



Council Meeting: February 23, 2010

SUBJECT: Award a Sunnyvale Works! Contract for the Design of Citywide Waterline Replacements 2011 (F0902-77)

BACKGROUND

Approval is requested to award a contract to Carollo Engineers, in an amount not to exceed \$105,434, to design Citywide waterline replacements for 2011, and to approve a 10% design contingency in the amount of \$10,543. This proposed design contract was developed in conjunction with the pre-qualification process established at the outset of the **Sunnyvale Works!** program. Carollo was selected from among thirteen pre-qualified firms who submitted proposals to design the project.

DISCUSSION

Capital project 825451, Citywide Waterline Replacements, provides for on-going replacement of aged and damaged water lines by prioritizing the number of repairs, age, size, and material composition. The project standardizes the piping used with C-900 PVC (Poly Vinyl Chloride) plastic water pipe, and also upgrades pipes and fittings for seismic stability.

The waterline replacements scheduled for 2011 include approximately 4,240 lineal feet of piping in the following locations:

- California Avenue from Bartlett Avenue to Hendy/Fair Oaks Avenue, replacing approximately 860 feet of existing water main with 6" PVC.
- Acacia Avenue from Bartlett Avenue to Hendy/Fair Oaks Avenue, replacing approximately 850 feet of existing water main with 6" PVC.
- Birch Avenue from Bartlett Avenue to Hendy/Fair Oaks Avenue, replacing approximately 855 feet of existing water main with 6" PVC.
- Cedar Avenue from Bartlett Avenue to Hendy/Fair Oaks Avenue, replacing approximately 850 feet of existing water main with 6" PVC.
- Dwight Avenue from Bartlett Avenue to Hendy/Fair Oaks Avenue, replacing approximately 825 feet of existing water main with 6" PVC.

This contract is recommended for approval in order to design the plans and specifications necessary for construction, and to provide construction support services.

FISCAL IMPACT

Budgeted expenditures are available in project 825451, funded through the Water Supply and Distribution Fund.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's Web site.

RECOMMENDATION

It is recommended that Council:

1. Award a contract to Carollo Engineers, in substantially the same form as the attached draft Consultant Services Agreement and in an amount not to exceed \$105,434, for the design of Citywide Waterline Replacements 2011; and
2. Approve a project contingency in the amount of \$10,543.

Reviewed by:

-Mary J. Bradley, Director of Finance
Prepared by: Pete Gonda, Senior Management Analyst

Reviewed by:

Marvin Rose, Director of Public Works

Approved by:

Gary M. Luebbbers, City Manager

Attachments

Draft Consultant Services Agreement

DRAFT

**CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF
SUNNYVALE AND CAROLLO ENGINEERS FOR DESIGN AND
CONSTRUCTION SUPPORT SERVICES
FOR CITYWIDE WATERLINE REPLACEMENT 2011**

THIS AGREEMENT, dated _____, is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and CAROLLO ENGINEERS ("CONSULTANT").

WHEREAS, CITY desires to secure professional services necessary for investigation, analysis, design, preparation of construction drawings and contract specifications, consultation, services during construction and other services for a project known as Citywide Water Line Replacement 2011 (Sunnyvale Works! Project No. SVW-007); and

WHEREAS, CONSULTANT represents that it, and its sub-consultants, if any, possess the professional qualifications and expertise to provide the required services and are licensed by the State of California to practice engineering in the required disciplines;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS AGREEMENT.

1. Services by CONSULTANT

CONSULTANT shall provide services in accordance with Exhibit "A" entitled "Scope of Work." All exhibits referenced in this Agreement are attached hereto and are incorporated herein by reference. To accomplish that end, CONSULTANT agrees to assign Thom Kalkman, Partner-in-Charge, to this project, to act in the capacity of Project Manager and personally direct the professional services to be provided by CONSULTANT.

Except as specified in this Agreement, CONSULTANT shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise to perform all operations necessary and required to satisfactorily complete the services required in this Agreement.

2. Notice to Proceed/Completion of Services

- (a) CONSULTANT shall commence services upon receipt of a Notice to Proceed from CITY. Notice shall be deemed to have occurred three (3) calendar days after deposit in the regular course of the United States mail.
- (b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily completed the Scope of

Work (Exhibit "A"), and if so requested, CITY shall make this determination within fourteen (14) days of such request.

3. Project Schedule

The Project Schedule is set forth in the attached Exhibit "A-1."

4. Payment of Fees and Expenses

Payments shall be made to CONSULTANT on a monthly basis as set forth in the attached Exhibit "B" entitled "Compensation Schedule." All compensation will be based on monthly billings as provided in Exhibit "B." Compensation will not be due until said detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion associated with the various categories of the services shall be furnished by CONSULTANT with said billing. When applicable, copies of pertinent financial records will be included with the submission of billing(s) for all direct reimbursables. Compensation shall not exceed the amounts set forth in Exhibit "B" for each phase. In no event shall the total amount of compensation payable under this agreement exceed the sum of One Hundred Five Thousand Four Hundred Thirty Four and No/100 Dollars (\$105,434.00) unless upon written modification of this Agreement. All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

5. No Assignment of Agreement

CONSULTANT bind themselves, their partners, successors, assigns, executors, and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement or any of the work provided for under this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of CITY. However, claims for money due to or to become due to CONSULTANT from CITY under this Agreement may be assigned to a bank, trust company or other financial institutions, or to a trustee in bankruptcy, provided that written notice of any such assignment or transfer shall be first furnished to CITY. In case of the death of one or more members of CONSULTANT's firm, the surviving member or members shall complete the services covered by this Agreement. Any such assignment shall not relieve CONSULTANT from any liability under the terms of this Agreement.

