

**Council Meeting: April 3, 2012****SUBJECT: Award of Contract for Engineering Design and Construction Support for Water Line Replacements 2012-13 (#F1111-33)****BACKGROUND**

Approval is requested to award an engineering design and construction support contract in the amount of \$226,032 to Bellecci & Associates, Inc. of Pleasanton for the Water Line Replacement FY 2012/13 Project (Public Works Project No.UW-12/01-13). Approval is also requested for a 10% design contingency in the amount of \$22,603.

DISCUSSION

Capital Project 825451 (City-wide Water Line Replacement) provides for the ongoing replacement of aged and damaged water lines. The project also upgrades the water system by standardizing the materials used (PVC C-900 with tracer water line), replaces valves and fire hydrants, and upgrades fittings for seismic stability. The project scope for FY 2012/13 includes replacing over 21,000 lineal feet of existing pipe, gate valves, meters and hydrants in the locations shown in Attachment B. This project consolidates waterline replacements that are typically budgeted over a multi-year period in order to ensure the timely expenditure of proceeds from the Water Revenue Bonds issued in 2010.

Specifications were developed by Public Works and Purchasing staff and Request for Proposals No. F1111-33 was released on January 5, 2012 and posted to the City's website and the Onvia Demandstar public procurement network. Thirty four (34) firms requested proposal documents. Sealed proposals were publicly received on February 1, 2012. Eight responsive proposals were received as follows:

Bellecci & Associates, Inc. of Pleasanton	\$163,012
Schaaf & Wheeler, of Santa Clara	\$252,985
Infrastructure Engineering Corp., of Menlo Park	\$269,000
Lee & Ro, Inc. of Walnut Creek	\$282,363
BKF Engineers, of Redwood City	\$299,868
Sandis Civil Engineers, of Sunnyvale	\$410,490
HydroScience Engineers, of San Jose	\$424,965
Wilsey Ham, of San Mateo	\$499,384

A City evaluation team consisting of Public Works and Environmental Services staff evaluated the proposals based on qualifications, experience, quality, project understanding, and price. The four highest ranking proposers (HydroScience, Lee & Ro, Bellecci & Associates, Inc., and Infrastructure Engineering Corporation) were invited for interviews with the evaluation team. As a result of the interview process, Bellecci & Associates, Inc. was unanimously selected as the highest ranking proposer.

Pricing clarifications with Bellecci & Associates resulted in the addition of optional services for water flow modeling to determine correct pipe sizing, additional environmental documentation, and additional construction support, as necessary. Due to the significant value pricing of the Bellecci proposal, Public Works staff requested additional pricing to update the City's standard details for waterline construction projects. Optional services pricing detail is as follows:

1. Waterline modeling to confirm pipe sizing	\$12,130
2. Additional construction support (if required)	\$14,190
3. Additional environmental documentation	\$3,210
3. Updating City Standard Details for Waterline Replacement	<u>\$33,490</u>
	\$63,020

The total proposal pricing for the design and construction support is \$226,032. Staff recommends accepting the proposal with optional services from Bellecci & Associates, Inc. Staff also recommends the award of a 10% design contingency in the amount of \$22,603.

FISCAL IMPACT

The City's water utility is aging and has many infrastructure renovation needs both in the short term and over a longer period. To address the immediate infrastructure needs in the water utility, the City issued Water Revenue Bonds in 2010 that provided approximately \$18 million in funding. In order to meet the highest priority infrastructure renovation needs in the most efficient manner and ensure the timely expenditure of bond proceeds, the Environmental Services Department is reprioritizing its projects to accelerate the simple, straightforward, and needed projects. Water pipeline replacements fall into this category.

Project costs for this contract are as follows:

Design and construction support services	\$163,012
Optional services	\$63,020
Subtotal	<u>\$226,032</u>
Design contingency (10%)	<u>\$22,603</u>
Total costs	\$248,635

Capital Project 825451 (Citywide Water Line Replacement) has a balance of approximately \$100,000 in the current fiscal year. This amount is sufficient to begin project design. The estimate for the construction cost is \$4.85 million. The FY 2011/2012 Adopted Budget includes an additional \$612,000 annually for water line replacements, for a total of \$15 million over 20 years. The acceleration of the funding for water line replacement will require bringing forward approximately \$4 million into FY 2012/2013. This will be offset by deferring several projects for coating, painting, and reconstruction of water tanks. These projects are currently on hold as the City is in the process of commissioning a study to determine how to best move forward on its tank maintenance and replacement, as well as review the potential to drill an additional water well.

The reprioritization of projects will be included in the FY 2012/2013 Budget and water rates. As this is a shifting of priorities and corresponding funding (i.e. bringing some budgets forward while deferring others) there is no immediate impact on rates and no anticipated long term impact on the City's current rate projections.

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, in substantially the same form as the attached draft and in an amount not-to-exceed \$226,032 to Bellecci & Associates, Inc. for the subject project, and authorize the City Manager to execute the contract when all the necessary conditions have been met; and
2. Approve a 10% design contingency in the amount of \$22,603.

