City of Palo Alto
City Council Staff Report

Report Type: Consent Calendar  Meeting Date: 7/11/2011

Summary Title: Crossbore Investigation and Rule 23 Amendment

Title: Approval of a Gas Enterprise Fund Contract with HydromaxUSA, LLC in the Total Amount of $3,523,950 for Professional Services for the Cross-bore Investigation by CCTVing Sanitary Sewer Laterals and Adoption of a Resolution Approving an Amendment to Utilities Rule and Regulation 23 (B and C) Pertaining to Special Wastewater Utility Regulations

From: City Manager

Lead Department: Utilities

Recommendation

1. Staff recommends that the Council approve and authorize the City Manager or his designee to execute the attached agreement with Hydromax USA, LLC. (Attachment A) for a not-to-exceed amount of $3,523,950 for Closed Circuit Television Inspection (CCTV inspection) and associated data processing services of wastewater laterals for the purpose of detecting gas cross-bores.

2. Staff recommends that Council approve and authorize the City Manager or his designee to negotiate and execute one or more change orders to the contract with Hydromax USA, LLC for additional services that may be required during this project for unforeseen developments, the total value of which shall not exceed $276,050 or 8% of the proposal cost.

3. Staff recommends that the Council adopt a resolution (Attachment B), approving an amendment to Utilities Rule and Regulation 23 (B and C), which will be effective upon the Council’s adoption of the resolution.

Background

Trenchless installation technology for utility service line installation has been employed since the 1970s. Trenchless installation techniques are less expensive and require minimal surface disruption in comparison to traditional open-cut construction methods. When gas pipe is installed by trenchless techniques and the existence of intersecting different utility lines are not verified by potholing or CCTV inspection, it is possible for the new pipe to be installed, resulting in the penetration of an existing pipe. This occurrence is known as a ‘cross-bore’. Since the 1970s, polyethylene gas service lines have been installed by the trenchless installation method. Gas pipes inadvertently installed in wastewater pipes can cause backups in the wastewater
lines and efforts to clear these blockages with mechanical equipment, commonly used by plumbers, may damage cross-bored gas lines during the cleaning effort. Recently, industry has become aware of an increase in cross-bore incidents nationwide. The proposed agreement will enable the City to proactively identify and appropriately deal with cross-bores.

Current work methods for the installation of gas lines require positive video verification of all adjacent wastewater lines, post gas service installation, prior to the introduction of gas into the new service line. This program will focus on wastewater laterals associated with gas lines that were installed before the current work methods were adopted. Mainlines will also be inspected.

Staff issued a press release on April 26, 2011, informing Palo Alto gas utility customers of the cross-bore safety program. Additional information was provided by mail to our customers, detailing the program and informing them that, in the event of a sewer blockage, they should call the City before contacting a plumber (Call Before You Clear). Mailers were also sent to drain-cleaning firms and plumbers operating in the area, indicating the importance of contacting the City prior to undertaking any sewer cleaning efforts. Information about the program is posted to the Utilities section of the City’s webpage.

Utilities Rule and Regulation 23 is being amended to allow the City to perform inspections of private laterals to determine if a cross bore has occurred and to make repairs if needed. In addition, the rule is being revised to provide an incentive to customers to allow the city to move the City’s clean out from the customers property to the edge of the Public Right-of-Way. The City will move the clean out at no expense to the customer. If the customer does not want to allow the City to move the clean out, the customer will be responsible for the lateral from the home to the main. This change is being made to limit the footage of City-owned laterals on customer property.

Discussion
On Tuesday, April 19, 2011 the City advertised the RFP. The scope and objectives were developed by the Utilities Department. A pre-proposal, non-mandatory teleconference was held on Tuesday, April 26, 2011, to review and discuss the proposal. Ten (10) parties participated in the teleconference. On Tuesday, May 10, 2011, eight (8) responses were received for the request for proposal. The Utilities Department staff evaluation team ranked the eight (8) proposals and conducted interviews with four (4) firms. The selection criteria for the firms, invited for oral interviews, were based on cost, experience, available resources, ability to comply with proposed schedule and quality control methods.

Project Scope
This project will determine whether cross-bores exist in wastewater laterals between the wastewater main and the structure it serves. Each lateral will be videoed and annotated to document whether the lateral is cross-bore-free. In the event that a cross-bore is detected, the City’s CCTV inspection contractor will secure the site and notify the City accordingly. Quality assurance and the tracking of the program's progress are key components to assure that
verification efforts identify all potential cross-bore locations. The City’s contractor will have three separate levels of in-house data checking prior to submission of information to the City. All inspected laterals will be tracked by the City through the enterprise GIS system.

Lateral launching of video equipment from the wastewater main is a recently developed technology that minimizes the need to launch video equipment from private property. Lateral launching of CCTV equipment will be pulled through the wastewater main and then directed up each individual lateral to create images from the main to the structure served. The City's contractor will also collect video images of the wastewater mains, thereby enhancing maintenance activities associated with these facilities.

The principle objectives of this project are:

1. Verify the absence of gas cross-bores in both the City-owned and privately-owned components of the wastewater collection system.
2. Create video records and report condition of designated wastewater laterals and mains in the City.
3. Indentify the existence of cross-bores and provide notification to the City in order that appropriate action may be undertaken.
4. Document all inspections and track the project’s progress with the City's GIS system.

