

**CITY OF SEBASTOPOL
CITY COUNCIL
STAFF REPORT**

Meeting Date: November 1, 2016

To: Honorable Mayor and Honorable City Councilmembers

From: Henry Mikus, Engineering Manager

Subject: Approval of Engineering Firm Contract No. 2016-08
Engineering Design & Bid Package Sewer and Water Pipeline Replacement and Repairs

Recommendation: Adopt Minute Order approving contracting with KASL for the engineering design and bid package.

Funding: Currently Budgeted: Yes No N/A
Net General Fund Cost: \$ none

Bid price is \$38,630. 68% of the design cost (\$26,268) would be paid for out of the Sewer Capital Fund, with the remaining 32% paid for with Water Capital Fund money (\$12,362).

INTRODUCTION: This item is to request the City Council authorize the staff to approve contracting with KASL as the Engineering firm to prepare engineering designs and a bid package for construction to replace and repair three sewer and three water pipelines.

BACKGROUND:

Via the most recent Capital Improvement Plan (CIP) the City Council approved work to replace and repair multiple sewer and water lines throughout the City of Sebastopol. There are six distinct pipeline segments selected for work during the current fiscal year: three are sewer lines and three pipelines supply water. Rather than six separate bids/projects, staff believes efficiency would be gained by doing the pipeline work as a single, larger project with resulting cost savings.

The three water lines are to be along Hayden Avenue, Edman Way, and Lillian Way. All three pipelines as currently configured are small sized (4 inch diameter) that should be upgraded to at least 6 inches in diameter, and of modern, durable materials. The three sewer pipe sections would be Johnson Street, Flynn Street, and Laguna Parkway. The Laguna Parkway and Flynn Street lines are currently in "at risk" situations as they have had facilities built over their pathway making access for repairs virtually impossible. Given their age, the consequences of a pipe failure in either line would be expensive given the difficult access. The Laguna segment passes under the Police Station property, and the Flynn line passes under the Skatergarten Park (both facilities were built after the respective pipelines were in place). Johnson Street has been identified as being in poor shape and is listed in the most serious category for rating condition by the CCTV inspection. Given its proximity to the other two sewer lines inclusion now is sensible.

DISCUSSION:

Based on using 10% of the estimate for construction at \$1.2 Million, the Engineering portion of the project cost estimate was \$121,000. Staff had prepared an RFP for obtaining the Engineering work, which was issued with five proposals returned. Responders, together with their prices, are listed:

Coastland	\$81,549
KASL	\$38,630
BKF Engineers	\$80,156
Michael Baker International	\$99,452
LACO Associates	\$82,798

The City maintains two Capital Funds, one for Sewer and one for Water, whose revenue comes from user fees that are set aside for Capital Projects such as these pipeline replacements. The current approximate Sewer Fund balance is \$1,265,137 with the anticipated balance at the end of FY 16-17 to be roughly \$306,000 after spending on planned projects including this one. Similarly, the Water Capital Fund has an approximate current balance of \$647,109 with the anticipated balance at \$310,00 after planned spending on projects including this one. The bid price of \$38,630 would be allocated for expense accounting at 68% from the Sewer fund (\$26,268) and 32% from the Water fund (\$12,362)

RECOMMENDATION: That the City Council adopt a Minute order to authorize the City Manager or his designee to contract with KASL for the preparation of engineering designs and a bid package for construction to replace and repair three sewer and three water pipelines.

Attachment(s):

- Amendment No. 4 to the Master Agreement between the City of Sebastopol and KASL
- KASL Cost Proposal
- KASL General Proposal to the RFP

**Amendment No. 4 to Master Agreement No. 2016-01-04
For Engineering Consulting Services to Perform Sewer and Water Pipeline
Replacement and Repair Design Services: KASL**

Parties hereto entered into a Master Agreement for Consulting Services on September 6, 2016 with an initial term of three (3) years.

As part of the annual Capital Improvements Program and annual efforts to improve, maintain, and repair water and sewer infrastructure, the City of Sebastopol requires Engineering services to design then provide a construction bid package for replacing and repairing three sewer lines and three water lines.

The City of Sebastopol and KASL wish to incorporate the Scope of Work (as shown in the attached Exhibit A) for the pipeline replacement and repair project into their Master Agreement via this Amendment No. 4. All of the terms and conditions of Master Agreement 2016-01-04 are hereby incorporated by reference and made part of this contract for the project. Cost is a not to exceed maximum estimate of \$38,630.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by the duly authorized officers on the dates indicated below.

CITY OF SEBASTOPOL

**CONSULTANT
KASL**

Larry McLaughlin, City Manager

John Scroggs, PE, Principal-in-Charge

Date: _____

Date: _____

Exhibit A of Amendment No. 4

Engineering Consulting Services to Perform Sewer and Water Pipeline Replacement and Repair Design Services

Note: The KASL proposal for this project dated October 6, 2016, 2016 is an integral part of this exhibit.

Scope of Work

1. Kick-off meeting
2. Inventory and information gathering
3. Topographic Surveys and Base Mapping
4. Preparation of Preliminary Design Report
5. Preparation of 50% submittal
6. Preliminary cost estimate
7. 50% submittal review
8. Preparation of 90% Plans, Specifications, and Estimates
9. Preparation of 100% Plans, Specifications, and Estimates
10. Construction assistance

Budget: Fee will be a maximum of \$38,630.