6. Consultant is an Independent Contractor

CONSULTANT is not an agent or employee of CITY but is an independent contractor with full rights to manage its employees subject to the requirements of the law. All persons employed by CONSULTANT in connection with this Agreement will be employees of CONSULTANT and not employees of CITY in any respect. CONSULTANT is responsible for obtaining statutory Workers' Compensation coverage for its employees.

7. Consultant's Services to be Approved by a Registered Professional (Where Applicable)

All reports, costs estimates, plans and other documents which may be submitted or furnished by CONSULTANT shall be approved and signed by a qualified registered professional in the State of California. The title sheet for calculations, specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the professional responsible for their preparation.

8. Standard of Workmanship

CONSULTANT represents and maintains that it is skilled in the professional calling necessary to perform the services and its duties and obligations, expressed and implied, contained herein, and CITY expressly relies upon CONSULTANT's representations regarding its skills and knowledge. CONSULTANT shall perform such services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California.

The plans, designs, specifications, estimates, calculations reports and other documents furnished under the Scope of Work (Exhibit "A") shall be of a quality acceptable to CITY. The criteria for acceptance of the work provided under this Agreement shall be a product of neat appearance, well-organized, technically and grammatically correct, checked and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that used by CITY for similar projects.

9. Responsibility of CONSULTANT

CONSULTANT shall be responsible for the professional quality, technical accuracy and the coordination of the services furnished by it under this Agreement. Neither CITY's review, acceptance nor payment for any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement and CONSULTANT shall be and remain liable to CITY in accordance with applicable law for all damages to CITY caused by CONSULTANT's negligent performance of any of the services furnished under this Agreement.

Any acceptance by CITY of plans, specifications, calculations, construction contract documents, reports, diagrams, maps and other material prepared by CONSULTANT shall not, in any respect, absolve CONSULTANT for the responsibility CONSULTANT has in accordance with customary standards of good engineering practice in compliance with applicable Federal, State, County and/or municipal laws, ordinances, regulations, rules and orders.

10. Right of CITY to Inspect Records of CONSULTANT

CITY, through its authorized employees, representatives, or agents, shall have the right, at any and all reasonable times, to audit the books and records including, but not limited to, invoices, vouchers, canceled checks, time cards of CONSULTANT for the purpose of verifying any and all charges made by CONSULTANT in connection with this Agreement. CONSULTANT shall maintain for a minimum period of three (3) years from the date of final payment to CONSULTANT or for any longer period required by law, sufficient books and records in accordance with generally accepted accounting practices to establish the correctness of all charges submitted to CITY by CONSULTANT. Any expenses not so recorded shall be disallowed by CITY.

11. Confidentiality of Material

All ideas, memoranda, specifications, plans, calculations, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for CONSULTANT and all other written information submitted to CONSULTANT in connection with the performance of this Agreement shall be held confidential by CONSULTANT and shall not, without the prior written consent of CITY be used for any purposes other than the performance of the Project services, nor be disclosed to an entity not connected with the performance of the Project services. Nothing furnished to CONSULTANT which is otherwise known to CONSULTANT or is or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use CITY's name, insignia or distribute exploitative publicity pertaining to the services rendered under this Agreement in any magazine, trade paper, newspaper or other medium without the express written consent of CITY.

12. No Pledging of CITY's Credit

Under no circumstances shall CONSULTANT have the authority or power to pledge the credit of CITY or incur any obligation in the name of CITY.

13. Ownership of Material

All material, including information developed on computer(s), which shall include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports and other material developed, collected, prepared or caused to be prepared, under this Agreement shall be the property of CITY, but CONSULTANT may retain and use copies thereof.

CITY shall not be limited, in any way, in its use of said material, at any time, for work associated with Project. However, CONSULTANT shall not be responsible for damages resulting from the use of said material for work other than Project, including, but not limited to the release of this material to third parties for work other than on Project.

14. Hold Harmless/Indemnification

To the extent permitted by law (including, without limitation, California Civil Code section 2782.6), CONSULTANT agrees to indemnify, defend and hold harmless CITY, its officers and employees from any and all claims, demands, actions, causes of action, losses, damages, liabilities, known or unknown, and all costs and expenses, including reasonable attorneys' fees in connection with any injury or damage to persons or property to the extent arising out of any negligence, recklessness or willful misconduct of CONSULTANT, its officers, employees, agents, contractor, subcontractors or any officer, agent or employee thereof in relation to CONSULTANT's performance under this Agreement. Such defense and indemnification shall not apply in any instance of and to the extent caused by the sole negligence, recklessness or willful misconduct of CITY, its officers, employees, agents or representatives.

15. Insurance Requirements

CONSULTANT shall take out and maintain during the life of this Agreement policies of insurance as specified in Exhibit "C" attached and incorporated by reference, and shall provide all certificates and/or endorsements as specified in Exhibit "C."

16. No Third Party Beneficiary

This Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action hereunder for any cause whatsoever.