The deliverables include the following:

1. Provide individual video files of all wastewater laterals inspected. Lateral lines shall be cleaned using methods that will not damage potential cross-bores or the lateral to enable proper CCTV inspection.
2. Provide a digital map at monthly intervals during the course of the project for purposes of tracking the completed work, pending work, and work in-progress.
3. Provide video files of wastewater mains.

Solicitation Process

A summary of the request for proposal process is outlined below:

<table>
<thead>
<tr>
<th>Proposal Title</th>
<th>CCTVing Sanitary Sewer Laterals to Investigate System Integrity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Number</td>
<td>140966</td>
</tr>
<tr>
<td>Proposed Length of Contract</td>
<td>One (1) year</td>
</tr>
<tr>
<td>Number of Proposal Mailed</td>
<td>10; Proposal was also available online.</td>
</tr>
<tr>
<td>Total days to Respond to Proposal</td>
<td>28 days</td>
</tr>
</tbody>
</table>
Attachment A, the Agreement, contains a complete description of the scope of service. Due to the specialized nature of this service, the equipment required to complete this project and the applicable critical quality assurance methods, it was determined that a contractor possessing these specialized skills and resources is required.

**Timeline**
This project is scheduled to start in late July 2011 and to be finished within 18 months or by January 2013. The project completion time in the RFP was specified as 12 months, however, during the selection process, it was determined that 18 months would be a more appropriate time period in which to successfully complete this project; this is consistent with the City’s publicly stated goal of completing this project by January 2013. Based on the City contractor’s resources required and in-house resources to fully address field issues, a decision was made to extend the contract term beyond the initial schedule in lieu of employing multiple contractors in order to complete the project within a shorter timeframe. This decision was also based on the desire to obtain consistent data and to minimize staff impact.

Rule 23 (Special Wastewater Utility Regulations) establishes the City’s authority to inspect and temporarily take responsibility for the wastewater sewer lateral on the customer side of the cleanout in order to appropriately deal with a cross-bore that might have been created by the City. In the event a cross-bore is identified or a video camera becomes lodged in the privately-owned portion of a lateral, the City will be authorized to address the incident. Rule 23, as amended, confers upon the City the responsibility to appropriately address cross-bore incidents. Additionally, rule changes were made to define the limits of the City’s responsibility associated with laterals on private property.

Attachment C is Utilities Rule and Regulation 23, as amended. A redlined version of Rule and Regulation 23, as amended, is available online. A paper redline copy is available for viewing in the Clerk’s Office.

**Resource Impact**
The funds for this project are included in the FY 2012 Utilities Operating Budget. This project will be managed by Utilities Department Staff.
Proposed changes to Rule and Regulation 23 has minimal resource impact.

**Policy Implications**  
This recommendation is consistent with the Council approved Utilities Strategic Plan Key Strategy #2, “invest in utility infrastructure to deliver reliable service.”

**Environmental Review**  
This project is categorically exempt from California Environmental Quality Act (CEQA) pursuant to CEQA Guideline Sections 15301 (b) repair, maintenance of existing facilities and 15302 (c) replacement or reconstruction of existing facilities.

**Attachments:**
- Attachment A: Agreement - Hydromax C12140966 (PDF)
- Attachment B: Resolution - Rule and Regulation 23 (PDF)
- Attachment C: Rule and Regulation 23 Cross-bore issue (PDF)

Prepared By: Robert Item, Project Engineer  
Department Head: Valerie Fong, Director  
City Manager Approval: James Keene, City Manager
CITY OF PALO ALTO CONTRACT NO. C12140966

GENERAL SERVICES AGREEMENT

THIS AGREEMENT made and entered into on the 18th day of July, 2011, by and between the CITY OF PALO ALTO, a California Chartered Municipal Corporation ("CITY"), and HYDROMAX USA, LLC, an Indiana corporation, located at 344 Kenderdine Road, Chandler, IN 47610, Telephone Number: (812) 925-3930 ("CONTRACTOR"). In consideration of their mutual covenants, the parties hereto agree as follows:

1. SERVICES. CONTRACTOR shall provide or furnish the services ("Services") described in the Scope of Services, attached as Exhibit A.

2. EXHIBITS. The following exhibits are attached to and made a part of this Agreement:

   - [X] "A" - Scope of Services
   - [X] "B" - Schedule of Performance
   - [X] "C" - Compensation
   - [X] "D" - Insurance Requirements
   - [X] "E" - Performance and/or Payment Bond
   - [ ] "F" - Liquidated Damages

   CONTRACT IS NOT COMPLETE UNLESS ALL EXHIBITS ARE ATTACHED.

3. TERM. The term of this Agreement is from July 18, 2011 to December 31, 2012 inclusive, subject to the provisions of subsection 3.(b) and Section Q and V of the General Terms and Conditions.

4. SCHEDULE OF PERFORMANCE. CONTRACTOR shall complete the Services within the term of this Agreement in a reasonably prompt and timely manner based upon the circumstances and direction communicated to CONTRACTOR, and if applicable, in accordance with the schedule set forth in the Schedule of Performance, attached as Exhibit B. Time is of the essence in this Agreement.

5. COMPENSATION FOR ORIGINAL TERM. CITY shall pay and CONTRACTOR agrees to accept as not to exceed compensation for the full performance of the Services and reimbursable expenses, if any:

   - [ ] The total maximum lump sum compensation of dollars ($ ); OR
   - [ ] The sum of dollars ($ ) per hour, not to exceed a total maximum compensation amount of dollars ($ ); OR
   - [X] A sum calculated in accordance with the fee schedule set forth in Exhibit C, not to exceed a total maximum compensation amount of Three Million Five Hundred Twenty Three Thousand Nine Hundred Fifty dollars ($3,523,950).

