projects in the cities of Ridgecrest, Wasco, Tehachapi, Bakersfield, and Maricopa. He also designed several projects in Dinuba including one mile of 15-inch sewer main and a 12-inch water transmission main.

1977 to 1986, Owner, Mark A. Ysusi & Associates, Dinuba, CA

As owner and principal engineer of a consulting engineering firm in Dinuba, California and contact City Engineer for the City of Dinuba, Mr. Ysusi designed and prepared construction documents for numerous utility and street improvement projects in Dinuba. His work included major street improvement projects in 1979, 1982, and 1983, two miles of 8-inch and 12-inch water line improvements in 1981 and 1982, a 21-inch sewer line project in 1985, and major storm drainage improvements in 1980 and 1984.

Other work included design of several local subdivisions including preliminary and construction surveying, utility design, and roadway design. Other work for private individuals included various boundary surveys and property divisions.

Mr. Ysusi designed numerous municipal, commercial, industrial, and agricultural buildings in the California San Joaquin Valley including the City of Dinuba Council Chamber and City Hall expansion, banks in Reedley, Dinuba, Parlier, and Orosi, and fruit packing and cold storage buildings up to 120,000 square feet.

1967 to 1977, Various Positions with Fresno County, City of Mountain View, & City of Milpitas

While in college, Mr. Ysusi worked for Fresno County as an Engineering Aide in the Soils Laboratory and then in 1969 accepted employment with the City of Mountain View as an Engineering Assistant, primarily to continue his engineering education. In 1972, Mr. Ysusi accepted employment with the City of Milpitas as an Assistant Civil Engineer and upon becoming a Registered Civil Engineer in 1973, was promoted to Senior Civil Engineer.

Publications/Papers

Melton, L.W., Ysusi, M.A., Barry D., Israel, K. "Initiation of Operations for California's Largest Recycled Water Program for Agriculture." AWAA, 1998. Water Resources Conference, Orlando, Florida. February 1998.

Ysusi, M.A. "Chapter 11, Water Distribution System Design, Hydraulic Design Handbook," McGraw-Hill, 1998.

Mark A. Ysusi, PE
Professional Civil Engineer
President
M Ysusi EIZ, Inc.



Professional Summary—continued

Ysusi, M.A. "Chapter 3, System Design: An Overview, Water Distribution Systems Handbook," McGraw-Hill, 1999.

Ysusi, M.A., Moss, C. "Disinfection of Salinas River Water and its use on Food Crops," Good Agricultural Practices Research and Extension Conference, Orlando, Florida. January 2005.

5.c.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 5.c.

DATE: February 11, 2016
TO: Board of Directors, San Rafael Sanitation District
FROM: Doris Toy, District Manager/District Engineer *DT*
SUBJECT: Adopt Resolution Authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Nute Engineering for Design and Construction Related Services for the Sun Valley Sewer Replacement Project, Phase 2

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Nute Engineering for design and construction related services for the Sun Valley Sewer Replacement Project, Phase 2.

BACKGROUND:

The Sun Valley Sewer Replacement Project was originally intended to replace the sewer on Alpine Street with a budget of \$500,000; however, after the District televised and evaluated the sewer pipes on Alpine and the neighboring streets, i.e. Solano, Humboldt, and Nevada streets and California and Windsor avenues, staff, with the assistance of Nute Engineering, determined that the sewers on the neighboring streets also needed to be replaced. Nute Engineering has estimated that it will cost approximately \$4.5 million to replace all of the referenced sewers. Since this project has grown in both size and cost, District staff made the decision to construct this project in two phases. The first phase, which consists of replacing the sewers on Nevada Street, Humboldt Street, and California Avenue, between Fifth Avenue and Humboldt Street, is currently under construction and is anticipated to be completed next month.

The second phase will include replacing the sewers on Solano and Alpine streets and on California Avenue, from Humboldt Street to the end of Windsor Avenue. In addition, staff has decided to add the sewer on Center Street, between J and K streets, since it is in the adjacent neighborhood and is also in poor condition.