17. Notices

All notices required by this Agreement shall be in writing, and shall be personally delivered, sent by first class mail with postage prepaid, or by commercial courier, addressed as follows:

To CITY: Richard Chen, Engineer
 Department of Public Works
 CITY OF SUNNYVALE
 P. O. Box 3707
 Sunnyvale, CA 94088-3707

To CONSULTANT: Carollo Engineers
 Attn: Thom Kalkman, Partner-in-Charge
 2700 Ygnacio Valley Road, Suite 300
 Walnut Creek, CA 94598

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of a facsimile transmission must be sent by first class mail, by commercial carrier, or hand-delivered. Each party may change the

address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of three days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.

18. Waiver

CONSULTANT agrees that waiver by CITY of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

19. Amendments

No alterations or changes to the terms of this Agreement shall be valid unless made in writing and signed by both parties.

20. Integrated Agreement

This Agreement embodies the agreement between CITY and CONSULTANT and its terms and conditions. No verbal agreements or conversation with any officer, agent or employee of CITY prior to execution of this Agreement shall affect or modify any of the terms or obligations contained in any documents comprising this Agreement. Any such verbal agreement shall be considered as unofficial information and in no way binding upon CITY.

21. Conflict of Interest

CONSULTANT certifies that to the best of its knowledge, no CITY employee or officer of any public agency interested in this Agreement has any pecuniary interest in the business of CONSULTANT and that no person associated with CONSULTANT has any interest that would conflict in any manner or degree with the performance of this Agreement.

22. California Agreement

This Agreement has been entered into in the State of California and this Agreement shall be governed by California law.

23. Records, Reports and Documentation

CONSULTANT shall maintain complete and accurate records of its operation, including any and all additional records required by CITY in writing. CONSULTANT shall submit to CITY any and all reports concerning its performance under this Agreement that may be requested by CITY in writing. CONSULTANT agrees to assist CITY in meeting CITY's reporting requirements to the state and other agencies with respect to CONSULTANT's work hereunder. All records, reports and documentation relating to the work performed under this Agreement shall be made available to City during the term of this Agreement.

24. Termination of Agreement

If CONSULTANT defaults in the performance of this Agreement, or materially breaches any of its provisions, CITY at its option may terminate this Agreement by giving written notice to CONSULTANT. If CITY fails to pay CONSULTANT, CONSULTANT at its option may terminate this Agreement if the failure is not remedied by CITY within thirty (30) days after written notification of failure to pay.

Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY also shall have the right to terminate this Agreement for any reason upon ten (10) days' written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be compensated in proportion to the percentage of services performed or materials furnished (in relation to the total which would have been performed or furnished) through the date of receipt of notification from CITY to terminate. CONSULTANT shall present CITY with any work product completed at that point in time.

25. Subcontracting

None of the services covered by this Agreement shall be subcontracted without the prior written consent of CITY. Such consent may be issued with notice to proceed if subcontract consultants are listed in the project work plan.

26. Fair Employment

CONSULTANT shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, condition of physical handicap, religion, ethnic background or marital status, in violation of state or federal law.

27. Changes

CITY or CONSULTANT may, from time to time, request changes in the terms and conditions of this Agreement. Such changes, which are mutually agreed upon by CITY and CONSULTANT, shall be incorporated in amendments to this Agreement.

28. Other Agreements

This Agreement shall not prevent either Party from entering into similar agreements with others.

29. Severability Clause.

In case any one or more of the provisions contained herein shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions which shall remain in full force and effect.

30. Captions

The captions of the various sections, paragraphs and subparagraphs, of the contract are for convenience only and shall not be considered nor referred to for resolving questions of interpretation.

31. Entire Agreement; Amendment

This writing constitutes the entire agreement between the parties relating to the services to be performed or materials to be furnished hereunder. No modification of this Agreement shall be effective unless and until such modification is evidenced by writing signed by all parties.

32. Miscellaneous

Time shall be of the essence in this Agreement. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. This Agreement shall be governed and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the parties have executed this Agreement.

ATTEST:

CITY OF SUNNYVALE ("CITY")

By _____
City Clerk

By _____
City Manager

CAROLLO ENGINEERS
("CONSULTANT")

APPROVED AS TO FORM:

By _____

Name/Title

City Attorney

By _____

Name/Title



Engineers...Working Wonders With Water™

December 18, 2009

Mr. David Gakle, Principal Buyer
City of Sunnyvale
650 West Olive Avenue
Sunnyvale, CA 94086

Subject: Proposal to Provide Professional Engineering Services –
Project Two: Citywide Water Line Replacements 2011

Dear Mr. Gakle:

In response to the City of Sunnyvale's (City) request, Carollo Engineers is pleased to provide this letter proposal for providing design, bidding, and construction services for the Citywide Water Line Replacements 2011 Project (Project Two). The discussion that follows provides a description of our project understanding, our technical approach based on the City's scope of work, our preliminary project schedule, our team member commitments, and potential cost savings opportunities to compliment the Statement of Qualifications previously provided to the City.

PROJECT UNDERSTANDING

The City provides municipal water services managing more than 280 miles of pipeline ranging from 4 inches to 30 inches in diameter. Many of these pipelines have exceeded their estimated useful life, so water line rehabilitation and replacement has moved to the forefront as an ongoing effort for the City. Replacement of some pipes may be required to upsize the pipe to meet the current City standard of a minimum 6-inch nominal pipe diameter. The existing waterlines were constructed of materials consisting of ductile iron, cast iron, asbestos cement, and concrete pressure pipe.