CONTRACTOR agrees that it can perform the Services for an amount not to exceed the total maximum compensation set forth above. Any hours worked or services performed by CONTRACTOR for which payment would result in a total exceeding the maximum amount of compensation set forth above for performance of the Services shall be at no cost to CITY.

   - [X] The City has set aside the sum of Two Hundred Seventy Six Thousand Fifty dollars ($276,050) for Additional Services. CONTRACTOR shall provide Additional Services only by advanced, written authorization from the City Manager or designee. CONTRACTOR, at the CITY's request, shall submit a detailed written proposal including a description of the scope of services, schedule, level of effort, and CONTRACTOR's proposed maximum compensation, including reimbursable

Rev. January 11, 2010
expense, for such services. Compensation shall be based on the hourly rates set forth above or in Exhibit C (whichever is applicable), or if such rates are not applicable, a negotiated lump sum.

CITY shall not authorize and CONTRACTOR shall not perform any Additional Services for which payment would exceed the amount set forth above for Additional Services. Payment for Additional Services is subject to all requirements and restrictions in this Agreement.

6. COMPENSATION DURING ADDITIONAL TERMS.

☐ CONTRACTOR’S compensation rates for each additional term shall be the same as the original term; OR

☐ CONTRACTOR’s compensation rates shall be adjusted effective on the commencement of each Additional Term. The lump sum compensation amount, hourly rates, or fees, whichever is applicable as set forth in section 5 above, shall be adjusted by a percentage equal to the change in the Consumer Price Index for Urban Wage Earners and Clerical Workers for the San Francisco-Oakland-San Jose area, published by the United States Department of Labor Statistics (CPI) which is published most immediately preceding the commencement of the applicable Additional Term, which shall be compared with the CPI published most immediately preceding the commencement date of the then expiring term. Notwithstanding the foregoing, in no event shall CONTRACTOR’s compensation rates be increased by an amount exceeding five percent of the rates effective during the immediately preceding term. Any adjustment to CONTRACTOR’S compensation rates shall be reflected in a written amendment to this Agreement.

7. INVOICING. Send all invoices to the CITY, Attention: Project Manager. The Project Manager is: Robert Item, Dept.: Utilities Engineering, Telephone: (650) 566-4513. Invoices shall be submitted in arrears for Services performed. Invoices shall not be submitted more frequently than monthly. Invoices shall provide a detailed statement of Services performed during the invoice period and are subject to verification by CITY. CITY shall pay the undisputed amount of invoices within 30 days of receipt.

GENERAL TERMS AND CONDITIONS

A. ACCEPTANCE. CONTRACTOR accepts and agrees to all terms and conditions of this Agreement. This Agreement includes and is limited to the terms and conditions set forth in sections 1 through 6 above, these general terms and conditions and the attached exhibits.

B. QUALIFICATIONS. CONTRACTOR represents and warrants that it has the expertise and qualifications to complete the services described in Section 1 of this Agreement, entitled “SERVICES,” and that every individual charged with the performance of the services under this Agreement has sufficient skill and experience and is duly licensed or certified, to the extent such licensing or certification is required by law, to perform the Services. CITY expressly relies on CONTRACTOR’s representations regarding its skills, knowledge, and certifications. CONTRACTOR shall perform all work in accordance with generally accepted business practices and performance standards of the industry, including all federal, state, and local operation and safety regulations.

C. INDEPENDENT CONTRACTOR. It is understood and agreed that in the performance of this Agreement, CONTRACTOR and any person employed by CONTRACTOR shall at all times be considered an independent CONTRACTOR and not an agent or employee of CITY. CONTRACTOR shall be responsible for employing or engaging all persons necessary to complete the work required under this Agreement.

D. SUBCONTRACTORS. CONTRACTOR may not use subcontractors to perform any Services under this Agreement unless CONTRACTOR obtains prior written consent of CITY. CONTRACTOR shall be solely responsible for directing the work of approved subcontractors and for any compensation due to subcontractors.

E. TAXES AND CHARGES. CONTRACTOR shall be responsible for payment of all taxes, fees, contributions or charges applicable to the conduct of CONTRACTOR’s business.
F. COMPLIANCE WITH LAWS. CONTRACTOR shall in the performance of the Services comply with all applicable federal, state and local laws, ordinances, regulations, and orders.

G. DAMAGE TO PUBLIC OR PRIVATE PROPERTY. CONTRACTOR shall, at its sole expense, repair in kind, or as the City Manager or designee shall direct, any damage to public or private property that occurs in connection with CONTRACTOR’s performance of the Services. CITY may decline to approve and may withhold payment in whole or in part to such extent as may be necessary to protect CITY from loss because of defective work not remedied or other damage to the CITY occurring in connection with CONTRACTOR’s performance of the Services. CITY shall submit written documentation in support of such withholding upon CONTRACTOR’s request. When the grounds described above are removed, payment shall be made for amounts withheld because of them.