ANALYSIS:

Since Nute Engineering performed the preliminary design for both phases of this project and the final design and construction engineering services for Phase 1, staff has requested Nute Engineering to furnish a proposal to perform the design and construction related services for Phase 2.

Nute Engineering is proposing to perform this work on a time-and-materials basis, for an amount not to exceed \$180,000.

Since Nute Engineering has already performed the preliminary design for Phase 2 and the geotechnical report has also been done, with the exception of Center Street, we can schedule the construction to begin by early summer and to be completed by fall of this year.

FISCAL IMPACT:

This project will be funded under the 80-Year Life Cycle Sewer Replacement Program from the current 2015-16 Budget.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Nute Engineering for design and construction related services for the Sun Valley Sewer Replacement Project, Phase 2.

Attachment: Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 16-1128

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH
NUTE ENGINEERING FOR DESIGN AND CONSTRUCTION RELATED SERVICES
FOR THE SUN VALLEY SEWER REPLACEMENT PROJECT, PHASE 2
FOR AN AMOUNT NOT TO EXCEED \$180,000**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN, hereby resolves as follows:**

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with Nute Engineering for design and construction related services to for the Sun Valley Sewer Replacement Project, Phase 2, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 11th day of February, 2016, by the following vote,
to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Gary O. Phillips, Chairman

ATTEST:

Maribeth Bushey, Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR DESIGN AND CONSTRUCTION RELATED SERVICES FOR THE
SUN VALLEY SEWER REPLACEMENT PROJECT, PHASE 2**

This Agreement is made and entered into this 11th day of February, 2016, by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and *NUTE ENGINEERING* (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected *NUTE ENGINEERING* to perform the required design and construction related services for the "Sun Valley Sewer Replacement Project, Phase 2" (hereinafter "PROJECT"); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Senior Civil Engineer is hereby designated as the PROJECT MANAGER for the DISTRICT, and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. *MARK WILSON* is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as an Engineering Consultant to prepare work outlined in the Proposal from CONSULTANT dated February 9, 2016, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time and materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed \$180,000.

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At District's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Ms. Karen Chew
San Rafael Sanitation District
111 Morphew Street
P.O. Box 151560
San Rafael, CA 94915-1560

TO CONSULTANT: Mr. Mark Wilson
Nute Engineering
907 Mission Avenue
San Rafael, CA 94901

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is 94-1510137, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day, month and year first above written.

SAN RAFAEL SANITATION DISTRICT

CONTRACTOR

Doris Toy, P.E.
District Manager/District Engineer

NUTE ENGINEERING _____

APPROVED AS TO FORM:

By: _____
Mark Wilson

Jack F. Govi
Assistant County Counsel

Title: _____



EXHIBIT A

February 9, 2016

Ms. Doris Toy, District Manager/District Engineer
San Rafael Sanitation District
111 Morphew Street
San Rafael, CA 94901

**Re: Sun Valley Sewer Replacement Project - Phase 2
Alpine St, Solano St, California Ave, and Windsor Ave
Center Street between K and J Streets, Bypass between Forbes and Fifth Avenues
Proposal for Design Engineering Services**

Dear Doris:

As you requested, we are pleased to submit this letter outlining the engineering services proposed to be furnished by our firm for the design of a project to replace the sewers serving Alpine St, Solano St, California Ave and Windsor Ave in Sun Valley. The Phase 1 project is currently under construction and nearing completion. The Phase 2 project was delayed to a later fiscal year for budgetary reasons. The Center Street portion of this proposal is in an adjacent neighborhood and was recently added to the project.

BACKGROUND

The sewers on Alpine St, Solano St and on California and Windsor Aves in Sun Valley are mostly located off the pavement in the front yards of the downhill properties. Generally, these sewers serve the homes on both the uphill and downhill sides of the street, which means that the private laterals from the uphill homes must cross the street to connect to the sewer on the other side located in the opposite neighbor's front yard. There is one easement sewer which runs between Solano St to Windsor Ave.