Project Two includes replacement of approximately 4,240 linear feet (lf) of existing water pipeline with new 6-inch PVC pipe in a residential neighborhood bounded by Bartlett Avenue, California Avenue, Fair Oaks Avenue, and Dwight Avenue.

Based on our understanding of the project components, and our technical expertise, we have developed an approach that will:

- Result in selecting the construction method for each pipe segment that will provide the most cost-effective and least disruptive solution.
- Deliver clear, concise plans and specifications structured to encourage competitive bidding.
- Meet the City's 100 calendar day design schedule.



Project Two Location Map

2700 Ygnacio Valley Road, Suite 300, Walnut Creek, California 94598
P. 925.932.1710 F. 925.930.0208

PROJECT APPROACH

Carollo will work collaboratively with the City to develop a set of plans and specifications that will result in a comprehensive, cost-effective solution for replacement of the City's water lines. We have done recent work with the City at the treatment plant and are familiar with your standard documents, which will help us streamline the design process. Below is how we propose to complete Project Two.

Task 1 – Project Management

Project success is as dependent on cost and schedule management as it is on technical quality. To achieve this, Carollo will incorporate three principal components of project management: planning, monitoring, and reporting.

Labor hour estimates are made for each task listed within the scope and are then fitted to the proposed schedule. The finished product is an S-Curve that serves to monitor actual progress against planned progress. Monthly invoices will be prepared, and a monthly project progress report will be provided to the City that describes up-to-date budget and schedule progress.

The key to a successful project is establishing clear expectations and lines of communication when the project begins. At the kick-off meeting, our goal is to develop a joint City/Carollo project strategy and set key milestones. The strategy developed will be the basis for the development and implementation of a project management plan (PMP). Which in turn will be the primary tool used to manage and integrate all activities required by the scope of work. The PMP also includes templates we will use to provide conformance with your design and CAD standards.

Deliverables

- Monthly invoice.
- Monthly progress report.

Task 2 – Engineering Design Services

Subtask 2.1 – Preliminary Design

After the kick-off meeting, Carollo will begin the preliminary design. During preliminary design, Carollo will review available information and conduct a site visit to review site conditions. Based on the information gathered, we will evaluate which rehabilitation/replacement methods will be most applicable for each segment. Construction methods likely to be considered are pipe bursting, cured-in-place pipe (CIPP), and traditional open cut replacement. Some site constraints that will affect the selection of an appropriate construction method include proximity to existing utilities, existing pipe material, depth of cover, cost, hydraulic impacts, number of service laterals, and the importance of minimizing community disruption.

Construction Method Selection Criteria
1. Proximity to existing utilities
2. Existing pipe material
3. Depth of cover
4. Cost
5. Hydraulic impacts
6. Number of service laterals
7. The importance of minimizing community disruption

If an existing pipe is found to be asbestos cement, it is likely we would suggest abandoning the existing pipe in place and installing a new pipe in a new alignment to minimize the hazardous material work associated with this pipe type, unless it is the City's preference to remove the pipe from the ground. Because the City's minimum allowable pipe diameter is 6-inch, and the replacement in this project calls for 6-inch pipe, we would not recommend CIPP unless the City is comfortable with a smaller pipe diameter and the potential for a slightly reduced hydraulic capacity.

Construction method evaluation criteria for use on this project, including the importance of each criteria, will be developed with input from City staff. To select the best construction method, we will prepare a construction method comparison matrix for each pipe segment. The matrix will provide the relative value of each construction method based on each selected criteria, which will result in the apparent best construction method.

Sample Construction Method Comparison Matrix					
Critical Parameter	Open Cut	Fold & Form	Slip Lining	Pipe Bursting	CIPP
Environmental Impacts	3	5	3	4	5
Traffic Control	4	5	5	5	5
Relative Construction Cost	3	5	3	3	4
Constructability	4	4	3	2	4
Construction Duration	3	4	4	3	4
Long-term Performance	5	2	2	5	4
O&M Considerations	5	4	3	5	4
Hydraulic Capacity	5	3	1	5	4
TOTAL	35	36	28	35	38

A construction method comparison matrix will provide the City with a "best apparent construction method" for each segment based on the criteria most important to the City.

The preliminary design report will include applicable design criteria, the final construction method recommendations, including a summary of the evaluation process, preliminary pipeline alignments, results of utility investigations, a summary of discussions with the Santa Clara Valley Transportation Authority (VTA) and the U.S. Postal Service, preliminary technical specifications, and recommended revisions to the City's standard special provisions.

We have not included a geotechnical investigation at this time. However, if a trenchless construction method is recommended, we would highly suggest that a geotechnical report, including borings, be prepared unless there are existing geotechnical reports available for the area. This approach will limit possible geotechnical challenges that can be incorporated into the design and reduce potential change orders during construction.

Survey. Our subconsultant, Kier & Wright Civil Engineers & Surveyors, Inc., will conduct a conventional ground survey to prepare a base map of existing conditions. They will use the City benchmarks for vertical control, and survey monuments for horizontal control. The base maps will show the existing topography, and all known underground utilities, surface features, and overhead features in the project area. Invert elevations will be provided for all accessible gravity facilities. Our surveyors will also contact all local utility companies to request record documents for their facilities within the project area and incorporate the mapping into the project base map.