Reviewed by:

Grace K. Leung, Director of Finance
Prepared by: Pete Gonda, Purchasing Officer

Reviewed by:

Kent Steffens, Director, Department of Public Works

Reviewed by:

John Stufflebean, Director, Environmental Services

Approved by:

Gary M. Luebbers
City Manager

Attachments

- A. Consultant Services Agreement
- B. Waterline Replacement Locations

**ATTACHMENT A
DRAFT**

**CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF SUNNYVALE AND
BELLECCI & ASSOCIATES, INC. FOR DESIGN AND CONSTRUCTION SUPPORT
SERVICES FOR WATER LINE REPLACEMENT 2012-13**

THIS AGREEMENT dated _____ is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and BELLECCI & ASSOCIATES, INC. ("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 Water Line Replacement 2012-13; 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 Daniel Leary, P.E. 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 Two Hundred Twenty Six Thousand Thirty Two and No/100 Dollars (\$226,032.00) 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

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 2782.8), 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, other than invoices for payment which shall be sent directly to Accounts Payable, shall be in writing, and shall be personally delivered, sent by first class with postage prepaid, or sent by commercial courier, addressed as follows:

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

To CONSULTANT: BELLECCI & ASSOCIATES, INC.
Attn: Daniel Leary, P.E.
6601 Koll Center Parkway, Suite 240
Pleasanton, CA 94566

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

BELLECCI & ASSOCIATES, INC.
("CONSULTANT")

By _____

APPROVED AS TO FORM:

Name/Title

City Attorney

By _____

Name/Title

EXHIBIT A**City of Sunnyvale - Waterline Replacement Project 2012-2013**

The City of Sunnyvale ("CITY") is retaining Bellecci & Associates Inc ("CONSULTANT") to provide Civil Engineering services for Water line Replacement 2012-2013 Project ("PROJECT"). In general the scope of work includes preparation of plans, specifications and estimates for public bidding of the 21,127 feet of waterline replacement for the street segments listed in the RFP 1111-33.

Scope of work is defined in more detail below:

- 1 **Set Flight Crosses & Field Utility Locating:** "CONSULTANT" will field survey for flight crosses and utility locating for Waterline base mapping. Field surveying will include 12 days of field surveying to collect field data necessary for the waterline replacement base mapping. The exact items to be collected in the field will depend on the location of the existing waterline, location of the new waterline, and location of the new water meters relative to the existing water meters. Examples of items that would be collected in areas related to waterline replacement are as follows: driveways, trees, power poles, sidewalk boxes, sewer manholes, sewer inverts, and other items as determined by the project engineer and field surveyor. Critical facilities to be surveyed include all visible water meters and fire hydrants. At the beginning of the survey the Senior Civil Engineer will walk the site with the survey party chief to clarify relevant survey facilities. "CONSULTANT" will also set flight crosses for the aerial photogrammetrist.
- 2 **Aerial Survey:** "CONSULTANT" will perform aerial flyover of the project site. Aerial topography will be prepared in AutoCAD and will be 1"=40' including visible features from aerial flyover. CAD aerial topo will be the base map for the waterline replacement with the ground field survey points added on the same coordinate system. Aerial topographic survey will be completed by a professional photogrammetrist and will encompass the waterline replacement limits of work as outlined in the RFP.
- 3 **Team Site Walk:** Key members of the design team will visit the site to evaluate existing conditions and discuss the proposed waterline replacement routing. This site visit will also confirm portions of the field utility survey performed by the "CONSULTANT" union field crew. During the site visit "CONSULTANT" will collect site photos that will be preserved on the "CONSULTANT" project files.
- 4 **30% Plans:** The 30% plans will be a 24x36 plan set prepared on the City Standard Border and will include the following items:
 - a. Aerial topographic survey background
 - b. Topographic survey points at locations described in Task 2
 - c. Existing waterline, sanitary sewer, gas main, power poles, water meters, storm drain
 - d. Alignment and diameter of proposed waterline replacement on 1"=40' scale.
 - e. Dimensions from new waterline and adjacent utilities
 - f. Street names, north arrow, graphical scale, stationing, city standard border

- g. Utility lines as shown on the City record drawings
- h. A numbered notation at each location of the intersection of the waterline and known existing utilities. Pipe clearance will be indicated on the plan view or the notation will indicate unknown. "CONSULTANT" will work with City to resolve any unknown utility crossing locations. Profile will be provided at 65% submittal.

"CONSULTANT" will submit 5 copies of 30% plans to City project manager to be circulated for review. "CONSULTANT" will arrange a review meeting with City staff as soon as possible following the 30% submittal to accelerate the beginning of the 60% design.

30% Exhibits: Prepare two plan exhibits to be submitted along with the 30% Plans:

- a. Sequence of Work Exhibit: Showing graphically the breakdown of work by geographic area, similar to a staging plan. Project staging and sequencing notes will be included on the exhibit.
- b. Method of Installation Exhibit: A plan depicting the method of pipe installation and lateral & meter installation, showing: pipe to remain, new pipe, new water, existing water meter, extents of trenching, and directional drilling if applicable. Notes regarding the trenching options will be included on the plan.