H. WARRANTIES. CONTRACTOR expressly warrants that all services provided under this Agreement shall be performed in a professional and workmanlike manner in accordance with generally accepted business practices and performance standards of the industry and the requirements of this Agreement. CONTRACTOR expressly warrants that all materials, goods and equipment provided by CONTRACTOR under this Agreement shall be fit for the particular purpose intended, shall be free from defects, and shall conform to the requirements of this Agreement. CONTRACTOR agrees to promptly replace or correct any material or service not in compliance with these warranties, including incomplete, inaccurate, or defective material or service, at no further cost to CITY. The warranties set forth in this section shall be in effect for a period of one year from completion of the Services and shall survive the completion of the Services or termination of this Agreement.

I. MONITORING OF SERVICES. CITY may monitor the Services performed under this Agreement to determine whether CONTRACTOR’s work is completed in a satisfactory manner and complies with the provisions of this Agreement.

J. CITY’S PROPERTY. Any reports, information, data or other material (including copyright interests) developed, collected, assembled, prepared, or caused to be prepared under this Agreement will become the property of CITY without restriction or limitation upon their use and will not be made available to any individual or organization by CONTRACTOR or its subcontractors, if any, without the prior written approval of the City Manager.

K. AUDITS. CONTRACTOR agrees to permit CITY and its authorized representatives to audit, at any reasonable time during the term of this Agreement and for three (3) years from the date of final payment, CONTRACTOR’s records pertaining to matters covered by this Agreement. CONTRACTOR agrees to maintain accurate books and records in accordance with generally accepted accounting principles for at least three (3) following the terms of this Agreement.

L. NO IMPLIED WAIVER. No payment, partial payment, acceptance, or partial acceptance by CITY shall operate as a waiver on the part of CITY of any of its rights under this Agreement.

M. INSURANCE. CONTRACTOR, at its sole cost, shall purchase and maintain in full force during the term of this Agreement, the insurance coverage described in Exhibit D. Insurance must be provided by companies with a Best’s Key rating of A-VII or higher and which are otherwise acceptable to the City’s Risk Manager. The City’s Risk Manager must approve deductibles and self-insured retentions. In addition, all policies, endorsements, certificates and/or binders are subject to approval by the Risk Manager as to form and content. CONTRACTOR shall obtain a policy endorsement naming the City of Palo Alto as an additional insured under any general liability or automobile policy. CONTRACTOR shall obtain an endorsement stating that the insurance is primary coverage and will not be canceled or materially reduced in coverage or limits until after providing 30 days prior written notice of the cancellation or modification to the City’s Risk Manager. CONTRACTOR shall provide certificates of such policies or other evidence of coverage satisfactory to CITY’s Risk Manager, together with the required endorsements and evidence of payment of premiums, to CITY concurrently with the execution of this Agreement and shall throughout the term of this Agreement provide current certificates evidencing the required insurance coverages and endorsements to the CITY’s Risk Manager. CONTRACTOR shall include all subcontractors as insured under its policies or shall obtain and provide to CITY separate certificates and endorsements for each subcontractor that meet all the requirements of this section. The procuring of such required policies of insurance shall not operate to limit CONTRACTOR’s liability or obligation to indemnify CITY under this agreement.
N. HOLD HARMLESS. To the fullest extent permitted by law and without limitation by the provisions of section M relating to insurance, CONTRACTOR shall indemnify, defend and hold harmless CITY, its Council members, officers, employees and agents from and against any and all demands, claims, injuries, losses, or liabilities of any nature, including death or injury to any person, property damage or any other loss and including without limitation all damages, penalties, fines and judgments, associated investigation and administrative expenses and defense costs, including, but not limited to reasonable attorney’s fees, court costs and costs of alternative dispute resolution, arising out of, or resulting in any way from or in connection with the performance of this Agreement. The CONTRACTOR’s obligations under this Section apply regardless of whether or not a liability is caused or contributed to by any negligent (passive or active) act or omission of CITY, except that the CONTRACTOR shall not be obligated to indemnify for liability arising from the sole negligence or willful misconduct of the CITY. The acceptance of the Services by CITY shall not operate as a waiver of the right of indemnification. The provisions of this Section survive the completion of the Services or termination of this Contract.

O. NON-DISCRIMINATION. As set forth in Palo Alto Municipal Code section 2.30.510, CONTRACTOR certifies that in the performance of this Agreement, it shall not discriminate in the employment of any person because of the race, skin color, gender, age, religion, disability, national origin, ancestry, sexual orientation, housing status, marital status, familial status, weight or height of such person. CONTRACTOR acknowledges that it has read and understands the provisions of Section 2.30.510 of the Palo Alto Municipal Code relating to Nondiscrimination Requirements and the penalties for violation thereof, and agrees to meet all requirements of Section 2.30.510 pertaining to nondiscrimination in employment.

P. WORKERS’ COMPENSATION. CONTRACTOR, by executing this Agreement, certifies that it is aware of the provisions of the Labor Code of the State of California which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that Code, and certifies that it will comply with such provisions, as applicable, before commencing and during the performance of the Services.

Q. TERMINATION. The City Manager may terminate this Agreement without cause by giving ten (10) days’ prior written notice thereof to CONTRACTOR. If CONTRACTOR fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, the City Manager may terminate this Agreement immediately upon written notice of termination. Upon receipt of such notice of termination, CONTRACTOR shall immediately discontinue performance. CITY, CITY shall pay CONTRACTOR for services satisfactorily performed up to the effective date of termination. If the termination is for cause, CITY may deduct from such payment the amount of actual damage, if any, sustained by CITY due to Contractor’s failure to perform its material obligations under this Agreement. Upon termination, CONTRACTOR shall immediately deliver to the City Manager any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by CONTRACTOR or given to CONTRACTOR, in connection with this Agreement. Such materials shall become the property of CITY.