These sewers were constructed in the early 1940's and are in poor condition. Furthermore, maintenance of these lines is difficult because the manholes are in front yards. The project will involve constructing new replacement sewers near the center of the streets and reconnecting the house laterals to the new sewer lines.

Much of the preliminary design work for this project has been completed. Therefore Phase 2 design can be completed on a fast track schedule for construction in early summer. The revised Preliminary Design Report for the Sun Valley Project including both Phases 1 and 2 was completed October 15, 2015. We have already received drawings from the City of San Rafael

and MMWD. The revised soils report covering both phases of the Sun Valley Project was submitted by Miller Pacific Engineering Group on April 30, 2015 does not cover Center St.

The sewer in Center Street is near the center of the road. The section of Center Street between the bypass pipe and K Street was redirected with a 8" VCP in 1968 to reverse the direction of flow and drain towards K Street then southerly to Fifth Avenue. The short sewers draining towards Center Street, the Bypass between Forbes and Center, and the 6" VCP sewer southwesterly of the Bypass towards J Street are in poor condition.

PROJECT DESCRIPTION

The Sun Valley Sewer Replacement Project – Phase 2 will involve constructing new replacement sewers in the center of the streets and reconnecting the laterals to the new sewer lines (see attached map). The estimated length of each sewer segment and the number of homes served by these sewers is summarized below.

<u>Location</u>	<u>Length - ft</u>	<u># of Laterals</u>
234 Alpine St to California Ave	275	10
Solano St from 245 Solano St to California Ave	630	22
California Ave from Humboldt Ave to Alpine St	450	4
Alpine St from California Ave to 176 Alpine St	140	5
Solano St from California Ave to 157 Solano St	410	12
California Ave from Alpine St to Windsor Ave	330	6
Windsor Ave from California St to 21 Windsor Ave	380	9
Easement sewer from 162 Solano St to Windsor Ave	500	4
Alpine St through new easement in Sun Valley Park	420	6
Windsor Ave tributary to easement sewer 25 - 41 Windsor Ave	240	12
Center Street between K Street and J Street	952	32
Bypass between Forbes and Fifth Street	280	2
Easement Sewer at 272/268 Center	180	2
	<u>5187</u>	<u>126</u>

The estimated cost of the entire project is summarized below

5,187 LF 8" sewer	@240/LF	\$1,245,000
18 each manholes	@5,000ea	90,000
126 each lower lateral replacement	@4,000ea	360,000
800 tons AC replacement	@\$230ton	184,000
Miscellaneous restorations (including microseal)		400,000
Estimated construction cost		<u>2,279,100</u>
Contingencies and incidentals		683,000
ESTIMATED PROJECT COST		<u>\$2,962,700</u>

For the purpose of this proposal it is assumed that the construction cost of the Phase 2 project will be around \$3,000,000.

BASIC SERVICES TO BE PERFORMED BY THE ENGINEER

The following are the scope of services we propose to provide on the above referenced Sun Valley Sewer Replacement Project. These services cover the final design and construction review of the Phase 2 project.

Schedule A Services – Phase 2 – Design and Preparation of Plans and Specifications

1. Design and prepare plan and profile drawings for the Phase 2 project. Provide 65%, 90% and 100% design submittals.
 - a. Prepare plan and profile sheets for the project using the City of San Rafael base maps.
 - b. Conduct field surveys, take elevations and locate underground utilities from record drawings, markings on the pavement or from potholing.
 - c. Prepare construction details including traffic control requirements.
 - d. Prepare technical specifications and bid documents.
 - e. Coordinate all backfill, paving and traffic control requirements for the City of San Rafael and prepare the application for an encroachment permit.
2. Prepare an easement description and plat for Sun Valley Park Easement if needed.
3. Prepare an estimate of the project construction cost based on the final construction plans and specifications.
4. Provide a list of property owners where laterals must be connected from Assessor's records. It is assumed that rights of entry will not be needed.
5. Provide assistance during bidding including responding to contractors' questions, attendance at a pre-bid meeting and issuing addendums as necessary.
6. Attend three (3) progress meetings with District staff during design.