- 5. **30% Construction Cost Estimate:** The 30% estimate will include items shown on the plans along with general construction work. Examples of cost estimate items are as follows:
 - a. Quantities of waterline with pipe diameters
 - b. Water valves
 - c. Tees and Crosses.
 - d. Fire Hydrants
 - e. Traffic controls
 - f. Mobilization
 - g. Striping restoration
 - h. Crosswalk restoration
 - i. Sidewalk restoration
 - j. Private property notifications
 - k. Water meters
 - l. Water services
 - m. Temporary walkways
 - n. Thrust blocks and mechanical restraints (incidental)
 - o. Backfill and bedding (incidental)
 - p. Repaving and possible tee trench
 - q. Parking notifications and controls
 - r. Minor utility alterations of conflicting utilities
 - s. Vertical offsets for utility crossings

- 6. **60% Plans:** The 60% plans will include the same plan elements as the 30% submittal along with the following added items: construction details, water main profiles (on 1"=40' horizontal scale and 1"=4' vertical scale), sequencing and traffic control performance requirements, trench details, one typical water service profile within public right of way on

each side of the water main, coordination with the updated standard plans, changes as requested by City during 30% review. The 60% plans will show the existing utilities to be potholed as the contractor's first order of work. "CONSULTANT" will submit 5 copies of PS&E to City project manager to be circulated for review. "CONSULTANT" will arrange a review meeting to as soon as possible following the 60% submittal to accelerate the beginning of the 99% design.

- 7 **60% Specifications:** "CONSULTANT" will prepare 60% technical specifications in City standard format. Technical specifications will include performance specifications for traffic handling, pedestrian access control, striping restorations, and specific measures for coordination with property owners and notifications. Specifications will provide for an allowance for vertical offsets both above and below the existing utility conflicts, with the quantity to be assumed based on the site conditions. "CONSULTANT" will work with City to establish bidding assumptions for hazardous materials, groundwater and soil conditions as described in related studies prepared by others. For some of the items of work that are unknown at the time of bidding "CONSULTANT" will include bid items as allowances to obtain competitive pricing. Potholing will also be identified as a first order of work for the Contractor in the specifications to collect information regarding utility conflicts.
- 8 **60% Construction Cost Estimate:** 60% cost estimate will reflect the items included in the plans and specifications, with a 15% design contingency included.
- 9 **99% Plans:** The 99% plans will include all of the intended project details and profiles, along with plan review comments addressed and included in the submittal. "CONSULTANT" will submit 5 copies of PS&E to City project manager to be circulated for review. "CONSULTANT" will arrange a review meeting to as soon as possible following the 99% submittal to accelerate the beginning of the 100% design.
- 10 **99% Specifications:** "CONSULTANT" will coordinate the 99% specification update with the City's boilerplate specifications prepared by City.
- 11 **99% Construction Cost Estimate:** 99% cost estimate will reflect the items included in the plans and specifications, with a 5% design contingency.
- 12 **100% Plans:** The 100% plans will include all of the intended project details and profiles, along with plan review comments addressed and included in the submittal. "CONSULTANT" will submit 1 copy of the signed PS&E to City project manager.
- 13 **100% Specifications:** "CONSULTANT" will finalize the bid technical specifications for bidding.
- 14 **100% Construction Cost Estimate:** 100% cost estimate will reflect the items included in the plans and specifications with a 0% design contingency and 10% contingency for changes during construction.

- 15 **Allowance for Bid Support:** "CONSULTANT" will provide up to 18 hours of Bid support to City. Examples of bidding support include responding to select bidding RFI's, presenting at pre-bid conference, preparation of minor addendum items, and other services requested by the City project manager up to the hours provided for in Exhibit B. "CONSULTANT" will not extend beyond the basic services budget without prior written approval from City.
- 16 **Design Services During Construction:** "CONSULTANT" will provide up to 56 hours of construction support to City. Examples of construction support include responding to select RFI's, reviewing key submittals, attendance at construction meeting, and other services requested by the City inspector up to the hours provided for in Exhibit B. "CONSULTANT" will not extend beyond the basic services budget without prior written approval from City.
- 17 **Printing Allowance:** Contract includes allowance for expenses not to exceed the amount shown in Exhibit B without prior written approval from the City. Expenses anticipated are primarily printing, but may include mileage and other project expenses as approved by the City.
- 18 **Memorandum for Categorical Exemption:** Determine if the project fits within a specific Categorical Exemption under the CEQA. Determine if the project construction activities are covered under the NPDES Construction General Permit. If covered under the NPDES Construction General Permit, determine the project type and risk level. Prepare a brief memo.

OPTIONAL SERVICE 1:

City Standard Plans: "CONSULTANT" will review and update the twenty-seven City Standard waterline plans, as listed below.