PROPOSAL FOR ENGINEERING SERVICES, 2016 PIPELINE REPLACEMENT
PROJECT



COST PROPOSAL

The Cost Proposal submitted for the City of Sebastopol 2016 Pipeline Replacement Design Services is based on the Labor Effort Estimates and Fee Schedule presented on Page 10 of the Proposal. Based on the estimated hours and rates provided on Page 10 of our Proposal, we will complete all design work, bidding and construction assistance for the 2016 Pipeline Replacement Project for a **not to exceed fee of \$38,630**. No subconsultant services or costs are proposed for this Project.





**PROPOSAL FOR ENGINEERING SERVICES
2016 PIPELINE REPLACEMENT PROJECT**

October 6, 2016

Submitted to: Henry Mikus, Engineering Manager
City of Sebastopol Engineering Division
714 Johnson Street
Sebastopol, CA 95472

Submitted by: KASL Consulting Engineers, Inc.
7777 Greenback Lane, Suite 104
Citrus Heights, CA 95610





TABLE OF CONTENTS

TABLE OF CONTENTS

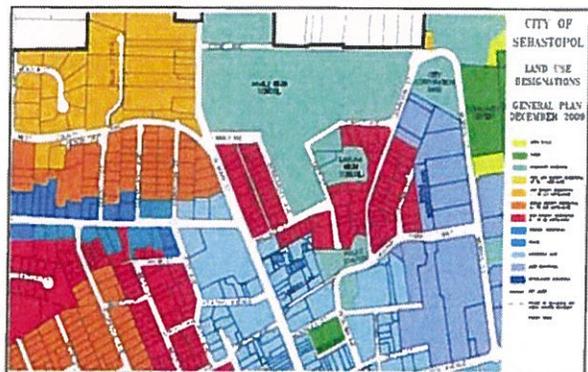
DESCRIPTION	PAGE
PROJECT APPROACH	1-3
SCOPE OF WORK	1-3
RELATED EXPERIENCE	4
PROJECT TEAM	5-8
PROJECT SCHEDULE	9
CONFLICT OF INTEREST	8
CONTRACT TERMS	8
LABOR EFFORT ESTIMATE	9
REFERENCES	10
FEE SCHEDULE	9
COST PROPOSAL	Separate Sealed Envelope



PROJECT APPROACH AND SCOPE OF WORK

For the 2016 Pipeline Replacement Project, the City of Sebastopol has identified three (3) sections (approximately 1900-LF) of their existing sanitary sewer system that need replacement or rehabilitation and three (3) sections (approximately 1400-LF) of water main that require upsizing and replacement. The 3 sections of sewer that require replacement have been identified by recent CCTV inspections. After the preparation of a Preliminary Design Report, detailed evaluation of CCTV findings and review of existing conditions at each location, these existing sewers will either be removed and replaced with new City of Sebastopol standard sewer pipe material, or they will be repaired with sewer lining, or they will be rehabilitated with High Density Polyethylene (HDPE) pipe material using pipe bursting methods. The 3 water mains included in the scope of work are 4 inch diameter pipelines which the City of Sebastopol has determined will be replaced with new 6 inch diameter water mains in compliance with City of Sebastopol Standards. The proposed size of the water main replacements will be confirmed with the City as the Project design phase proceeds.

In the scope of work proposed, KASL Consulting Engineers (KASL) will clearly identify what the City of Sebastopol (City) needs to complete the 2016 Pipeline Replacement Project and the services KASL will provide the City to meet those needs.



City of Sebastopol Sewer Map Land Use Designations

TASK 1. INFORMATION GATHERING

Task 1.1 - Kick Off Meeting. The purpose of the Kick Off Meeting is to review with the City our proposed approach to the design of the pipeline replacement improvements, review design deliverables, review the City's Project schedule through completion of construction, identify protocol for communications, identify the City's goals and objectives and the stakeholders associated with each location. The three

water main replacement sites, Hayden Avenue, Lillian Way and Edmans Way and the sewer to be rehabilitated or replaced on Johnson Street are within public rights of way (R/W). The remaining two sewer rehabilitation replacement locations are located within sewer easement areas or are located within City owned property. The final approach selected for rehabilitation / replacement of sewers not located in public R/W's may be different than the best approach for rehabilitation or replacement of the sewer on Johnson Street.

Task 1.2 – Inventory and Information Gathering.

KASL will review the CCTV reports prepared for the three sections of sewer included in the scope of the 2016 Pipeline Replacement Project. The existing sewer in Johnson Street is an 8 inch PVC pipeline. The conditions of the pipeline determined from the CCTV inspection (cracks, offset joints, damaged laterals, roots, visible signs of infiltration, pipe sags). The pipe age and the depth of construction will be reviewed to determine whether this existing sewer pipe should be replaced or rehabilitated. For the two other 2016 sewer repair / replacement sections not located in public streets (in addition to the CCTV results available for these sewers), the ground surface conditions (vegetation, structures, encroachments) and access to and within these areas will likely dictate the most viable options for sewer repair or replacement. The sewer located to the west of Johnson Street is 8 inches in diameter and constructed with PVC pipe. The sewer to the east of Flynn Street is a 10 inch diameter pipeline which has previously been "sliplined". The City's sewer maintenance records and the CCTV inspection data will be carefully reviewed to determine why the previous sliplining was not successful, the year that the lining was completed and the 10 inch pipeline age and sewer pipe material.