Schedule B Services – Phase 2 – Design Services During Construction

1. Attend preconstruction meeting.
2. Provide one set offset stakes designating the alignment and depth of the new sewer and prepare grade sheets.
3. Review the contractor's submittals and working drawings as necessary.

4. Attend weekly construction meetings as necessary.
5. Evaluate proposals for modifications to the contract work and prepare change orders to the contract for the District's approval, to include modifications in the contract.
6. Prepare a set of record drawings for the project.

SCHEDULE

It is proposed that construction of the Sun Valley Sewer Replacement Project – Phase 2 be undertaken during the 2016 construction season. The following is the proposed schedule for the project design:

Phase 2 Project – 2016 Construction Season

- SRSD Board approves proposal – February 11, 2016
- Phase 2 - 65% submittal, preliminary plans – March 15, 2016
- Phase 2 - 90% submittal, plans and specifications – March 30, 2016
(District staff one week review)
- Phase 2 - 100% submittal, full size plans, specifications and engineer's estimate – April 7, 2016
- SRSD Board calls to advertise for construction bids – April 14, 2016
- Receive Phase 2 construction bids – May 5, 2016
- SRSD Board awards Phase 2 bids – May 12, 2016
- Issue Notice to Proceed – June 1, 2016
- Completion of Work – September 29, 2016 (120 days)

SERVICES NOT INCLUDED IN THIS PROPOSAL

It is understood that the following services are outside the scope of this proposal and will be provided by others:

1. Geotechnical engineering and soil contamination investigation services.
2. Hazardous material investigations, assessment or removal.
3. Potholing of underground utilities.
4. Environmental review or preparation of an environmental impact report of the project.
5. Payment of permit application fees.

6. Title reports or rights of entries.
7. Legal services in connection with the project.
8. Printing of plans and specifications for bidding purposes and for the Contractor's use.
9. Clerical time to send bid documents out to bidders.
10. On-site inspection services.

ENGINEERING FEE

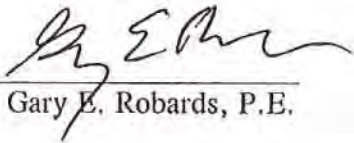
We propose to do all the work on a time and materials basis to be billed according to the Schedule of Hourly Rates attached hereto as Attachment A. The estimated labor hours and costs for the work by task and job classification are shown in Attachment B. The budget for the three schedules is given below.

Schedule A	\$138,672
Schedule B	\$ 41,140

Very truly yours,

NUTE ENGINEERING

By:



Gary E. Robards, P.E.

Attachment A - Schedule of Hourly Rates
Attachment B - Project Estimating Sheet



HOURLY RATE SCHEDULE

OFFICE PERSONNEL	HOURLY RATE
Principal Engineer (Ed Nute)	\$219.00
Senior Engineer (Mark Wilson)	188.00
Engineer III (David Stier)	179.00
Engineer II	172.00
Engineer I	146.00
Field Representative (Construction) I	124.00
Field Representative (Construction) II	140.00
Engineering Technician II	118.00
Engineering Technician I	87.00
Senior Designer	169.00
CAD Drafter II	160.00
CAD Drafter I	116.00
Technical Administrative Support	101.00
Clerical	65.00

LITIGATION SERVICES	
Court Appearance/Deposition	310.00

REIMBURSABLE EXPENSES

Sub-consultants will be charged at 1.10 times cost. Charges for reproductions, blueprinting, outside computer services, rental of special equipment, delivery, express mail, insurance certificates (where client requires to be listed as an additional insured) and meals and lodging will be charged at 1.10 times cost. Mileage will be charged at the IRS approved rate. Nute Engineering reserves the right to adjust its hourly rate structure at the beginning of each new year for all ongoing contracts.