1B	Water Valve Box Installation
2B	Fire Hydrant Assembly
2B-2	Fire Hydrant Locations
3B	Standard Blow off
3B-1	Standard Air-Relief Valves 1" & 2"
4B	Water Service Connection for Meter Sizes, 1", 1-1/2", and 2"

4B-1A	Meter Box and Vault Specifications
5B	Fire Service Loop with Separate Domestic Service
6B	Fire Service Loop with Fire Pump and Tank
8B	Fire and Domestic Service from a Single Connection
10B	Fire and Domestic Combined Service Loop System
12B	Water Service Installation 3" through 10" Meters
13B	Two Meter Manifold Service
14B	Manifold Service 3 or more Meters
14B-1	Manifold Service 3 or more Meters (Alternate Pipe Arrangement)
15B	Installation of Cut-in Tee and Gate Valve
16B	Thrust Block for Horizontal Bends
17B	Waterline Vertical offset
18B	Backflow Prevention Device (1 of 2) Service up to 2"
18B-1	Backflow Prevention Device (2 of 2) Recycled Water
19B	Backflow Prevention Device Enclosure
20B	Domestic RP Assembly Backflow Prevention Device-Sizes 2-1/2" and Larger
21B	Fire Service - Double Check Detector Assembly
22B	Installation of Backflow Prevention Device
23B	Thrust Blocks (Miscellaneous)

24B	Thrust Blocks in Bay Mud - 1 of 2
25B	Thrust Blocks in Bay Mud - 2 of 2

The process for revising the City Standard Water Details will include the following steps:

- 1) Initial review of the current City Water Details
- 2) Redline mark-up of proposed changes to City Water Details by "CONSULTANT" professional engineer and Senior Civil Engineer.
- 3) City to review redline mark-ups from "CONSULTANT" and will add further changes and comments
- 4) Complete the City Water Details update in AutoCAD using CAD files of the current approved Standard Plans
- 5) Distribute Standard plans to City staff for one added round of revisions
- 6) Finalize Standard plans in CAD and prepare PDF booklet for City.

Assumptions for City Water Details:

- a) CAD files to be provided by City for all current details.
- b) Added details will be \$1,500 per 8.5x11 sheets.
- c) Initial submittal will be red-lined mark ups.
- d) Assume one review each for red-lined mark ups and CAD drafted details.
- e) City to circulate to all associated departments such as Fire Prevention Division, Maintenance, Water districts etc.
- f) Submittals - 60% Redlined submittal (10 hard copies); 99% Draft Final (10 hard copies); Final 100% Details (10 hard copies- no binding)
- g) Final Submittal will also be e-mailed as a PDF Booklet.

OPTIONAL SERVICE 2:

Waterline Modeling:

"CONSULTANT" will model the waterline pipes within the project limits of work to optimize the pipe sizing for the sections of the waterlines to be replaced. The following steps are involved in the Modeling:

- 1) "CONSULTANT" will create a Node map for the waterline pipes in *Bentley WaterCAD software*. "CITY" will provide as-built plans, profiles of existing water system within the limits as shown in Attachment 1.
- 2) "CONSULTANT" will include all horizontal, vertical pipe bends, gate valves at tees, crosses, fire hydrant laterals, any fire service main greater than 4" in the Node Map. The pipe elevations will be based on 3' cover from existing ground in absence of waterline profile data.

- 3) "CONSULTANT" will create pump curves to input the existing known flow and pressure at the water main point of connection to existing within the project limits. See location shown on Attachment 1. "CITY" will provide flow and pressure test data (typically performed by the Fire Department at the nearest Fire Hydrants) to incorporate into the pump curves. This data typically consists of a static pressure and 3-residual pressures at different GPM's when the hydrant is flowing. In addition, "CITY" shall provide private fire demand data for any potential future projects along the waterline replacement corridor.
- 4) Once the Model is set up and the data has been input into the Model, "CONSULTANT" will calibrate the model and run the model using the existing pipe data and prepare a Report.
- 5) "CONSULTANT" will perform 2 additional iterations based on increased pipe diameters to optimize the water system within the limits of work and create Reports.
- 6) The model will be coordinated with the Fire Prevention Division for required residual pressures at each fire hydrant.
- 7) Water System Model may be expanded beyond the limits of work upon written approval of additional services budget from "CITY".
- 8) Consultant will generate Water CAD Report for each system run which includes
 - a. Cover Sheet
 - b. Methodology
 - c. Node Map
 - d. Proposed Plan
 - e. Flow and Pressure Data (provided by City)
 - f. Applicable As-built Plans (provided by City)
 - g. Results:
 - i. Pipe Table and Individual Pipe Runs.
 - ii. Junction Table at Nodes showing flow and pressures.
 - iii. Pump Curve Data – From existing flow and pressures
 - iv. Valve Tables
 - v. Head loss Curves for Valves
 - vi. Head loss Curves for Backflows (if applicable)
 - vii. Minor Loss Coefficient Data – Bends, Tees, and Crosses.

OPTIONAL SERVICE 3:

Allowance for Design Services During Construction (2): "CONSULTANT" will provide up to 110 hours of additional construction support to City, in addition to the services provided under Basic Services Task 16 – Design Services During Construction. Examples of construction support includes responding to select RFI's, reviewing key submittals, attendance at construction meeting, and other services requested by the City inspector up to the hours provided for in Exhibit B. "CONSULTANT" will not extend beyond the optional services 3 budget without prior written approval from City.