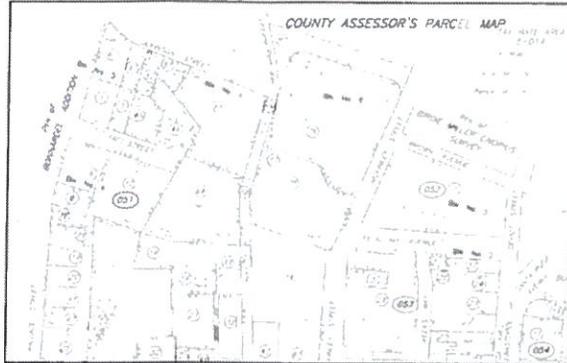
The existing waterline in Hayden Avenue is a 4 inch diameter steel pipe. The location of existing valves, sewers, hydrants and other water line appurtenances will be reviewed in the field and identified for subsequent topographic surveys. The existing water line to be replaced in Lillian Way and in Edman Way are also 4 inch diameter mains. Existing visible water main appurtenances in these locations will also be identified and will be surveyed and mapped as part of the next subtask.

As part of the information gathering task, KASL will also research City Records in greater detail to identify any existing sewer easements for the two sewer mains



PROJECT APPROACH AND SCOPE OF WORK

that leave the City's Right of Way at Johnson St. and Flynn St.



Sonoma County Assessor's Parcel Map

Task 1.3 - Topographic Surveys and Base Mapping.

At each of the 3 sanitary sewer rehabilitation / replacement locations and at each of the 3 water main locations, detailed topographic surveys and base mapping will be prepared. Surveys at each location will be conducted at 1 inch = 20 foot scale. Topographic surveys at locations within public rights of way will include identification, mapping and elevations of all visible utilities including main lines, sewers and appurtenances, sewer invert elevations, pavement limits, curb, gutter and sidewalk improvements, overhead power, telephone and cable television poles, facilities and guy anchors, pavement striping, physical features adjacent to the public streets including driveways, trees, signs, mailboxes and like features. Where sewers are located outside of public rights of way, sewer manholes, cleanouts and inverts will be mapped and existing topographic and physical features such as walls, fences, structures, trees and significant vegetation will be surveyed and mapped to identify potential encumbrances to the completion of the sewer rehabilitation or replacement improvements.

Base maps prepared from the topographic survey tasks will be submitted to the City of Sebastopol for review and approval.

TASK 2. PREPARATION OF PRELIMINARY DESIGN REPORT

Based on the information available from the CCTV inspection surveys the information gathered from the City and from the field in Task 1, a Preliminary Design Report (PDR) will be prepared which identifies alternative and recommended sewer rehabilitation or replacement improvements for each of the three sewer pipeline replacement locations. The cost and constructability of sewer pipe removal and replacement, the lining and retention of the existing

sewer pipe or pipe rehabilitation and replacement with bursting techniques will be evaluated for each location. Issues identified with the apparent failure of previous pipe lining improvements installed in the 10 inch sewer east of Flynn Street will be reviewed with City Engineering and Public Works Maintenance staff. KASL has recently completed similar sewer system PDR's for the City of Plymouth and for the Tuolumne City Sewer District.

The City has determined the existing sewers of this Project, while requiring rehabilitation or replacement, do not need to be upsized to increase capacity. The estimated rehabilitation or replacement cost developed for each location will take into consideration pipe material, number and location of sewer service (lateral) connections, sewer depth, access, traffic control (for the Johnson Street sewer) and constructability.



Example of Vacuum Extraction for Locating Existing Underground Utilities (Potholing)

The PDR will include descriptions of existing conditions, CCTV and field survey findings and recommended improvements at each location.

Three copies of the draft PDR will be submitted to the City for review and comment. Final paper and electronic copies will be submitted to the City which respond to the City's draft comments.

TASK 3. PREPARATION OF PRELIMINARY DRAWINGS AND COST ESTIMATE

3.1 – Preparation of 50% Submittal. The base maps prepared in Task 1.3 and the findings and recommendations included in the PDR and described in Task 2 will be used to prepare the 50% Improvement Plans. This submittal will include the proposed sewer and water improvements shown in plan and profile. The 50% plan submittal will include Title Sheet, General Construction Notes, Water and Sewer Construction Notes, location and vicinity maps and City Standard Details.

With the City's concurrence, we will transmit the 50% improvement plans ("A" plans) to utility companies for review and to identify potential conflicts with existing underground improvements.

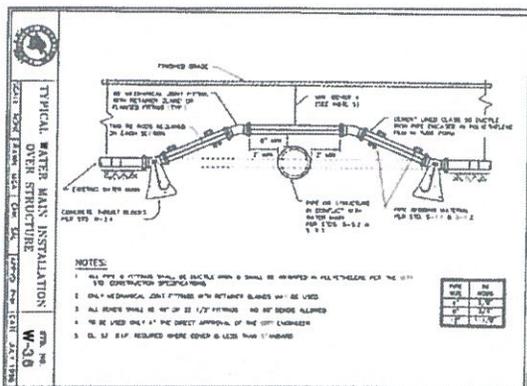


PROJECT APPROACH AND SCOPE OF WORK

Draft Technical Specifications will be prepared for the 2016 water and sewer pipeline improvements. Specifications will comply with City Standard Specifications and will conform to the specification format typically followed by the City for Public Works construction; either "Caltrans" type format or Construction Specification Institute (CSI) format.

