SUBJECT: Award a Sunnyvale Works! Contract for Design and Construction Support Services for Citywide Sanitary Sewer Main Replacements 2010 (F0904-93)

BACKGROUND
Approval is requested to award a contract to West Yost Associates of Walnut Creek in an amount not to exceed $160,835, to design and provide construction support services for the 2010 Citywide Sanitary Sewer Main Replacements project, and to approve a 10% project contingency in the amount of $16,084. The proposed contract also includes video inspections of all sewer lines included in the project.

This proposed contract was developed in conjunction with the pre-qualification process established at the outset of the Sunnyvale Works! program. West Yost was selected from among five prequalified firms who submitted proposals on the project.

DISCUSSION
The Fiscal year 2009/2010 Budget includes Capital project 825331, Replacement/Rehabilitation of Sewer Pipes. This project provides funding in each of the years of the Twenty Year Resource Allocation Plan for the prioritized replacement or rehabilitation of sewer mains as they are identified to be in need of replacement. The project allows for the investigation of alternative replacement technologies, including lining and “pipe bursting” and replacement on a location by location basis to generate cost savings.

The sewer main replacements scheduled for 2010 include approximately 8,819 lineal feet of piping at the following locations:

- Maude Avenue between Borregas and Fair Oaks, replace 14” mainline of approximately 2,690 feet.
- Nectarine Avenue between Cambridge and Peach, replace 8” mainline of approximately 1066 feet.
- Bennington Drive between Citron and Grape, replace 8” mainline of approximately 615 feet.
- Parkington Avenue between Knickerbocker and Bernardo, replace 6” mainline of approximately 1015 feet.
• Parkington Avenue between Bernardo and Grape, replace 8” mainline of approximately 660 feet.
• Lois Avenue between Lynn and Blair, replace 6” mainline of approximately 1133 feet.
• Ramona Avenue between Blair and Lynn, replace 6” mainline of approximately 935 feet.
• Sydney Drive between Cascade and mid-block, replace 8” mainline of approximately 255 feet.
• Piedra Avenue between Matadero and Bidwell, replace 8” mainline of approximately 745 feet.
• Carson Avenue between Mary and Piedra, replace 8” mainline of approximately 843 feet.
• Bidwell Avenue between Mary and Piedra, replace 8” mainline of approximately 507 feet.

This contract is recommended for approval in order to design the plans and specifications necessary for construction, and to provide construction support services. As part of their design evaluation, the engineering consulting firm will review every job location for the possibility of using replacement technologies less expensive than the conventional open cut pipe replacement.

**FISCAL IMPACT**
Expenditures are budgeted in Project 825331, funded through the Wastewater Management 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 West Yost Associates, in substantially the same form as the attached draft Consultant Services Agreement and in an amount not to exceed $160,835, for design and construction support services for the Citywide Sanitary Sewer Main Replacements 2010 and

2. Approve a project contingency in the amount of $16,084.
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. Luebbers, City Manager

**Attachments**

A. Draft Consultant Services Agreement
CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF SUNNYVALE AND WEST YOST ASSOCIATES FOR DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR CITYWIDE SANITARY SEWER MAIN REPLACEMENT 2010

THIS AGREEMENT dated ______________________________ is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and WEST YOST ASSOCIATES ("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 Sanitary Sewer Main Replacements 2010 (Project No.SVW-008); 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 Vivian Housen, 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 including Total Design in the amount of $134,761.00 (Tasks 1-4) and Bid and Construction Services in the amount of $26,074.00 (Tasks 5 and 6). In no event shall the total amount of compensation payable under this agreement exceed the sum of One Hundred Sixty Thousand Eight Hundred Thirty Five and No/100 Dollars ($160,835.00) 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 sound 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 professional engineering practice in compliance with applicable and non-conflicting 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, reuse or misuse of this material to third parties for work other than on Project.