ATTACHMENT 1
MODELING LIMITS FOR SUNNYVALE WATERLINE
REPLACEMENT PROJECT 2012-13
 Nodes of Known Flow & Pressure

- 14" Water Main
- 12" Water Main
- 8" Water Main

EXHIBIT A-1
 City of Sunnyvale
WATERLINE REPLACEMENT 2012-13
PROJECT NO. UW-12/01-13

ID	Task Name	Duration	Start	Finish	Predest	2012				2013									
						Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4						
1	NTP	1 day	Mon 4/2/12	Mon 4/2/12															
2	Mapping	23 days	Tue 4/3/12	Thu 5/3/12															
3	Set Flight Crosses	3 days	Tue 4/3/12	Thu 4/5/12	1														
4	Aerial Survey #1	2 wks	Fri 4/6/12	Thu 4/19/12	3														
5	Aerial Survey #2	2 wks	Fri 4/20/12	Thu 5/3/12	4														
6	Field Surveying / Utility Locating	3 wks	Fri 4/6/12	Thu 4/26/12	3														
7	Team site walk	1 wk	Fri 4/6/12	Thu 4/12/12	3														
8	Kick-Off Meeting	1 wk	Fri 4/20/12	Thu 4/26/12	4														
9	30% Submittal	34 days	Fri 4/20/12	Wed 6/6/12															
10	Plan production period	4 wks	Fri 4/20/12	Thu 5/17/12	4														
11	Internal submittal for Team review	1 day	Fri 5/18/12	Fri 5/18/12	10														
12	Internal revisions after QC review	1 day	Mon 5/21/12	Mon 5/21/12	11														
13	Submit to City	1 day	Tue 5/22/12	Tue 5/22/12	12														
14	Half-day review meeting	1 day	Wed 5/23/12	Wed 5/23/12	13														
15	City Review Period	2 wks	Thu 5/24/12	Wed 6/6/12	14														
16	60% Submittal	39 days	Thu 5/24/12	Tue 7/17/12															
17	Team site walk for QA	2 days	Thu 5/24/12	Fri 5/25/12	14														
18	Plan production period	5 wks	Thu 5/24/12	Wed 6/27/12	14														
19	Internal submittal for Team review	1 day	Thu 6/28/12	Thu 6/28/12	18														
20	Internal revisions after QC review	1 day	Fri 6/29/12	Fri 6/29/12	19														
21	Submit to City	1 day	Mon 7/2/12	Mon 7/2/12	20														
22	Half-day review meeting	1 day	Tue 7/3/12	Tue 7/3/12	21														

EXHIBIT A-1
City of Sunnyvale
WATERLINE REPLACEMENT 2012-13
PROJECT NO. UW-12/01-13

ID	Task Name	Duration	Start	Finish	Predef	2012				2013										
						Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2							
23	City Review Period	2 wks	Wed 7/4/12	Tue 7/17/12	22															
24	99% Submittal	34 days	Wed 7/4/12	Mon 8/20/12																
25	Team site walk for QA	2 days	Wed 7/4/12	Thu 7/5/12	22															
26	Plan production period	4 wks	Wed 7/4/12	Tue 7/31/12	22															
27	Internal submittal for Team review	1 day	Wed 8/1/12	Wed 8/1/12	26															
28	Internal revisions after QC review	1 day	Thu 8/2/12	Thu 8/2/12	27															
29	Submit to City	1 day	Fri 8/3/12	Fri 8/3/12	28															
30	Half day review meeting	1 day	Mon 8/6/12	Mon 8/6/12	29															
31	City Review Period	2 wks	Tue 8/7/12	Mon 8/20/12	30															
32	Peer Review Period	2 wks	Tue 8/7/12	Mon 8/20/12	30															
33	Final PS&E	18 days	Tue 8/21/12	Thu 9/13/12																
34	Plan production period	3 wks	Tue 8/21/12	Mon 9/10/12	32															
35	Internal submittal for Team review	1 day	Tue 9/11/12	Tue 9/11/12	34															
36	Internal revisions after QC review	1 day	Wed 9/12/12	Wed 9/12/12	35															
37	Submit to For Advertisement	1 day	Thu 9/13/12	Thu 9/13/12	36															
38	Bidding and Construction	197 days	Fri 9/14/12	Mon 6/17/13																
39	Printing and Bid Prep	3 days	Fri 9/14/12	Tue 9/18/12	37															
40	Advertise	24 edays	Tue 9/18/12	Fri 10/12/12	39															
41	Bid Opening	1 day	Mon 10/15/12	Mon 10/15/12	40															
42	Award	2 wks	Tue 10/16/12	Mon 10/29/12	41															
43	NTP	2 wks	Tue 10/30/12	Mon 11/12/12	42															
44	Construction	155 days	Tue 11/13/12	Mon 6/17/13	43															

EXHIBIT A-1
City of Sunnyvale
WATERLINE REPLACEMENT 2012-13
PROJECT NO. UW-12/01-13