Task 3.2 – Preliminary Cost Estimate. The estimated cost for construction of each water main replaced and for each sewer line rehabilitation or replacement will be submitted consistent with the recommendations developed in the PDR and the preliminary improvements submitted as part of the 50% plan submittals. Estimated costs will take into account pipeline depth, reconnection of services, reconnection of appurtenances, replacement of surface conditions, traffic control, constructability, access and the selected method of rehabilitation for each sewer improvement.

Task 3.3 – 50% Submittal Review. KASL will prepare and circulate the meeting agenda for the 50% PS&E submittal review. The City's directives and action items will be circulated to meeting participants following the 50% review meeting.



City of Sebastopol Design Standard W-36

TASK 4. PREPARATION OF CONSTRUCTION COST DOCUMENTS

Task 4.1 – Preparation of 90% Plans, Specifications and Estimates (PS&E)

The scope of this task will include the 90% Improvement Plans, Technical Specifications and Cost Estimates. This submittal will reflect the comments received from the City to the 50% PS&E submittal. The horizontal and vertical alignment of other underground utilities identified in responses received to the "A" Plan distribution will be shown. The 90% Plan will include details of the proposed water and sewer improvements and will identify where previously proposed alignments

have been adjusted to avoid conflict with other underground facilities. The 90% submittal will include erosion and sediment control improvements in conformance with the SWPPP prepared by others. The 90% submittal will include proposed traffic control plans. With concurrence by the City, the 90% Plans will be distributed to utility agencies as "B" Plans. The location of existing underground improvements and avoidance of utility conflicts will be confirmed with each recipient.

The 90% specifications submittal will include all of the Project's Technical Specifications and will respond to the City's specification comments to the 50% submittal. An Updated Cost Estimate will be prepared and submitted to the City.

Task 4.3 - Preparation of 100% Plans, Specifications and Estimates (PS&E).

The scope of this submittal will include construction documents ready for advertisement and bidding. The 100% PS&E will respond to the City's 90% design review comments. The Specifications will include Technical Specifications, Bidding and General Conditions documents consistent with City's template. The 100% submittal will include a final quantity takeoff and construction cost estimates.

TASK 5. BIDDING AND CONSTRUCTION ASSISTANCE

As directed by the City of Sebastopol, Bidding and Construction Assistance Services will include:

- Response to questions, RFI and RFC received from prospective bidders
- Review of shop drawing submittals
- Periodic site visits during construction and response to questions during construction
- Preparation of as built (record) drawings at Project completion

DELIVERABLES

Deliverables will consist of two paper copies and one electronic copy of the Preliminary Design Report, 100% PS&E and As Built submittals.

MEETINGS

The Scope of Work will include, at a minimum, the Kick Off Meeting, a design review meeting at the completion of the 50% design submittal, and one additional meeting TBD by the City. KASL will be available to review the 90% and 100% PS&E submittals either at the City's offices or via conference call.





PROPOSAL FOR ENGINEERING SERVICES, 2016 PIPELINE REPLACEMENT PROJECT
RELATED EXPERIENCE

Within the past 10 years, **KASL Consulting Engineers, Inc.**, has provided engineering services for the following water and sewer replacement and reconstruction and design projects.

PROJECT NAME	PROJECT DESCRIPTION	YEAR COMPLETED	ASSIGNED STAFF	TASK DESCRIPTIONS
1. Tuolumne City Sanitary Sewer Renovation Study	CCTV, flow metering and smoke test investigations to identify and mitigate sources of I & I in the District's Sewer System. Preparation of recommended rehabilitation and replacement costs.	2016	Jack Scroggs Octavio Perez Bill Ostroff	Project Manager Project Engineer Project Engineer
2. City of Plymouth Wastewater Collection System Infiltration and Inflow Study	Field investigations and CCTV investigation of 12,000 LF of existing sewers. Preparation of I & I reduction measures and construction cost estimates.	2016	Jack Scroggs Octavio Perez Bill Ostroff	Project Manager Project Engineer Project Engineer
3. Citrus Heights Water District Water Main Improvements	Design of water main replacement improvements for residential streets in Citrus Heights. Including the design of 12" diameter replacement water line across Park lands in Citrus Heights and the relocation of existing rear yard water mains with new water mains in public rights of way	2013-2016	Jack Scroggs Bill Ostroff Octavio Perez	Project Manager Project Engineer Project Engineer
4. Orange Vale Water Company Replacement of Main Street Water Line	Preliminary Design Report, preparation of Plans and Specifications for replacement of 12 inch diameter water main.	2010	Jack Scroggs Bill Ostroff	Project Manager Project Engineer
5. River Pines Water Rehabilitation Study, Amador Count	Preliminary Design Report, alternative and recommended water system rehabilitation improvements.	2009	Jack Scroggs Bill Ostroff	Project Manager Project Engineer
6. Sewer and Water Main Replacement Projects Military Housing Projects Reservations, Hawaii, New Mexico and Arizona	System evaluation, preliminary and final design for main and sewer pipeline replacement improvements at multiple neighborhoods at military bases.	2008-2015	Jack Scroggs Octavio Perez Jorge Beltran Bill Ostroff	Project Manager Project Engineer Project Engineer Project Engineer
7. Willow Street Pump Station and East Fort Bragg Water System Improvements	Preliminary Design Report and preparation of improvement plans and specifications for booster pump station and water main improvements.	2009	Jack Scroggs Bill Ostroff	Project Manager Project Engineer