14. **Hold Harmless/Indemnification**

To the extent permitted by law, 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 and reimbursable attorneys' fees in connection with any injury or damage to persons or property to the extent arising out of any negligent act, error, omission or negligence 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 or active negligence 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: Chuck Neumayer, Senior Engineer  
Department of Public Works  
CITY OF SUNNYVALE  
P. O. Box 3707  
Sunnyvale, CA 94088-3707

To CONSULTANT: WEST YOST ASSOCIATES  
Attn: Vivian Housen, P.E.  
2185 N. California Blvd., Suite 315  
Walnut Creek, CA 94596

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 _____________________________  By _____________________________
  City Clerk                        City Manager

WEST YOST ASSOCIATES ("CONSULTANT")

By _____________________________

APPROVED AS TO FORM:

______________________________
  Name/Title

______________________________
  City Attorney

By _____________________________

______________________________
  Name/Title
Approach and Scope of Services

The City of Sunnyvale (City) seeks design services for sewer rehabilitation projects that address known structural deficiencies. The projects are located in residential neighborhoods where property access and continuous sewer service are critical. Traffic flow at all intersections must be maintained. Work on Maude Avenue and within Fair Oaks Drive, in particular, must consider heavy traffic patterns and bus routes. All designs must utilize construction methods that provide the lowest cost and least neighborhood impact.

The West Yost team has extensive experience with replacement and rehabilitation of sewer pipelines similar in size and nature to the City’s sanitary sewer mains. We understand and have demonstrated success addressing the issues that can significantly impact project designs. For the City’s projects, pipe bursting and conventional open cut construction will be compared to select the best replacement option for each particular alignment. If current and future flows, pipeline diameter, and maintenance records support pipe lining in lieu of replacement, lining will also be considered as a viable option.

As demonstrated by the project experience submitted in our Statement of Qualifications, this project team has worked together on many pipeline replacement projects with challenges similar to those faced by the City. We bring a work-with approach to develop designs that integrate City standards and needs, and use construction methods that best meet the unique challenges presented by each alignment. Our design approach provides flexibility and creativity.

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Challenges</th>
<th>Solutions and benefits</th>
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<tbody>
<tr>
<td>MAUDE AVENUE FROM BORREGAS TO FAIR OAKS</td>
<td>Large pipe (14-inch diameter) and the longest pipe (2,690 ft) presents bypassing challenges, and increases construction impact</td>
<td>Open cut construction may be preferred to reduce need for bypassing</td>
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<td>Heavily traveled roadway requires carefully planned traffic control and consideration of traffic loops</td>
<td>Alternatively, pipe bursting or pipe lining, if viable, reduces construction impacts</td>
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<td></td>
<td>Commuter and bus routes require advance coordination and may limit construction periods</td>
<td>West Yost’s communication strategy involves stakeholders early, addressing coordination needs early in design</td>
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<td>Bishop Elementary School along route must remain accessible during drop-off/pick-up hours</td>
<td>Limiting allowable feet of open trench reduces the number of residents immediately impacted by construction</td>
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<td></td>
<td>Construction must allow driveway ingress and egress on these quiet, residential streets</td>
<td>Bidding bursting against open cut construction provides the lowest cost option, with similar levels of construction impact (due to high number of lateral connections)</td>
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<td>Number of required lateral connections may overcome benefits of trenchless construction</td>
<td>Early permitting ensures that construction constraints are incorporated into bid documents</td>
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<td>Big trees on Parkington and Ramona could impact laterals or even the main line</td>
<td>Using manholes in busy intersections as receiving facilities for pipe bursting operations limits extent and duration of traffic impact</td>
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<td>Coordination with PGE critical in the Bennington power corridor</td>
<td>Pneumatic pipe bursting presents less ground vibration and provides good performance in wet soils</td>
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<td>NECTARINE AVENUE FROM CAMBRIDGE TO PEACH</td>
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<td>BENNINGTON DRIVE FROM CITRON TO GRAPE</td>
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<td>RAMONA AVENUE FROM BLAIR TO LYNN</td>
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<td>CYPRESS AVENUE FROM FAIR OAKS TO BRITTON</td>
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<td>PARKINGTON AVENUE FROM KNICKERBOCKER TO BERNARDO</td>
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West Yost’s team successfully met project challenges including major streets, private property backyard easements, traffic control plans and detours, temporary construction easements, and permitting from multiple agencies for the Central Trunk Rehabilitation Project.

to create the most cost-effective and reliable solutions that are tailored to each project.

We have a proven approach toward pipeline and pump station designs that addresses the key project issues presented by the City’s projects:

- Construction methods must consider existing soils and setting, traffic impacts, existing utilities, and should minimize neighborhood impacts
- Pipeline replacements must effectively and reliably reduce infiltration and inflow, at the lowest cost to the ratepayers
- Designs must integrate proactive planning to ensure no interruption to sewer flows during construction

Construction methods must consider existing soils and setting, traffic impacts and existing utilities, while minimizing construction impacts

Many of the City’s projects are ideal candidates for pipe splitting. Pipe splitting, bursting, or reaming has proven to be a highly cost-effective replacement method under optimum conditions, and will be considered first for those pipelines that are removed and replaced in their current location. Pipe bursting will upsize 6-inch pipe to 8-inch diameter in suitable conditions. Construction impacts are limited to access pits and lateral connection points. Spoils and asphalt removal are minimized, resulting in cost savings to the Contractor and City.