ID	Task Name	Duration	Start	Finish	Predest	2012				2013									
						Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4						
1	NTP	1 day	Mon 4/2/12	Mon 4/2/12															
2	Mapping	23 days	Tue 4/3/12	Thu 5/3/12															
3	Set Flight Crosses	3 days	Tue 4/3/12	Thu 4/5/12	1														
4	Aerial Survey #1	2 wks	Fri 4/6/12	Thu 4/19/12	3														
5	Aerial Survey #2	2 wks	Fri 4/20/12	Thu 5/3/12	4														
6	Field Surveying / Utility Locating	3 wks	Fri 4/6/12	Thu 4/26/12	3														
7	Team site walk	1 wk	Fri 4/6/12	Thu 4/12/12	3														
8	Kick-Off Meeting	1 wk	Fri 4/20/12	Thu 4/26/12	4														
9	30% Submittal	34 days	Fri 4/20/12	Wed 6/6/12															
10	Plan production period	4 wks	Fri 4/20/12	Thu 5/17/12	4														
11	Internal submittal for Team review	1 day	Fri 5/18/12	Fri 5/18/12	10														
12	Internal revisions after QC review	1 day	Mon 5/21/12	Mon 5/21/12	11														
13	Submit to City	1 day	Tue 5/22/12	Tue 5/22/12	12														
14	Half-day review meeting	1 day	Wed 5/23/12	Wed 5/23/12	13														
15	City Review Period	2 wks	Thu 5/24/12	Wed 6/6/12	14														
16	60% Submittal	39 days	Thu 5/24/12	Tue 7/17/12															
17	Team site walk for QA	2 days	Thu 5/24/12	Fri 5/25/12	14														
18	Plan production period	5 wks	Thu 5/24/12	Wed 6/27/12	14														
19	Internal submittal for Team review	1 day	Thu 6/28/12	Thu 6/28/12	18														
20	Internal revisions after QC review	1 day	Fri 6/29/12	Fri 6/29/12	19														
21	Submit to City	1 day	Mon 7/2/12	Mon 7/2/12	20														
22	Half-day review meeting	1 day	Tue 7/3/12	Tue 7/3/12	21														

EXHIBIT A-1
City of Sunnyvale
WATERLINE REPLACEMENT 2012-13
PROJECT NO. UW-12/01-13

ID	Task Name	Duration	Start	Finish	Preced	2012				2013			
						Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
23	City Review Period	2 wks	Wed 7/4/12	Tue 7/17/12	22								
24	99% Submittal	34 days	Wed 7/4/12	Mon 8/20/12									
25	Team site walk for QA	2 days	Wed 7/4/12	Thu 7/5/12	22								
26	Plan production period	4 wks	Wed 7/4/12	Tue 7/31/12	22								
27	Internal submittal for Team review	1 day	Wed 8/1/12	Wed 8/1/12	26								
28	Internal revisions after QC review	1 day	Thu 8/2/12	Thu 8/2/12	27								
29	Submit to City	1 day	Fri 8/3/12	Fri 8/3/12	28								
30	Half day review meeting	1 day	Mon 8/6/12	Mon 8/6/12	29								
31	City Review Period	2 wks	Tue 8/7/12	Mon 8/20/12	30								
32	Peer Review Period	2 wks	Tue 8/7/12	Mon 8/20/12	30								
33	Final PS&E	18 days	Tue 8/21/12	Thu 9/13/12									
34	Plan production period	3 wks	Tue 8/21/12	Mon 9/10/12	32								
35	Internal submittal for Team review	1 day	Tue 9/11/12	Tue 9/11/12	34								
36	Internal revisions after QC review	1 day	Wed 9/12/12	Wed 9/12/12	35								
37	Submit to For Advertisement	1 day	Thu 9/13/12	Thu 9/13/12	36								
38	Bidding and Construction	197 days	Fri 9/14/12	Mon 6/17/13									
39	Printing and Bid Prep	3 days	Fri 9/14/12	Tue 9/18/12	37								
40	Advertise	24 edays	Tue 9/18/12	Fri 10/12/12	39								
41	Bid Opening	1 day	Mon 10/15/12	Mon 10/15/12	40								
42	Award	2 wks	Tue 10/16/12	Mon 10/29/12	41								
43	NTP	2 wks	Tue 10/30/12	Mon 11/12/12	42								
44	Construction	155 days	Tue 11/13/12	Mon 6/17/13	43								