FIRM BACKGROUND AND ORGANIZATION

KASL Consulting Engineers, Inc., is a City of Citrus Heights-based, locally owned, professional engineering and land surveying firm. KASL provides civil engineering, water resources engineering and land surveying services to public agencies and to private development interests throughout Northern California and the Western United States.

Founded in 1982, our firm offers expertise in road improvement projects, bikeways, streetscape improvements, traffic signal design, water and wastewater engineering, storm drainage improvements, utility plans, street lighting design, computer modeling, and mapping and surveying. With support from our subconsultants we also provide public outreach, structural engineering, geotechnical engineering, environmental assessments, pavement rehabilitation analysis and design, and other professional services, as required. Our current staff includes five Registered Civil Engineers and one Registered Traffic Engineer.



The KASL Team

KEY PERSONNEL

John (Jack) Scroggs, P.E. Principal-in-Charge and Project Manager

The Project Manager for all public works projects and water and sewer design and construction projects conducted by our firm is **Jack Scroggs**. Mr. Scroggs is a California Registered Civil Engineer (C 26388) and California Registered Traffic Engineer (TR 1733). He is also Registered Civil Engineer in Nevada (015866).



KEY TASKS FOR THIS PROJECT

Mr. Scroggs will serve as the Principal-in-Charge and Project Manager for this project and will be the primary point of contact with the City of Sebastopol. He will direct the engineering design of the proposed utilities to be replaced or rehabilitated and he will coordinate all work by, reviewing, approving, signing and stamping all engineering documents prepared for the City. He will also participate and coordinate all project meetings required of the project.

SUMMARY OF EXPERIENCE

Mr. Scroggs has supervised and directly participated in the preparation of study reports, improvements plans, specifications and cost estimates for the analysis and design of water supply, water and wastewater collection systems, and wastewater treatment plants completed by KASL. Mr. Scroggs has over 40 years of experience in civil engineering and water resources engineering.

Mr. Scroggs served as the Principal-in-Charge and Project Manager for the engineering design of the following water and wastewater improvement projects:

- Tuolumne City Sanitary Sewer Renovation Study
- City of Plymouth Wastewater Collection System Infiltration and Inflow Study
- Citrus Heights Water District Northgrove Way and Walnut Drive Water Main Replacement Project
- City of Plymouth Wastewater Treatment Engineering Services Phase I and Phase II, City of Plymouth.
- Plymouth Pipeline, Amador County.
- Citrus Heights Water District San Juan Park Water Main Replacement
- Citrus Heights Water District Mariposa Avenue Water Main Improvements
- Orange Vale Water Company replacement of Main Street water line
- Wheeler Ranch Subdivision, Sewage Lift Station, Force Main and Outfall Sewer, Yuba County
- Sewage Collection and Transmission Improvements, La Contenta, New Hogan Lake Estates North, Calaveras County
- West Point Wastewater Modification & Replacement Project, Calaveras County
- Copper Cove Water Treatment Plant, Calaveras County
- Jenny Lind Water Treatment Plant, Calaveras County
- Vallecito Wastewater Project, Calaveras County



PROJECT TEAM

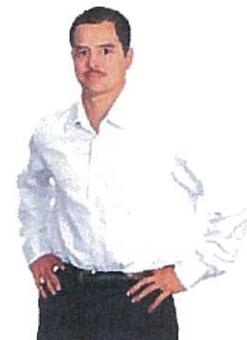
William (Bill) Ostroff, P.E., Project Engineer

Mr. Ostroff is a California Registered Civil Engineer (C 69221) with over 14 years of experience with KASL preparing improvement plans for utility rehabilitation and improvement projects. He has conducted extensive network modeling of water and sewer systems, and he has completed sewer studies and hydraulic modeling of water and sewer networks for both proposed and existing systems.



Octavio Perez, P.E., Project Engineer

Mr. Perez is a California Registered Civil Engineer (C 69969) with over 12 years of civil engineering design experience. While at KASL, Octavio has conducted detailed design of sewer collection, storm drain conveyance, water distribution for public works and residential land development projects in California, Nevada, New Mexico, Hawaii and Arizona.



KEY TASKS FOR THIS PROJECT

Mr. Ostroff will serve as Project Civil Engineer for this assignment and will perform civil engineering planning and design for water and sewer distribution and sewer rehabilitation and replacement improvements.