Environmental Documentation. Carollo will develop the required CEQA documentation and file it with the County of Santa Clara. Because this project is for replacement of existing pipes within the public right-of-way and is less than one mile in length, we anticipate there is no need for environmental documentation beyond a Categorical Exemption (CATEX). An Initial Study, Negative Declaration, or Environmental Impact Report is considered beyond this scope of work.

Assumptions

- Utility block maps, tract maps, and parcel maps record drawings are available for review.
- Two meetings: project kick-off and preliminary design review.
- The City will provide review comments one week after receiving the preliminary design submittal.
- No geotechnical work has been budgeted.

Deliverables

- Preliminary drawings.
- Preliminary technical specifications.
- Preliminary Design Report.

Subtask 2.2 – Final Design

Carollo will prepare the final design documents in conformance with the City's Standard Details and Specifications, applicable regulatory codes and laws, and all permit requirements. Intermediate submittals will be made at the 60 percent and 99 percent milestones. A bid package will be submitted after the 99 percent review comments have been incorporated. Each submittal will include plans, specifications, and an opinion of probable construction cost. We will respond to all City and internal quality assurance/quality control (QA/QC) comments and incorporate them into the final submittal.

The plans will include plan and profile sheets for the water main replacement, details for connecting to existing water mains, and provisions for replacement of water service laterals to the existing meter boxes in addition to general sheets and typical details required to make a complete biddable set of plans.

Our specifications will clearly identify any contractor requirements for coordination with the VTA and the U.S. Postal Services, as well as any specific requirements for maintaining access to properties affected by the construction. Additionally, we will address the possibility of soil contamination in both the specifications and by providing an allowance in the bid schedule if needed. Where appropriate, we will structure the bid schedule to allow the contractors to bid multiple construction methods to encourage competitive bidding.

QA/QC. Carollo has established and maintains an extensive Quality Management (QM) program based on the concept of continually improving quality through identifying and correcting problems so they do not reoccur, identifying and eliminating inefficiency and waste, reducing variability, and increasing performance. The program includes Carollo's continually evolving in-house QM documents. In addition, the work of each discipline engineer is checked as part of our QM program.

Tim Taylor will serve as the primary peer reviewer for this project. With his extensive background in water infrastructure and public works projects, he will perform a thorough review of the drawings and specifications for overall constructability, completeness, and coordination.

Assumptions

- The City will provide a copy of their Standard Details and Specifications for use on this project.
- The City will provide review comments within one week of receiving each submittal.
- Carollo and the City will participate in two review meetings to openly discuss the City's review comments to help facilitate quick turn around.

Deliverables

- Plans, specifications, opinions of probable construction costs, and schedule at the 60 percent and 99 percent design level.
- Responses to City comments, including return of City markups.
- Final construction documents, including plans and specifications stamped and signed by the Engineer of Record, an opinion of probable cost, list of submittals, and a list of all information or record drawings available to bidders.
- Peer review certification letter regarding internal QA/QC of the final construction documents.
- Digital copies of all work products and supporting work.

Task 3 – Bidding Services

Carollo will provide engineering services during the bid period as needed. Our design team will be available to answer questions during the bid period, which will allow us to provide more efficient responses to bidder questions, and provide written responses to the City with minimal turn around time. We will attend the pre-bid meeting and prepare meeting minutes for distribution.

We will prepare addenda as necessary, and will immediately notify the City of any cost or schedule impacts associated with addenda items. We understand that all communications during bidding will be directed through the City.

We understand that if the addenda items are extensive and significantly change the project, we will be responsible for preparing conformed documents at no expense to the City. Additionally, we will assist the City with getting the Contractor to sign off on the conformed drawings if requested.

Assumptions

- Carollo will attend the pre-bid meeting.
- The City will reproduce and distribute addenda to bidders.
- Reproduction for conformed drawings, if required, will be provided by the City.

Deliverables

- Pre-bid meeting minutes.
- Written responses to bidder questions.

- Addenda, as necessary.
- Conformed drawings, as necessary.

Task 4 – Construction Services

Carollo will provide comprehensive construction support services, including attendance at meetings, review of submittals, responses to requests for information (RFIs), review of proposed substitutions, assistance with preparation or review of change orders, participation in the final inspection, and preparation of record drawings as requested by the City.

Meetings and Site Visits. Appropriate members of the project design team will attend meetings, record meeting minutes, and perform site visits as requested by the City to discuss and coordinate the construction progress, and resolve any technical issues and concerns.

Assumptions

- The City will have the primary responsibility for construction management and inspection.
- Carollo will make four site visits: pre-construction meeting, construction meeting, field review, and final inspection.

Deliverables

- Construction meeting minutes.
- Punch list.

Submittal Review. Carollo will review all contractor submittals. If submittals are incomplete, we will notify the City immediately. The summary of the submittal review comments, including review status, will be returned to the City for distribution to the Contractor. We will notify the City if a review will require more than normal time to review, if the review could result in a change order, or if the Contractor is requesting a substitution.

Assumptions

- Review of 15 submittals has been budgeted.

Deliverables

- Review comments for submittals and re-submittals.

RFIs. Carollo will provide written responses to the Contractor's RFIs, and provide additional clarification of the plans and specifications through a design clarification if necessary.

Assumptions

- Review of five RFIs has been budgeted.

Deliverables

- Written response to RFIs.