R. ASSIGNMENTS/CHANGES. This Agreement binds the parties and their successors and assigns to all covenants of this Agreement. This Agreement shall not be assigned or transferred without the prior written consent of the CITY. No amendments, changes or variations of any kind are authorized without the written consent of the CITY.

S. CONFLICT OF INTEREST. In accepting this Agreement, CONTRACTOR covenants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of this Contract. CONTRACTOR further covenants that, in the performance of this Contract, it will not employ any person having such an interest. CONTRACTOR certifies that no City Officer, employee, or authorized representative has any financial interest in the business of CONTRACTOR and that no person associated with contractor has any interest, direct or indirect, which could conflict with the faithful performance of this Contract. CONTRACTOR agrees to advise CITY if any conflict arises.

T. GOVERNING LAW. This contract shall be governed and interpreted by the laws of the State of California.
U. ENTIRE AGREEMENT. This Agreement, including all exhibits, represents the entire agreement between the parties with respect to the services that may be the subject of this Agreement. Any variance in the exhibits does not affect the validity of the Agreement and the Agreement itself controls over any conflicting provisions in the exhibits. This Agreement supersedes all prior agreements, representations, statements, negotiations and undertakings whether oral or written.

V. NON-APPROPRIATION. This Agreement is subject to the fiscal provisions of the Charter of the City of Palo Alto and the Palo Alto Municipal Code. This Agreement will terminate without any penalty (a) at the end of any fiscal year in the event that funds are not appropriated for the following fiscal year, or (b) at any time within a fiscal year in the event that funds are only appropriated for a portion of the fiscal year and funds for this Contract are no longer available. This Section shall take precedence in the event of a conflict with any other covenant, term, condition, or provision of this Contract.

W. ENVIRONMENTALLY PREFERRED PURCHASING AND ZERO WASTE REQUIREMENTS. CONTRACTOR shall comply with the City’s Environmentally Preferred Purchasing policies which are available at the City’s Purchasing Department which are incorporated by reference and may be amended from time to time. CONTRACTOR shall comply with waste reduction, reuse, recycling and disposal requirements of the City’s Zero Waste Program. Zero Waste best practices include first minimizing and reducing waste; second, reusing waste and third, recycling or composting waste. In particular, Contractor shall comply with the following zero waste requirements:

- All printed materials provided by Contractor to City generated from a personal computer and printer including but not limited to, proposals, quotes, invoices, reports, and public education materials, shall be double-sided and printed on a minimum of 30% or greater post-consumer content paper, unless otherwise approved by the City’s Project Manager. Any submitted materials printed by a professional printing company shall be a minimum of 30% or greater post-consumer material and printed with vegetable based inks.
- Goods purchased by Contractor on behalf of the City shall be purchased in accordance with the City’s Environmental Purchasing Policy including but not limited to Extended Producer Responsibility requirements for products and packaging. A copy of this policy is on file at the Purchasing Office.
- Reusable/returnable pallets shall be taken back by the Contractor, at no additional cost to the City, for reuse or recycling. Contractor shall provide documentation from the facility accepting the pallets to verify that pallets are not being disposed.

X. AUTHORITY. The individual(s) executing this Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

Y. CONTRACT TERMS: All unchecked boxes do not apply to this Contract.

IN WITNESS WHEREOF, the parties hereto have by their duly authorized representatives executed this Agreement on the date first above written.

CITY OF PALO ALTO

City Manager or Designee

Approved as to form:

Senior Assistant City Attorney

HYDROMAX USA, LLC

By_________________________ 6/21/11

Name __________________________

Title __________________________

Rev January 1, 2010
EXHIBIT A
SCOPE OF SERVICES

1.1 Proposed Methods to Collect Lateral CCTV Data:
Hydromax USA LLC. (Consultant) shall inspect approximately 18,000 sanitary sewer laterals and approximately 1,000,000 LF of associated sanitary sewer mains for the presence of natural gas cross bores with robotic lateral launching CCTV cameras, manual push rod cameras, and lateral cleaning equipment in a professional and workmanlike manner. The laterals to be inspected exclude approximately 140 critical facilities previously inspected by others. The work shall be compensated according to the fee schedule attached. The work shall be performed according to the requirements of Attachment C, City of Palo Alto Contract General Services Agreement, except where more specifically stated herein or in attachments.

Consultant shall make reasonable attempts, as defined below, to inspect all sanitary laterals between the tap connection at the main sewer to the point the lateral enters the building. Consultant will accomplish this by placing a robotic lateral launching camera at the downstream manhole to remotely search for the presence of cross bores in the manhole, main sewer, and laterals. The robotic lateral launching equipment that shall be used, will enable inspection of laterals from mainline sewers 6 inches to 36 inches in diameter. Sewers greater than 36 inches in diameter will, as necessary, require confined space entry to hand place the lateral camera head in the tap from inside the main sewer. Consultant will traverse the main sewer to each tap and launch a steerable, pan and tilt, lateral camera up to 120LF from the tap connection where the structural condition of said pipes allows for passage of the camera. Should Consultant encounter multiple laterals converging in a single tap, Consultant will utilize the steerable lateral camera with guide pin to inspect the adjoining laterals separately by identifying each pipe as an independent inspection. Such adjoining lateral inspections shall be treated as separate inspections for identification, data submittal and invoicing.