SUMMARY OF EXPERIENCE

Bill served as a Project Engineer for the engineering design of the following recent projects:

- City of Plymouth Wastewater Treatment Engineering Services Phase I and Phase II, City of Plymouth.
- Big Pine CSD Wastewater Treatment Plant Engineering Report
- Eastern Sierra Community Services District Wastewater Treatment Plant Expansion, Bishop, CA
- North Plumas Water Treatment Plant and Booster Pumps, Yuba County
- Lindhurst Storage Tank and Booster Pump System, Yuba County
- Plymouth Pipeline Project
- Greenwood Water Treatment Plant and Transmission Main, El Dorado County
- Tuolumne City Sanitary Sewer Renovation Study
- City of Plymouth Wastewater Collection System Infiltration and Inflow Study
- Citrus Heights Water District Northgrove Way and Walnut Drive Water Main Replacement Project
- Water System Network Modeling, Olivehurst, Yuba County

KEY TASKS FOR THIS PROJECT

Mr. Perez will serve as Project Civil Engineer for this assignment and will perform civil engineering planning and design for water and sewer distribution and sewer rehabilitation and replacement improvements.

SUMMARY OF EXPERIENCE

Octavio served as a Project Engineer for the engineering design of the following recent projects:

- Sewer Renovation Study, Tuolumne City Sanitary Sewer District
- City of Plymouth Wastewater Collection System Infiltration and Inflow Study
- Potable Water & Sanitary Sewer Pipeline Replacement, Aliamanu Military Reservation, Honolulu Hawaii, (Multiple Neighborhoods)
- Potable Water & Sanitary Sewer Pipeline Replacement, Hickam AFB, Honolulu Hawaii (Multiple Neighborhoods)
- Potable Water & Sanitary Sewer Pipeline Replacement, Fort Shafter, Honolulu Hawaii (Multiple Neighborhoods)
- Chestnut Street Corridor Improvement Project
- Skycrest Well Project, Citrus Heights Water District
- Lake Isabella DSMP Improvements, Kern County
- Laguna Crossing Infrastructure Improvements, Elk Grove
- Lake Isabella DSMP Improvements, Kern County
- East Tabor Avenue Sidewalk Gap Closure Project, City of Fairfield
- Sunrise Mall Parcel 3B Project, Citrus Heights



PROJECT TEAM

**Jorge L. Beltran, P.E, QSD/QSP
Project Engineer**

Mr. Beltran is a California Registered Civil Engineer (C 75576) with over 12 years of experience preparing drainage studies, designing storm drain systems and preparing plans for construction of roadways and public works improvements.



Jorge has extensive hydrological and hydraulic modeling experience of compliance storms, open channels, floodway encroachment analysis, closed conduit drainage systems, culverts and bridges for public works and residential land development projects in California, Nevada, New Mexico, Hawaii and Arizona.

KEY TASKS FOR THIS PROJECT

Mr. Beltran will serve as Project Civil Engineer for this assignment and will perform civil engineering planning and design for water and sewer distribution and sewer rehabilitation and replacement improvements.

SUMMARY OF EXPERIENCE

Jorge served as a Project Engineer for the engineering design of the following Land Development and Utility Rehabilitation Projects:

- Davis-Monthan AFB. 900 Family Unit Military Housing Project Utility Design. Tucson, Arizona
- Holloman AFB 900 Family Unit Military Housing Project Utility Design. Alamo Gordo, New Mexico
- Auburn Blvd. Infill sidewalk, curb and gutter, and Drainage Improvement Project, City of Citrus Heights
- Hickam AFB 172 Family Unit Military Housing Project Utility Design. Honolulu, Hawaii
- Fort Shafter, Simpson-Wisser New Family Housing Utility Design. Honolulu, Hawaii.

**Charlie Moore, P.E.
Senior Project Engineer**

Mr. Moore is a California Registered Civil Engineer with over 39 years experience in public works and private consulting. Since 2000, Mr. Moore has served as a Senior Project Engineer with KASL. Between 1985 and 2000 he served as Assistant Manager and District Engineer for the Calaveras County Water District.



Charlie has extensive experience in the design and analysis of wastewater collection, treatment, and disposal equipment and water pumping treatment and storage improvements.

KEY TASKS FOR THIS PROJECT

Mr. Moore will serve as a Senior Project Engineer responsible for providing technical assistance in selecting the most appropriate sewer and water replacement or rehabilitation improvements for the 2016 Pipeline Replacement Project.

SUMMARY OF EXPERIENCE

Mr. Moore served as the Senior Project Engineer responsible for engineering design services for each of the following projects:

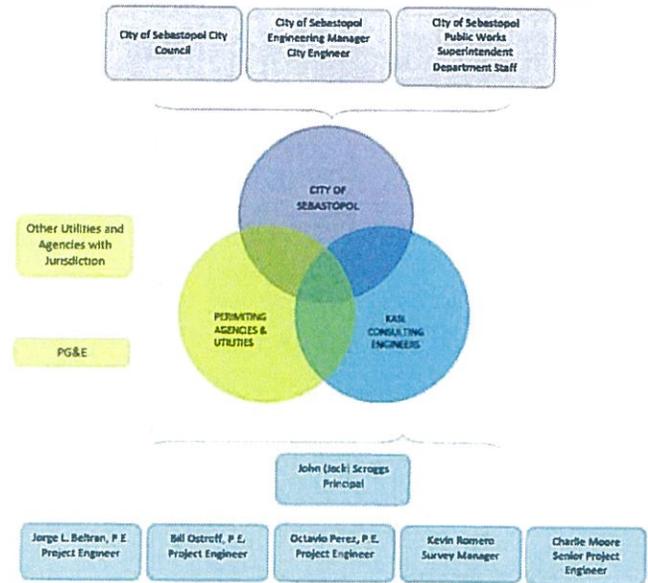
- Wheeler Ranch Sewage Lift Station, Force Main and Outfall Sewer, Yuba County
- Sewer Lift Station, Hickam AFB, Honolulu, HI
- Plymouth Pipeline Project
- Greenwood Water Treatment Plant and Transmission Main
- North Plumas Water Treatment Plant and Booster Pumps, Yuba County
- Lindhurst Storage Tank and Booster Pump System, Yuba County
- Wildflower Booster Pump and Water Storage Tank, lone, Amador County
- Preliminary Engineering Report, Big Pine CSD Wastewater Treatment Plant Improvements