Construction Change Order Assistance. Carollo will assist the City in the preparation or review of contract change orders that may arise during construction. We will provide recommendations on the proposed changes to the contract and assist in providing cost substantiation.

Assumptions

- Preparation of one contractor change order has been budgeted.

Deliverables

- Change order documentation as needed.

Record Drawings. After construction completion, Carollo will prepare and submit to the City a set of record drawings based on the contract drawings, changes resulting from change orders and RFIs, field review, and the field changes as shown in the Contractor's redline drawings.

Assumptions

- The City will provide the Contractor's redlines.

Deliverables

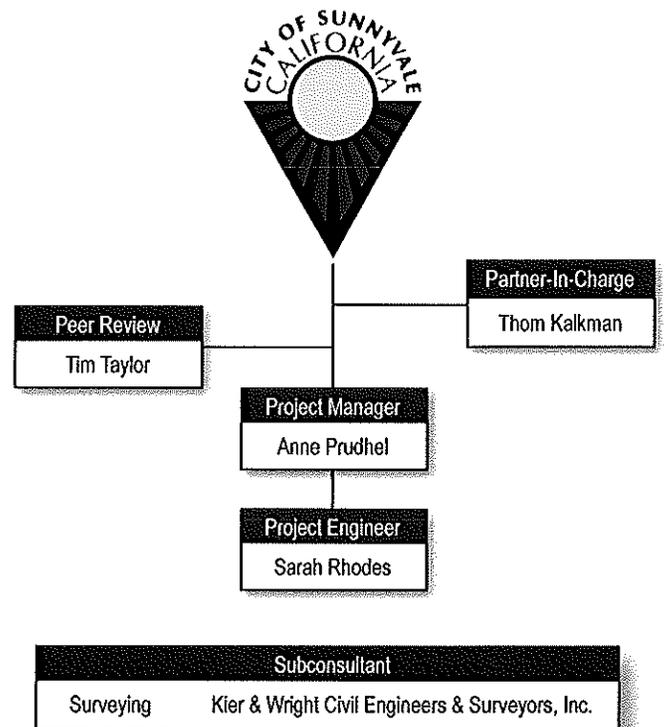
- As-built drawings.

PROJECT TEAM

Our team, led by Thom Kalkman, has the experience, expertise, and proven track record to provide a complete bid package within the City's project schedule. Our organization chart below clearly shows the roles of our team members, followed by brief team member profiles. Resumes for our team members are available upon request.

Thom Kalkman, P.E.

Thom has more than 35 years of experience specializing in the design and construction of water and wastewater infrastructure. As partner-in-charge, Thom will have ultimate responsibility for Carollo's performance on your project and will provide overall project direction. Relevant project experience includes:



- Partner-in-charge for the design and construction of 21 miles of 6-inch to 18-inch-diameter water mains for the California Men's Colony in San Luis Obispo, California.
- Partner-in-charge for the design and construction of 10 miles of 8-inch to 36-inch-diameter water mains for the City of Pittsburg.
- Project manager for the design and construction of more than 10,000 lf of 8-inch to 66-inch-diameter pipe for the City of Vallejo Fleming Hill Water Treatment Plant.

Anne Prudhel, P.E.

As project manager, Anne will be the key contact for all aspects of this project, including services during construction. She will be responsible for the overall management and technical quality of the work performed, and will oversee the day-to-day activities of the project to ensure it is being completed to your satisfaction. Relevant projects are as listed in the previously submitted Statement of Qualifications.

Sarah Rhodes, P.E.

As the project engineer, Sarah will perform the detailed design and coordinate with the technicians and subconsultants. Relevant projects include:

- Project engineer for the San Jerardo Water Improvements Project, which included the design of 1,200 feet of 6-inch water pipeline for the County of Monterey.
- Engineer for the Harding Park Recycled Water Project, which included approximately 4,800 lf of 18-inch recycled water pipeline for the San Francisco Public Utilities Commission.
- Engineering services during construction for the Central Marin Sanitation Agency Wet Weather Improvements Project, which included submittal review and RFI response.

Tim Taylor, P.E.

Tim has more than 23 years of experience in the water and wastewater industry, and is a senior infrastructure manager. As the peer reviewer, Tim will provide a review of the constructability, coordination, and any omissions and errors. He will seal the Certification of Peer Review, and will ensure that the project is optimized for Public Works bidding.

Team Member	Availability
Thom Kalkman	10%
Anne Prudhel	60%
Sarah Rhodes	60%
Tim Taylor	20%

SCHEDULE

Carollo proposes to finish the engineering design phase of this project within 100 calendar days from the notice to proceed. In addition, we are committed to minimizing our response time during construction to meet the Contractor's construction schedule. Our preliminary project schedule is presented in Exhibit A.

ESTIMATED BUDGET

Our budget has been provided in a separate, sealed envelope at your request.

Mr. David Gakle, Principal Buyer
City of Sunnyvale
December 18, 2009
Page 9

Opportunities for Cost Savings. After reviewing Project One and Project Two, we have identified the following possible cost-savings ideas. We hope to discuss these in more detail with you during contract negotiations.

Design of Project One and Project Two by a Single Consultant.

- Due to the nature of the projects, we anticipate the plan sets for Project One and Project Two to be very similar. The preparation of the plans and specifications for Project One will essentially act as a template for Project Two, which will reduce the time and cost necessary to produce the plans and specifications for Project Two, as well as minimize the City's review time.
- Continuity between the two projects may result in better construction bids for Project Two, since contractors will have already seen a similar set of contract documents.