EXHIBIT B

BASIC SERVICES RATES AND BUDGET SUMMARY

	TASKS DESCRIPTION	RATE										TOTAL
		\$165	\$150	\$140	\$138	\$145	\$120	\$130	\$170	\$100		
		Bellecci									Radman	
		PRIN	SR PROJ MNGR	PROF ENG. PROJ ENG	SENIOR ENG	PEER REVIEW	ASSIST ENG	OFFICE SRVY	ONE-MAN FIELD CREW	RADMAN		
1	Set Flight Crosses & Field Utility Locating	\$0	\$0	\$0	\$0	\$0	\$0	\$5,200	\$16,320	\$0	\$21,520	
2	Aerial Survey	\$0	\$0	\$350	\$0	\$0	\$0	\$0	\$0	\$8,900	\$9,250	
3	Team Site Walk	\$0	\$600	\$560	\$552	\$0	\$0	\$0	\$0	\$0	\$1,712	
4	Base sheets and 30% Plans	\$330	\$1,200	\$9,870	\$8,280	\$0	\$14,400	\$0	\$0	\$0	\$34,080	
5	30% Estimate	\$0	\$0	\$980	\$1,104	\$0	\$960	\$0	\$0	\$0	\$3,044	
6	60% Plans	\$330	\$1,200	\$8,400	\$8,280	\$580	\$16,260	\$0	\$0	\$0	\$35,050	
7	60% Technical Specs	\$0	\$0	\$980	\$5,520	\$0	\$0	\$0	\$0	\$0	\$6,500	
8	60% Estimate	\$0	\$0	\$980	\$1,104	\$0	\$960	\$0	\$0	\$0	\$3,044	
9	99% Plans	\$330	\$1,200	\$5,600	\$2,760	\$1,740	\$9,600	\$0	\$0	\$0	\$21,230	
10	99% Technical Specs	\$0	\$0	\$0	\$2,760	\$0	\$0	\$0	\$0	\$0	\$2,760	
11	99% Estimate	\$0	\$0	\$0	\$552	\$0	\$540	\$0	\$0	\$0	\$1,092	
12	100% Plans	\$165	\$600	\$1,400	\$3,312	\$870	\$2,460	\$0	\$0	\$0	\$8,807	
13	100% Technical Specs	\$0	\$0	\$0	\$1,794	\$0	\$0	\$0	\$0	\$0	\$1,794	
14	100% Estimate	\$0	\$0	\$0	\$552	\$0	\$480	\$0	\$0	\$0	\$1,032	
15	Allowance for Bid Support	\$165	\$600	\$840	\$897	\$0	\$0	\$0	\$0	\$0	\$2,502	
16	Allowance for CA	\$330	\$1,050	\$3,990	\$2,622	\$0	\$0	\$0	\$0	\$0	\$7,992	
17	Printing Allowance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Team Labor Budget Budget								\$161,409				
7% Sub Mark-up								\$623				
Printing Allowance								\$980				
Total Basic Services								\$163,012				

OPTIONAL SERVICES - BUDGET SUMMARY & RATES

		PRIN	PM	PE	SE	CADD	TOTAL
		\$ 165	\$ 150	\$ 140	\$ 138	\$ 100	
OS1	Allowance for Standard Plans	\$330	\$1,200	\$11,200	\$4,710	\$16,050	\$33,490
OS2	Waterline modeling	\$165	\$1,200	\$9,800	\$965	\$0	\$12,130
OS3	Allowance for Design Services During Construction	\$660	\$3,000	\$5,699	\$4,830	\$0	\$14,190
OS4	Memo for Categorical Exemption	\$0	\$0	\$0	\$3,210	\$0	\$3,210

EXHIBIT B

BASIC SERVICES - HOURS SUMMARY

#	TASKS DESCRIPTION	Bellecci								Sub	TOTAL
		PRINCIPAL	SR PROJ MNGR	PROF ENG, PROJ ENG	SENIOR ENG	PEER REVIEW	ASSIST ENG	OFFICE SRVY	FIELD CREW	RADIMAN	
1	Set Flight Crosses & Field Utility Locating	0	0	0	0	0	0	40	96	0	136
2	Aerial Survey	0	0	2.5	0	0	0	0	0	89	91.5
3	Team Site Walk	0	4	4	4	0	0	0	0	0	12
4	Base sheets and 30% Plans	2	8	70.5	60	0	120	0	0	0	260.5
5	30% Estimate	0	0	7	8	0	8	0	0	0	23
6	60% Plans	2	8	60	60	4	135.5	0	0	0	269.5
7	60% Technical Specs	0	0	7	40	0	0	0	0	0	47
8	60% Estimate	0	0	7	8	0	8	0	0	0	23
9	99% Plans	2	8	40	20	12	80	0	0	0	162
10	99% Technical Specs	0	0	0	20	0	0	0	0	0	20
11	99% Estimate	0	0	0	4	0	4.5	0	0	0	8.5
12	100% Plans	1	4	10	24	6	20.5	0	0	0	65.5
13	100% Technical Specs	0	0	0	13	0	0	0	0	0	13
14	100% Estimate	0	0	0	4	0	4	0	0	0	8
15	Allowance for Bid Support	1	4	6	6.5	0	0	0	0	0	17.5
16	Allowance for CA	2	7	28.5	19	0	0	0	0	0	56.5
17	Printing Allowance	0	0	0	0	0	0	0	0	0	0
Person Hours		7	32	208	265	22	380.5	40	96	89	1139.5
Team Hours		1139.5									

EXHIBIT B

OPTIONAL SERVICES (OS1 - OS4) - HOURS SUMMARY

#	OPTIONAL SERVICES	Bellecci					TOTAL
		PRINCIPAL	SR PROJ MNGR	PROF ENG, PROJ ENG	SENIOR ENG	CAD DRAFTER	
OS1	Allowance for Standard Plans	2	8	80	34.1	161	284.6
OS2	Waterline modeling	1	8	70	7.0	0	86.0
OS3	Allowance for Design Services During Construction	4	20	40.7	35	0	99.7
OS4	Memo for Categorical Exemption	0	0	0	23.3	0	23.3