The intent is to video every wastewater lateral and branches from the main to a single structure in one video. If there are separate taps off the main to the same structure, separate videos of each lateral shall be made from the main to the structure. If there are multiple structures branched off the lateral on the same parcel, separate video to each structure shall be made from the main to the structure. If there are multiple structures branched off the lateral to different parcels, separate video to each structure shall be made from the main to the structure. If there is an abandoned lateral at the curb, a separate video to the cap shall be made from the main to the capped end. Lateral risers and dead end branches shall be part of the lateral video inspection.

Consultant shall perform the inspections of both mainline sanitary and connected lateral sewers using pan and tilt cameras. All lateral sewers shall be inspected per NASSCO LACP requirements. Mains shall generally not be coded except for basic observations start/stop, footage, lateral locations, major defects (severe break, cannot proceed, cross bore). Consultant will ensure range of view, lighting, picture quality, rate of travel and pan and tilt at serious defects are upheld to support this goal without impeding the inspection process. All cross bores observed in the mainline sanitary sewer and in the connected lateral will be recorded as a defect and reported immediately as provided below.
Consultant will verify the limits of the inspections by identifying the location of the camera head by means of radio sonde transmitter contained within the camera and a sonde receiver on the ground surface to identify the actual limits of inspected lines with 33 or 512 MHz sondes.

In the event a lateral cannot be fully inspected from the tap connection it may become necessary to inspect the remaining portion of the lateral by means of manual push rod cameras. Lateral inspections up to 200 feet can be performed using push rods. Radio sonde and receiver equipment will be utilized as described above to ensure a complete inspection to 5 foot beyond abandoned inspection from the main sewer, or to the tap connection of sanitary lateral to sewer main, as necessary to allow for a combined inspection for a complete traverse of the lateral.

Push rod inspections will require an access point of no less than 3 inches inside diameter via an exterior clean out or upon approval through alternate means such as removal of toilets for direct access to the sewer within foundation. Consultant will contact the structure occupant to request entry for inspection in the event inspection from the mainline was incomplete and a suitable external access point is not available, unless the City provides instructions otherwise in advance. In the event a clean out is not present and the customer will not allow a toilet to be pulled, Consultant can sometimes accomplish the inspection by accessing the roof vent on single story homes. City may elect to install an exterior clean out. Consultant shall refer the need for alternate access/external clean out installations to the City. Consultant will return post installation and inspect via push rod through the newly installed clean out. It is preferable to have a “Tee” style or “Double Wye” clean out installed to allow for multidirectional inspections of the push camera. Where inspections are not able to be completed with reasonable efforts, and such completion has been hindered through structural problems or blockages, Consultant shall inform City of the limits of the incomplete inspection. This information may be used by the City to determine the improvement that the City may elect to use. City is not required to make any improvement of pipes and may do so at its sole option.

Consultant proposes to track laterals requiring push rod inspections to complete the pipe segment and coordinate with property owners for scheduling of inspections at the earliest convenience of the building occupants. If after three attempts to make contact with property owners Consultant is unsuccessful in gaining access, Consultant will make contact with City to determine how to proceed.

Consultant will return all work sites to equal or better conditions found prior to performance of said inspections.

Mainline sewers shall be inspected "as is". No cleaning for observing defects shall be included. City represents that their mainline sewers are on a preventative maintenance schedule with mains cleaned approximately every two+ years. If cleaning is needed to assist in the traverse of the mainline sewer Consultant will request City to clean the mainline sewer. The area to be cleaned will be clearly identified and communicated to City by email or in another manner agreed upon prior to starting the project that allows for documentation of such request.

In the event a lateral pipe segment cannot be fully inspected after reasonable attempts to remove obstructions or traverse because of poor structural condition or attempt/s for alternate access is/are not successful, Consultant will provide all the information obtained to City for City’s determination of possible solutions or to determine if enough information has been obtained to safely assess the proximity of uninspected portions of pipe

Consultant will capture all recorded CCTV data in a format compatible with P.O.S.M. software and suitable to uploading into ICOM software. Consultant will coordinate with ICOM to meet
their specifications. Collected data will be sent to Consultant's data center for quality assurance, progress updates, and creation of the electronic deliverables called for in the specifications. The video shall be annotated using the software. One copy of video logs and hard drives or downloaded color video and audio information shall be provided to City's contractor, ICOM or to other location as directed.

Consultant technicians and project manager will remain in regular contact with designated representatives of the City assigned to Consultant work areas in order to provide daily activities, work locations, progress, and findings requiring immediate attention.

If or when a cross bore is identified Consultant will immediately notify all required parties as determined in the kick off meeting, clearly identify the location and approximate depth of the breach, protect the breach from outside damage by remaining on the location with the breach in view of the camera until a City representative authorized to relieve Consultant crew(s) arrives (wait time is expected to be less than 60 minutes). An independent video, image, and report will be generated for each cross bore discovered and delivered post Consultant QA/QC.

The flow chart for project showing major steps is attached.

Work hours that are necessary for completion of the project, which are not within 8 to 5, shall be subject for obtaining a noise variance. It is our intention to try and work at least every other Saturday if possible. Inspections of arterial streets that have different work hour requirements will be scheduled accordingly. Night, weekend and evening work may be scheduled due to high flow conditions, traffic, accommodating structure entry to owner's convenience, etc. Business districts of the University area between Alma and Middlefield and the area on California between El Camino Real and Park, shall not be inspected between the week before Thanksgiving through New Year's Day.