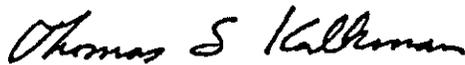
Optimizing Project One and Project Two Components. We understand there may be specific reasons for packaging the projects as outlined in the RFP, such as similar project footages. However, cost savings in design and construction may be realized by moving the Bartlett Avenue segment from Project One into Project Two since it is adjacent to the Project Two segments. Additionally, packaging this segment with Project Two will eliminate the need for two separate disruptions to the neighborhood.

Electronic Submission of Submittals and RFIs. Requiring the Contractor to make electronic submittals and RFI requests, as well as providing responses electronically, can reduce response time and cost due to reproduction and shipping.

Water and wastewater consulting is all we do – it's our passion. We would like the opportunity to be the City's design consultant for this important project. Our water infrastructure design experience is second to none, and our commitment to the City is 100 percent. Our team is available, ready, and eager to begin work on this challenging project, and we are pleased to submit this proposal for your consideration. We look forward to working with the City on this project. Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely,

CAROLLO ENGINEERS, P.C.

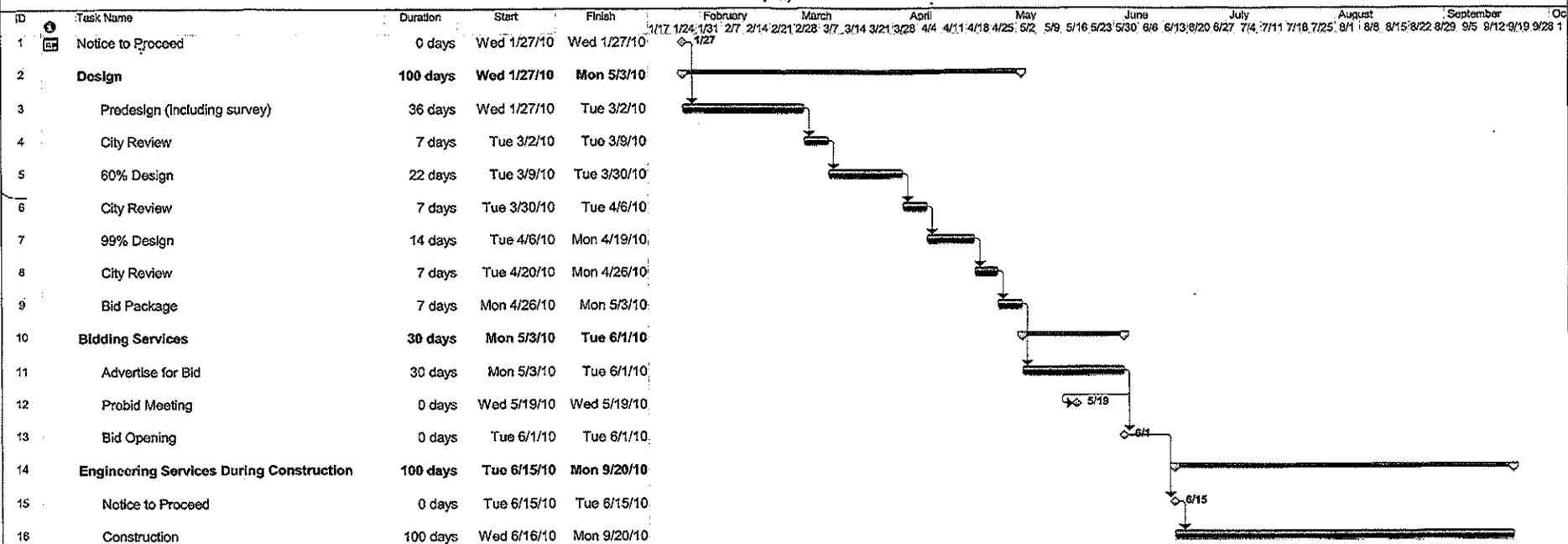


Thomas S. Kalkman, P.E.
Partner-in-Charge

TSK:pg

Enclosure: Exhibit A - Preliminary Project Schedule

City of Sunnyvale
Citywide Water Line Replacements 2011
Preliminary Project Schedule



Note: The schedule currently shows bidding services and engineering services during construction in 2010 as a placeholder. We understand that the City will bid the project in either 2010 or 2011 and we will work with the City to adjust the schedule accordingly.