EXHIBIT B

CITY OF SUNNYVALE WATERLINE REPLACEMENT 2012-2013

BASIC SERVICES

#	TASKS DESCRIPTION	AMOUNT
1	Set Flight Crosses & Field Utility Locating	\$21,520
2	Aerial Survey (including 7% mark-up on Sub)	\$9,803
3	Team Site Walk	\$1,719
4	Base sheets and 30% Plans	\$34,090
5	30% Estimate	\$3,064
6	60% Plans	\$35,070
7	60% Technical Specs	\$6,520
8	60% Estimate	\$3,064
9	99% Plans	\$21,230
10	99% Technical Specs	\$2,760
11	99% Estimate	\$1,064
12	100% Plans	\$8,760
13	100% Technical Specs	\$1,760
14	100% Estimate	\$1,064
15	Allowance for Bid Support	\$2,524
16	Design Services During Construction	\$8,000
17	Printing Allowance	\$1,000
Subtotal Basic Services		\$163,012

OPTIONAL SERVICES (OS)

#	TASKS DESCRIPTION	AMOUNT
OS1	City Waterline Standard Plans Update	\$33,490
OS2	Waterline Modeling	\$12,130
OS3	Allowance for Design Services During Construction (2)	\$14,190
OS4	Memo for Categorical Exemption	\$3,210
Subtotal Optional Services		\$63,020

TOTAL BASIC SERVICES + OPTIONAL SERVICES= \$226,032

EXHIBIT "C"
INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the Agreement 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 CONSULTANT, its 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 for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. 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 CONSULTANT's profession: \$1,000,000 per occurrence.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared and approved by CITY. 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. CITY, its officials, employees, agents and volunteers are to be covered as additional insureds with respect to liability arising out of activities performed by or on behalf of CONSULTANT; products and completed operations of CONSULTANT; premises owned, occupied or used by CONSULTANT; or automobiles owned, leased, hired or borrowed by CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to CITY, its officers, employees, agents or volunteers, except as follows: Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of section 2782 of the Civil Code.

2. For any claims related to this project, CONSULTANT's insurance shall be primary. Any insurance or self-insurance maintained by CITY, its officers, officials, employees, agents and volunteers shall be excess of 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 CITY, its officers, officials, employees, agents or volunteers.
4. 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 CITY.

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 CITY.

Verification of Coverage

CONSULTANT shall furnish to CITY original Certificate(s) of Insurance and endorsements effecting the coverage required. The Certificate(s) shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received and approved by CITY prior to commencement of work.

Water Line Replacement 2012-2013 Project Locations

	Approx. Lineal Feet
Murphy 1 Upsize to 6" & 8" PVC, new service connections/meters/fire hydrants/gate	
B/M 409 - Replace 6" CI with 8" PVC on Murphy Ave. between Arques and Maude	1,717
B/M 432 Replace 4" CI with 6" PVC on Chestnut Ave. to Stowell Ave.	345
B/M 409 - Replace 4" CI with 6" PVC on Orchard Ave. between Walnut and Chestnut	1,285
B/M 409 Replace 4" CI with 8" PVC on Walnut Ave. to Stowell Ave.	320
B/M 431 - Replace 4" CI with 8" PVC on Maude Ave. to Sunnyvale Ave	690
B/M 409 - Replace 4" CI with 6" PVC on Hazelton Ave. between Sunnyvale and Bayview	640
Sub-total	4,997
Murphy 2 Upsize to 6" PVC, new service connections/meters/fire hydrants/gate valves	
B/M 369 Replace 4" CI with 6" PVC on Murphy Ave. between Hendy and California	1,030
B/M 368 - Replace 4" CI with 6" PVC on Francis St. between Hendy and California	985
B/M 368 Replace 4" CI with 6" PVC on Taaffe Ave. between Hendy and Beemer	515
B/M 368 Replace 4" CI with 6" PVC on Angel Ave. between Taaffe and Angel	475
B/M 368 Replace 6" CI with 6" PVC on Angel Ave. between Angel and Beemer	340
B/M 368 Replace 4" CI with 6" PVC on Beemer Ave. between Angel and Francis	815
Sub-total	4,160
Street Re-Const Upsize to 14" PVC, new service connections/meters/fire hydrants/gate valves	
B/M 396 - Replace 10" CI with 14" PVC on Evelyn Ave. between Mary and Bernardo	1,590
Replace 10" CI with 14" PVC on Evelyn Ave. between Mary and Bernardo	726
B/M 367 - Replace 10" CI with 14" PVC on Evelyn Ave. between Mary and Charles	2,964
Sub-total	5,280
Downtown Upsize to 6" & 8" PVC, new service connections/meters/fire hydrants/gate	
B/M 327 - Replace 4" CI with 8" PVC on Charles Ave. between Iowa and Evelyn	2,330
B/M 327 - Replace 4" CI with 6" PVC on Florence Ave. between Iowa and Evelyn	2,330
B/M 327 - Replace 4" CI with 6" PVC on Waverly Ave. between Iowa and Evelyn	2,030
Sub-total	6,690

Approximate total length in lineal feet

21,127

Note: the pipe length are approximate and for proposal use only.