City shall provide GIS mapping system and minor order records for City facilities as available. Consultant will use such mapping and information from City to plan and execute inspections in addition to other information including review of physical assets.

Consultant shall be responsible for damage to public or private property that occurs because of our inspection activities.

Consultant believes that there will be some laterals that are not capable of being inspected without replacement of the lateral line due to structural defects or other causes after reasonable cleaning attempts. When reasonable cleaning efforts of a single lateral (1-1/2 hours) using either high pressure jetting and/or City approved non-cutting mechanical cleaning equipment in combination with cameras is unable to determine the presence or absence of a cross bore, the cleaning efforts shall be abandoned and the City shall be informed. City may require no further actions by Consultant. If all of the items associated with this paragraph have been performed, but Consultant has not been able to clear the entire line, Consultant will provide all of the collected information to the City and Consultant will be compensated as if the lateral had been cleared.

1.2 Meeting Project Deadline
Consultant shall inspect approximately 18,000 laterals and the corresponding main sewer involved in inspection of these sanitary laterals.

Consultant will begin on July 19, 2011. Consultant will provide adequate mainline launch lateral CCTV inspection trucks and crews to inspect all laterals by December 31, 2012. Initial equipment and crews will increase periodically throughout the project. Additionally, Consultant
plans to add temporary mainline launch lateral CCTV inspection trucks and crews during winter months. Consultant will provide adequate equipment and crews to complete these inspections prior to December 31, 2012.

Consultant shall refer all problematic laterals to City for completion of clean out installation, scheduling, re-inspection and all other labors for said problematic laterals, defined as those in excess of reasonable efforts as described in section 4.1 or those that are otherwise inaccessible. This corresponds to the City management intention to free Consultant lateral launching crews to be unhindered or undelayed by lateral inspections requiring extraordinary lengthy or unusual measures beyond reasonable described in section 4.1.

Consultant will perform inspections in restricted areas early in the project to make sure the limitations of those areas will not impede meeting the 12/31/2012 deadline.

1.3 Verification of Completion (All of Section 4.3 is to remain confidential)
Consultant would perform QA/QC checks on 100% of all the collected field data. These checks include data analyst office review of all videos, logs, and crew reports against supplied contract documents, mapping, GIS shape files, and area survey form performed prior to pipeline inspections. Consultant will ensure every known sanitary sewer pipe segment potentially affected by the presence of natural gas cross bores has been inspected and approved by data analyst independent of the inspection. However, incomplete pipe lines that have not been able to be inspected after reasonable effort will be listed as incomplete and will not be categorized as cleared. If improvements to the pipeline allows for later inspections to be completed, the line will then be listed as complete and cleared of cross bores of gas lines.

Consultant shall perform the following tasks to ensure each lateral awarded for inspection is completed:
1. Prior to beginning any inspections it is the policy of Consultant to gather in all available mapping of the sewer systems, gas systems, satellite imagery of entire work area, address lists, and area approval forms. The area approval form, shall include a drawing created from available information or on site and agreed upon with City, to clearly define Consultant inspection limitations prior to inspecting any sewers. These exceptions are expected to exclude the 140 critical laterals previously completed. Included in this form is the following base information Consultant's pipeline data analysts uses the following to track completion and compare against incoming field data.
   - Total LF of sanitary sewer main required to reach all affected laterals
   - Total number of buildings potentially affected by trenchless installation of gas lines
   - Total manhole to manhole pipe segments to inspect
   - Drawing of above listed findings from site survey coupled with information provided by sewer mapping defining sewers not identifiable on ground surface. This will include main segments crossing bore paths at intersections and lines without manholes to identify.
2. Consultant will perform all laterals in the project area. City will provide mapping detailing the boundaries of areas containing gas lines for cross bore investigations.
3. Data analysts create punch list based on the collected field data contained in the above documents.
4. Crews will use templates for pipeline inspection software designed to ensure contract deliverable requirements fields are entered. Technicians are prompted to progress through data collection and inspections to assist in all the predetermined information being collected.

5. In areas where delineation of the limits of inspection have not been determined, Consultant shall schedule an onsite meeting with City project manager, and Consultant technicians to physically walk project where delineation of the limits of inspection have not been determined to discuss any last minute changes to scope, or area approval forms, as well as, City expectations specific to inspection site beginning with lateral launching CCTV crews.

6. GPS points shall be captured at the mainline/lateral connection, property line clean-outs, and at the furthest point inspected in the lateral. The cost to do this is built into the cost provided. This cost assumes that we will be capturing a GPS point on a cleanout that is readily seen in the yard, or based on the location that the sonde provides when viewing the cleanout invert with a camera. Consultant will not be expected to uncover any laterals in the field and then take a GPS point.

7. Pipeline data and GPS data is transmitted daily to analysts for QA/QC through ftp site or other means.

8. Consultant data analyst shall review videos, other data and uses GPS findings to ensure project limitations are met based upon comparison with previously provided information.

9. Any incomplete segments shall be recorded in Consultant data-base and referred for lateral launching CCTV crews for rework or to push rod technicians via electronic work orders.

10. Push rod technicians shall be instructed to attempt inspections received through work orders.

11. Data from laterals completed by push rod technicians is uploaded daily to analysts for QA/QC through ftp site or other means.