PROJECT TEAM, CONFLICT OF INTEREST AND CONTRACT TERMS

KASL Survey Team

Kevin Romero (L) and Justin Gingrich (R), Survey Technicians, have 11 years and 10 years surveying experience, respectively, with KASL Consulting Engineers. They both perform record research and field data collection and are proficient with all types of surveying instrumentation. They also manipulate data in the office using a variety of computer applications and CADD in order to produce finished mapping and other surveying deliverables.



2016 PIPELINE REPLACEMENT PROJECT TEAM ORGANIZATION CHART

KEY TASKS FOR THIS PROJECT

Our survey team will collect all field survey data and will prepare topography maps for this assignment.

SUMMARY OF EXPERIENCE

Their Survey Experience, similar to the 2016 Pipeline Replacement Project Includes:

- Wildflower Subdivision Water and Sewer Improvements, Lone, Amador County
- Wildflower Booster Pump and Water Storage Tank, Lone, Amador County
- Plymouth Pipeline Project
- Citrus Heights Water District Northgrove Way and Walnut Drive Water Main Replacement Project
- Plymouth Sprayfield Management Plans
- Wheeler Ranch Subdivision Phase I, Yuba County, CA
- Aliamanu Military Reservation New Military Family Housing, Honolulu, HI

CONTRACT TERMS

KASL Consulting Engineers agrees to accept the City of Sebastopol's contract terms including insurance requirements stated in the Sample Agreement, Exhibit C of the City of Sebastopol's Request for Proposal. If selected by the City to provide the design, bidding and construction services of the 2016 Pipeline Replacement Project, KASL agrees to enter into an agreement with the City of Sebastopol which contains terms consistent with the Sample Agreement provided

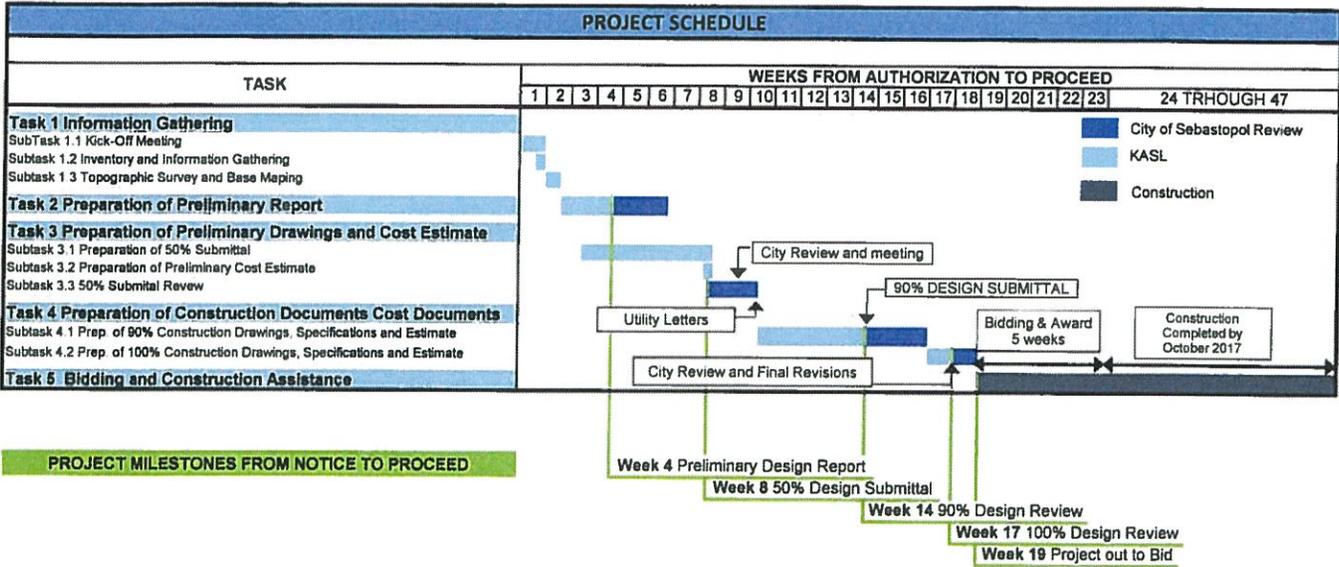
CONFLICTS OF INTEREST

KASL Consulting Engineers does not have any actual, apparent, direct, indirect or potential conflict of interest with any official or employees of the City of Sebastopol relative to the services to be provided by KASL.