Project: Citywide Water Line Replacements 2011
Date: Wed 12/16/09

Task Progress Summary External Tasks Deadline

Split Milestone Project Summary External Milestone

EXHIBIT B

City of Sunnyvale Project Two - Citywide Water Line Replacements 2011 Fee Estimate																																						
Task	Task Description	PIC \$294	PR \$213	PM \$185	PE \$145	CAD \$100	Support \$90	Total Hours	Labor Cost	Subconsultants Name	Amount	Other Direct Costs (ODC)				ODC Cost	Total Cost																					
												PECE \$0.00	Printing	Trips	Village Amount																							
1.0	Project Management																																					
1.1	Contract Administration	2	0	12	0	0	0	14	\$2,448			\$128	\$0	0	\$0	\$128	\$2,574																					
1.2	Project Meetings	6	0	16	16	0	0	38	\$6,364			\$342	\$0	4	\$210	\$552	\$6,916																					
Task 1.0 Total =		8	0	28	16	0	0	52	\$8,812			\$468	\$0	4	\$210	\$678	\$9,490																					
2.0	Design Engineering																																					
2.1	Preliminary Design	1	0	16	30	50	11	108	\$13,217	Survey - Kler & Wright	\$16,632	\$871	\$100	1	\$53	\$17,756	\$30,972																					
2.2	Final Design	1	24	26	80	116	26	272	\$35,101			\$2,451	\$260	1	\$53	\$2,753	\$37,854																					
Task 2.0 Total =		2	24	42	110	166	37	380	\$48,317			\$3,422	\$350	2	\$105	\$3,877	\$56,826																					
3.0	Bid Period Services	0	0	6	16	4	2	28	\$3,890			\$252	\$0	1	\$53	\$305	\$4,195																					
4.0	Engineering Services During Construction	0	0	24	96	34	0	154	\$21,280			\$1,386	\$100	3	\$158	\$1,644	\$22,924																					
Project Total =		10	24	100	238	203	39	614	\$82,298			\$5,528	\$450	10	\$525	\$6,503	\$88,801																					
Legend:		<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">PIC</td> <td style="width: 10%;">TSK</td> <td style="width: 80%;">Partner-in-Charge</td> </tr> <tr> <td>PR</td> <td>TT</td> <td>Peer Review</td> </tr> <tr> <td>PM</td> <td>AP</td> <td>Project Manager</td> </tr> <tr> <td>PE</td> <td>SLR</td> <td>Project Engineer</td> </tr> <tr> <td>CAD</td> <td></td> <td>CAD Technician</td> </tr> <tr> <td>Support</td> <td></td> <td>Support Staff</td> </tr> <tr> <td>PECE:</td> <td></td> <td>Project Equipment and Communication Expense</td> </tr> </table>																PIC	TSK	Partner-in-Charge	PR	TT	Peer Review	PM	AP	Project Manager	PE	SLR	Project Engineer	CAD		CAD Technician	Support		Support Staff	PECE:		Project Equipment and Communication Expense
PIC	TSK	Partner-in-Charge																																				
PR	TT	Peer Review																																				
PM	AP	Project Manager																																				
PE	SLR	Project Engineer																																				
CAD		CAD Technician																																				
Support		Support Staff																																				
PECE:		Project Equipment and Communication Expense																																				
Assumptions:		<ol style="list-style-type: none"> 1. Survey will be performed using conventional ground survey. Photogrammetry can be provided as an optional service. 2. Geotechnical work is not included in this scope of work, but can be provided as an optional service if a need is identified. 3. Task 2.0 is based on preparation of 10 drawings. 4. 4 meetings are budgeted during design. This includes kick-off, pre-design report submittal, 60% submittal, and 90% submittal. 5. 1 site visit is budgeted during bid period to attend the pre-bid meeting. 6. 3 site visits are budgeted during construction. This includes 1 pre-construction meeting, 1 construction meeting, and 1 field review. 7. Review of 15 submittals has been budgeted. 8. Responses to 5 RFIs has been budgeted. 9. Preparation or assistance with 1 change order has been budgeted. 10. Division 0 will be provided by the City. 11. Potholing existing utilities is not included in this scope of work, but can be provided as an optional service if a need is identified. 																																				
Notes:		<ol style="list-style-type: none"> 1. Mileage: Based on 104 miles roundtrip @ \$0.505/mile for meetings in Sunnyvale. 																																				

Exhibit C

INSURANCE REQUIREMENTS FOR CONSULTANTS

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the Consultant, his agents, representatives, or employees.

Minimum Scope and Limits of Insurance: Consultant shall maintain limits no less than:

1. **Commercial General Liability:** \$1,000,000 per occurrence and \$2,000,000 aggregate for bodily injury, personal injury and property damage. ISO Occurrence Form CG 0001 is required.
2. **Automobile Liability:** \$1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 is required.
3. **Workers' Compensation** and **Employer's Liability:** \$1,000,000 per accident for bodily injury or disease.
4. **Errors and Omissions** Liability Insurance appropriate to the Consultants Profession: \$1,000,000 per occurrence and \$2,000,000 aggregate.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared and approved by the City of Sunnyvale. The consultant shall guarantee payment of any losses and related investigations, claim administration and defense expenses within the deductible or self-insured retention.

Other Insurance Provisions

The **general liability** and **automobile liability** policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Sunnyvale, its officials, employees, agents and volunteers are to be covered as additional insureds with respects to liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City of Sunnyvale, its officers, employees, agents or volunteers.
2. For any claims related to this project, the Consultant's insurance shall be primary. Any insurance or self-insurance maintained by the City of Sunnyvale, its officers, officials, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City of Sunnyvale, its officers, officials, employees, agents or volunteers.
4. The Consultant's insurance shall apply separately to each insured against whom claim is made

or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City of Sunnyvale.

Claims Made Coverage

If the General Liability and/or Errors & Omissions coverages are written on a claims-made form:

1. The retroactive date must be shown, and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the contract work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the Consultant must purchase an extended period coverage for a minimum of five years after completion of contract work.
4. A copy of the claims reporting requirements must be submitted to the City of Sunnyvale for review.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City of Sunnyvale.

Verification of Coverage

Consultant shall furnish the City of Sunnyvale with original a Certificate of Insurance effecting the coverage required. The certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates are to be received and approved by the City of Sunnyvale prior to commencement of work.