Where conditions are not supportive of pipe splitting, open trench construction will be evaluated as a cost-effective alternative. Conditions that may preclude pipe splitting include unfavorable geotechnical conditions, utilities in close proximity to the burst pipeline, frequent lateral sewer connections, and shallow existing pipeline depth or sags.

In addition to pipe splitting and open trench construction, the City may encounter project conditions that support trenchless installations such as pipe lining. Lining is beneficial in pipes with excess capacity for both existing and future sewer flows, and in pipes that can be sufficiently maintained using hydroflushing in lieu of power rodding with potential damaging cleaning tools. The Maude Avenue pipeline, in particular, with its traffic impacts and large diameter, may be a good candidate for pipe lining.

Our team members are well versed in the benefits and pitfalls of pipe lining, and will apply this knowledge to your projects to determine whether lining will provide needed long-term reliability. Designs will consider options to bid more than one replacement method, in order to secure the lowest project cost for the City.
West Yost offers the City expertise in all methods of pipe rehabilitation including trenchless technologies.

Pipeline replacements must effectively and reliably reduce infiltration and inflow

The cities throughout the Bay Area are under increasing scrutiny to reduce infiltration that can lead to sanitary sewer overflows (SSOs). In order to remain proactive with regard to reducing SSOs, the City's replacement projects must provide the greatest assurance of infiltration and inflow (I&I) reduction now and into the future.

Pipe splitting technologies use high density polyethylene pipe (HDPE), which has a published design life that is greater than the older vitrified clay. HDPE joints are butt-fused. These fused joints prevent root intrusion – a predominant source of pipe damage and I&I. Because pipe bursting does not remove sags, spot repairs would be included in the design to remove sags and improve flow characteristics through the new pipe.

Designs must integrate proactive planning to ensure no interruption to sewer flows during construction

Project locations on Nectarine, Cypress, Parkington, Lois, and Ramona Avenues, and Bennington drive are lined with homes. Maude Avenue is a busy thoroughfare that hosts a number of small businesses. Any sewer replacement project will be cause for concern to these residents and businesses, and continuous service must be maintained.

Pipe splitting, or other rehabilitation methods such as lining, require continuous sewer bypassing. A proactive plan for sewer bypassing is especially important in areas of heavy traffic or narrow access, or in pipelines with significant flow. Designs will consider bypassing needs, such as locating bursting pits in areas that can readily accommodate bypassing equipment. Replacement strategies for pipes that provide service to critical facilities will be developed to maintain service at all times. Public outreach may be required in critical project locations.

The West Yost team is experienced with public outreach and meetings, and will begin communication efforts early to make sure that projects move smoothly through the construction phase.
We will implement this approach using the following work plan. Our work plan provides:

- A design that accommodates existing soils and setting, traffic impacts, existing utilities, and minimizes neighborhood impacts
- Replacement methodologies that effectively and reliably reduce infiltration and inflow, at the lowest cost to the ratepayers
- Designs that integrate proactive planning to ensure no interruption to sewer flows during construction

Work Plan

Task 1 – Project Management and Coordination

Vivian Housen, West Yost's project manager, will lead the project team, serve as the primary interface with City staff and stakeholders, and will be the primary point of contact for permitting, and, if needed, easement discussions. This task includes preparation of a project work plan and schedule, monitoring budget and progress, and facilitating project meetings. Vivian and the project team will work closely with the City's project manager to ensure timely and responsive coordination and communication.