PROPOSAL FOR ENGINEERING SERVICES, 2016 PIPELINE REPLACEMENT PROJECT



PROJECT SCHEDULE, LABOR EFFORT ESTIMATE AND FEE SCHEDULE



LABOR EFFORT ESTIMATE

TASK	LABOR CLASSIFICATION							
	Principal Engineer / Project Manager (ES-3)	Senior Project Engineer (ES-4)	Project Engineer (ES-5)	Survey Manager (ES-5)	Survey Office Staff (ES-7)	Engineering Survey Technician (ES-7)	Administrative Assistant (AA-10)	2-Person Survey Crew (2-CREW)
Task 1 Information Gathering	ESTIMATED LABOR HOURS							
SubTask 1.1 Kick-Off Meeting	6		6				2	
Subtask 1.2 Inventory and Assessment of Existing Conditions	2		12			4	2	
Subtask 1.3 Topographic Survey and Base Mapping	1		1	12	12			24
Task 2 Preparation of Preliminary Report	8	8	12			8	8	
Task 3 Preparation of Preliminary Drawings and Cost Estimate								
Subtask 3.1 Preparation of 50% Submittal	12	4	40			16	8	
Subtask 3.2 Preparation of Preliminary Cost Estimate	2	2	8				2	
Subtask 3.3 50% Submittal Review	6		6				2	
Task 4 Preparation of Construction Documents Cost Documents								
Subtask 4.1 Prep of 90% Construction Drawings, Specifications and Estimate	8	2	32			12	6	
Subtask 4.2 Prep of 100% Construction Drawings, Specifications and Estimate	4	1	12			8	4	
Task 5 Bidding and Construction Assistance	6	2	8			2		
ESTIMATED TOTALS	55	19	137	12	12	50	36	24

345

FEE SCHEDULE

LABOR CLASSIFICATION	RATE
Engineer, Surveyor 3 (ES-3)	\$140.00 per hour
Engineer, Surveyor 4 (ES-4)	\$124.00 per hour
Engineer, Surveyor 5 (ES-5)	\$108.00 per hour
Engineer, Surveyor 7 (ES-7)	\$91.00 per hour
Technician, Administration 10 (AA-10)	\$60.00 per hour
2-Man Survey Crew (2 Crew)	\$195.00 per hour

NO ESCALATION OF RATES IS PROPOSED





REFERENCES

CASE STUDY NO. 1

TUOLUMNE CITY SEWER RENOVATION STUDY

Location: Tuolumne City, CA
Reference: Dave Anders
District Manager
Tuolumne Sanitary District
(209) 928-3517

Relevance to Project:

- Evaluate Existing Sewers
- CCTV Inspections
- Recommend Rehabilitation Improvements
- Develop Cost Estimates

CASE STUDY NO. 2

CITY OF PLYMOUTH WASTEWATER COLLECTION SYSTEM INFILTRATION AND INFLOW STUDY, PLYMOUTH PIPELINE PROJECT

Location: City of Plymouth, CA
Reference: Jeff Gardner
City Manager
(209) 245-6941

Relevance to Project:

- Evaluate Existing Sewers
- CCTV Inspections
- Prepare Recommendation for Water and Sewer Improvements
- Develop Cost Estimates
- Construction Administration

CASE STUDY NO. 3 THROUGH NO.5

CITRUS HEIGHTS WATER DISTRICT NORTHGROVE WAY AND WALNUT DRIVE WATER MAIN REPLACEMENT, SAN JUAN PARK WATER MAIN REPLACEMENT, MARIPOSA WATER MAIN IMPROVEMENTS

Location: City of Citrus Heights, CA
Reference: Paul Dietrich
Project Manager
Citrus Heights Water District
(916) 725-6873

Relevance to Project:

- Design of Water Main Replacement improvements
- Preparation of PS&E
- Construction Administration

CASE STUDY NO. 6

ORANGE VALE WATER COMPANY MAIN STREET WATER MAIN REPLACEMENT PROJECT

Location: Orangevale, Sacramento County
Reference: Sharon Wilcox
District Manager
Orange Vale Water Company
(916) 988-1693

Relevance to Project:

- Design of Water Main Replacement Improvements
- Preparation of PS&E
- Construction Administration

CASE STUDY NO. 7

RIVER PINES WATER REHABILITATION STUDY, AMADOR COUNTY

Location: Amador County, CA
Reference: Candi Bingham
District Manager
(209) 245-6723

Relevance to Project:

- Evaluation of Water System Rehabilitation
- Preparation of Recommended Improvement Plans
- Engineer's Estimate of Quantities and Costs

CASE STUDY NO. 8

WILLOW STREET PUMP STATION AND EAST FORT BRAGG WATER SYSTEM IMPROVEMENTS, FORT BRAGG WATER SYSTEM NETWORK ANALYSIS

Location: City of Fort Bragg, CA.
Reference: Tom Varga
Public Works Director
City of Fort Bragg
(707)961-2823

Relevance to Project:

- Evaluation of Water System Improvements
- Preparation of Recommended Improvement Plans
- Engineer's Estimate of Quantities and Costs
- Development of Hydraulic Network Model for Future Projects