EFFECTIVE DATE: January 1, 2015

ATTACHMENT B

SAN RAFAEL SANITATION DISTRICT
 SUN VALLEY SEWER REPLACEMENT PROJECT - PHASE 2
 ALPINE ST, SOLANO ST, CALIFORNIA AVE, AND WINDSOR AVE
 CENTER ST BETWEEN K ST AND J ST, BYPASS BETWEEN FORBES AVE AND FIFTH AVE
 PROPOSAL FOR DESIGN ENGINEERING SERVICES - LEVEL OF EFFORT

NUTE ENGINEERING
 907 Mission Ave
 San Rafael, CA 94900

Rate \$/Hr.	Principal Engineer	Senior Engineer	Engineer III	Senior Designer	Eng. Tech I	Tech Admin Support	Direct Cost	Direct Cost Markup	TOTALS	
	\$219	\$188	\$179	\$169	\$87	\$101				
SCHEDULE A SERVICES - Phase 2 Project - Design and Preparation of Plans and Specifications										
1. Design and prepare plan and profile drawings for Phase 1										
a. Design the alignment and depth of the new sewers and draft on the plan and profile sheets		40	120	40	160					
b. Conduct field topography surveys, take elevations and locate underground utilities	3	16	20	24	120		12,000	1,200		
c. Prepare construction details, include traffic control requirements		10	40	24						
d. Prepare technical specifications and bid documents	4	12	28			40				
e. Coordinate all backfill, paving, traffic control requirements for City of SR		10	18							
2. Describe Sun Valley Park Easement if pipe is relocated		8			8					
3. Prepare updated estimate of project construction cost			24							
4. Provide a list of property owners where laterals must be connected and make contact		30				32				
5. Provide assistance during bidding including responding to contractors' questions		12	18			12				
6. Attend three (3) progress meetings with District staff during design			9							
	Hours	7	138	277	88	288	84			
	Cost	\$1,533	\$25,944	\$49,583	\$14,872	\$25,056	\$8,484	\$12,000	\$1,200	\$138,672
SCHEDULE B SERVICES - Phase 2 Project - Design Services During Construction										
1. Attend preconstruction meeting		4	4							
2. Provide 1 set offset stakes for align./depth of new sewers, prepare grade sheets			12				12,000	1,200		
3. Review contractor's submittals and working drawings as necessary		8	16	6		14				
4. Attend weekly construction meetings as necessary (Assume 12 meetings)			24							
5. Evaluate proposed contract work modifications and prepare change orders			20	24						
6. Prepare a set of record drawings for the project		2			60					
	Hours	14	76	30	60	14				
	Cost		\$2,632	\$13,604	\$5,070	\$5,220	\$1,414	\$12,000	\$1,200	\$41,140
	TOTAL									\$179,812

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CITY OF SAN RAFAEL

PRESENTS THIS

RESOLUTION OF APPRECIATION

TO

KAREN CHEW

- WHEREAS,** Karen has worked for the City of San Rafael since 2005 and has served as Senior Civil Engineer for the San Rafael Sanitation District since 2009; and
- WHEREAS,** Karen has managed and executed more than 20 capital improvement projects for the Sanitation District ranging from \$20 thousand to \$3.5 million; and
- WHEREAS,** Karen has shown great dedication, energy, and enthusiasm about her work; and
- WHEREAS,** in every project, no matter the size, Karen always performs extensive public outreach, works long hours, and takes that extra step to ensure smooth and successful projects; and
- WHEREAS,** Karen brought the District into the 21st century with its first webpage and created the District's educational newsletters, written in several languages, and the wildly popular "Fats, Oils and Grease" magnets; and
- WHEREAS,** Karen believes in strong team work, as demonstrated by her efforts in coordinating with Public Works, Community Development, other utility agencies, consultants, and contractors on plan reviews and capital projects; and
- WHEREAS,** Karen is a true public servant, one who is helpful to all and who is always very generous with her time with the community and her peers.

NOW, THEREFORE, BE IT RESOLVED, that the Mayor and City Council of the City of San Rafael do hereby extend their congratulations and appreciation to Karen Chew as Employee of the Quarter for the 2nd quarter of 2015.



 MAYOR











 COUNCIL MEMBERS


 CITY MANAGER
 ATTESTED BY MY HAND THIS 15th
 DAY OF FEBRUARY, 2016


 CITY CLERK