Task 2 – Preliminary Design Workshop

West Yost will conduct a preliminary design workshop that clearly identifies and addresses project issues and constraints, and provides the necessary recommendations for proceeding with detailed design. The workshop will not only be important for the project team, but also for any stakeholders that have a role in the success of the project, such as representatives from adjacent schools, businesses, utilities, or permitting agencies. The workshop will confirm a design concept that balances the project's technical, permitting, community impact, cost, and schedule concerns. Necessary manhole replacements will be identified as part of this effort. West Yost will complete the following subtasks in preparation for the preliminary design workshop:

- Review existing reports, facility drawings, utility information, maps, CCTV records, and design standards and specifications provided by the City.
- Obtain design survey data and a preliminary geotechnical understanding.
- Obtain and review utility information.
- Prepare documentation for environmental clearance through a Categorical Exemption.
- Develop preliminary project drawings with detailed surface, overhead, and underground utilities and features, and the proposed preliminary pipeline alignments.
- Develop a conceptual construction schedule, and a preliminary engineer's estimate of construction cost.

Task 3 – Plans, Specifications, and Cost Estimates

West Yost will obtain all necessary permits and coordinate with project stakeholders as needed to finalize construction requirements in the contract documents. In addition to coordination with the City, depending on the project location, coordination will be required with PG&E, Comcast Cable, AT&T, Santa Clara Valley Transportation Authority (VTA), U.S. Postal Service, and other underground utilities. West Yost will evaluate special requirements for maintaining vehicular and pedestrian traffic flow, will document the locations of existing traffic signal electrical wiring, will complete needed survey and geotechnical activities, and produce detailed and accurate plans and specifications for construction. West Yost will meet with City to discuss comments at the 60% and 99% design stages, will develop construction cost estimates at the 60% milestone, and will deliver signed and sealed 100% construction plans and specifications, suitable for bidding, and an accompanying engineer's estimate. The submittals will be
accompanied by responses to comments from the City on prior submittals.

In conjunction with the final design documents, West Yost will provide a Certification of Peer Review and final list of submittals.

**Task 4 – Bid Phase**

West Yost will prepare for and attend the pre-bid conference, and will respond to questions by issuing contract addenda. West Yost will attend the bid opening and assist with the analysis of bid results, as requested by the City. West Yost will prepare conformed documents that reflect changes to the bid documents as described in the addenda.

**Task 5 – Construction Period Services**

West Yost will provide engineering services during construction, including reviewing submittals, responding to Requests for Information, issuing clarifications, attending the pre-construction meeting and one follow-up construction meeting, conducting one site visit, assisting with change order preparation, assisting with final inspection and punch list development, and preparing record drawings upon completion of construction. This task does not include daily inspection, contract administration, or construction management during the construction phase.
**Schedule**

<table>
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<tr>
<th>ID</th>
<th>Task Name</th>
<th>Duration</th>
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<tbody>
<tr>
<td>1</td>
<td>Notice to Proceed</td>
<td>0 days</td>
</tr>
<tr>
<td>2</td>
<td>Project Management</td>
<td>73 days</td>
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<tr>
<td>3</td>
<td>Preliminary Design</td>
<td>18 days</td>
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<tr>
<td>4</td>
<td>Kickoff Meeting</td>
<td>0 days</td>
</tr>
<tr>
<td>5</td>
<td>Review Information / Confirm Hydraulics</td>
<td>7 days</td>
</tr>
<tr>
<td>6</td>
<td>Finalize Alignment and Methods</td>
<td>15 days</td>
</tr>
<tr>
<td>7</td>
<td>Preliminary Design Workshop</td>
<td>0 days</td>
</tr>
<tr>
<td>8</td>
<td>Geotechnical Investigation (As-Needed)</td>
<td>2 mos</td>
</tr>
<tr>
<td>9</td>
<td>Design</td>
<td>58 days</td>
</tr>
<tr>
<td>10</td>
<td>60%</td>
<td>15 days</td>
</tr>
<tr>
<td>11</td>
<td>City Review</td>
<td>10 days</td>
</tr>
<tr>
<td>12</td>
<td>99% Plans and Specifications</td>
<td>13 days</td>
</tr>
<tr>
<td>13</td>
<td>City Review</td>
<td>10 days</td>
</tr>
<tr>
<td>14</td>
<td>100% Biddable Documents</td>
<td>7 days</td>
</tr>
<tr>
<td>15</td>
<td>Other Services</td>
<td>0 days</td>
</tr>
<tr>
<td>16</td>
<td>Bid Period Services</td>
<td>0 days</td>
</tr>
<tr>
<td>17</td>
<td>Engineering Services During Construction</td>
<td>0 days</td>
</tr>
</tbody>
</table>

**EXHIBIT "A-1"**
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 claim 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 state that coverage shall not be cancelled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by mail has been given to the City of Sunnyvale, or ten (10) days notice due in case of non-payment of premium.

**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.