12. Each attempt to enter a building for completion by push rod crews is recorded and tracked until 3 attempts are reached. Weekly reports from data analysts are issued to City and Consultant project manager listing unsuccessful attempts to complete inspection of sewers and subsequently gain access to buildings.

13. Consultant project manager and City shall reach a decision on how to proceed with unsuccessful entry buildings. City will inform Consultant of its decision. Consultant shall relay status and decision for future actions of said lateral to data analyst to enter final result for lateral in database. Subsequently, if an inspection can be completed the status will be changed as appropriate.

14. Laterals requiring push camera inspection that cannot be completed without an access point being created are referred by data analyst to City for City’s determination if a clean out installation will be scheduled. The incomplete lateral shall be marked incomplete in data base. Subsequently, if an inspection can be completed the status will be changed as appropriate.

15. Upon City notification to data analyst of clean out installation being completed, data analyst reissues work order for lateral to push rod technicians.

16. Steps 9-12 repeated to completion of lateral.
17. Data analysts will show GPS information for tap and foundation for every lateral identified through main line inspection thereby providing GPS map based project tracking. GPS points shall be accurate to within two (2) feet unless there are structural, canopy, or other physical restrictions. It should be noted that current Sonda/Locator technology also has a similar accuracy. This will aid project management in identifying which laterals are complete, incomplete, and the current status of each address based upon Consultant color coding key. If a wye lateral is identified, the tap of the branching lateral shall be the wye.

18. All data shall be made web accessible both internally for project management and to City for remote real time (within 72 hours after receipt of data from field crews) viewing of Consultant progress within any given area as noted by approval forms and attachments.

19. Data analyst will determine completion by query all predetermined addresses through Consultant project database.

20. Any incomplete laterals associated with query attempt will populate as red flagged and data analysts will not mark as complete until lateral status is entered as complete and up to 3 GPS points attached. Once City has determined that incomplete laterals will not be subject to further actions for inspection by Consultant, data analysts will indicate in the database that the incomplete inspection requires no further action by Consultant.

21. After all above criteria has been verified by Consultant data analyst, the data analyst will generate and transmit external hard drives to City or designated representative.

22. Subsequent to passing QA/QC processes, information shall be transmitted by Consultant data analyst to ICOM or other designated representative of City.

The above process along with the flow of work is shown on Consultant's Gas Services Legacy Inspections Flow Chart Final Work Procedures – Palo Alto (see end of this section).
Should Consultant have no other option but to access manholes on private property, or in easements connected to private property, Consultant will first make friendly requests to access private property for the purpose of completing inspections. Consultant will extend every courtesy to the residents of City when working in proximity of driveways, parked vehicles, sidewalks, place of residence, or place of business. Consultant will as courteously as possible attempt to coordinate inspections with the blessings of nearby affected individuals as to not block driveways, flow of patrons with local businesses, or endanger the sanctity of private property.

Consultant will seek the assistance of City officials when refusal to access mandatory points of entry should occur without provoking or disturbing residents when such refusals arise. Consultant will move to the next closest point of access and continue inspections elsewhere until City can resolve such occurrences and facilitate entry for Consultant.

1.5 Operator Qualifications
Consultant requires every technician to pass a set of rigorous training programs prior to being allowed to represent our name and perform as serious a task as cross bore eliminations. Training for our technicians includes the following:

- Basic and advanced knowledge of municipal, residential, commercial, and industrial plumbing systems.
- Adequate computer and software skills to perform high level data collection.
- Proficiency in line and sonde locating.
- Training in the protection of and safe practices regarding themselves, the public, and the work areas.
- Traffic control procedures.
- Effective communication practices.
- Training on the operations, troubleshooting, and repair of both mainline lateral launching CCTV equipment, and manual push rod equipment.
- Data storage and management practices.
- Gas installation procedures.
- Safe travel practices.
- Mainline launched CCTV operators have to hold the position of operator assistant for a minimum of three to six months before being eligible to start actually performing lateral inspections independently.
- Mainline launched CCTV operators must complete gas cross bore inspection training, pass written exams and demonstrate proficiency with all tasks associated with running a project, following project specifications and operating equipment.
- Mainline launched CCTV operators shall have at least 2,000 lateral inspections on gas cross bore projects before they are permitted to work on this project.
- Push rod operators must have plumbing and drain cleaning training.
- Basic electrical knowledge and factory training from manufacturers on advanced robotics repairs and wiring for repairs conducted in the field.
- Typically work as a helper or technician for 6 months before allowed to operate the equipment independently under the direct supervision of the training operator.
Upon passing numerous written and task related tests, new operators are paired with veteran operators on the same projects to fine tune the newly promoted operator and observe the completeness of the training process.

Ongoing education and retesting to keep individuals sharp and up on current practices.

All operators report to project managers with many thousands of lateral inspections and hundreds of thousands of mainline inspections to observe and uphold quality and completion of all assigned tasks.

As noted in the “Staffing Section” of our proposal, it is our intention to have Adam Petrzilka as the initial and primary CCTV truck operator on this project. Adam has performed approximately 2,000 lateral inspections. We estimate that he will have completed an additional 500 inspections prior to deploying to City. Adam possesses all the technical, and communication skills required to successfully complete this project. We believe that while he does not have the 5,000 inspections as requested in the proposal, that he has the best qualifications for successfully completing City’s project and is LACP certified.

Any additional CCTV truck operators who are deployed will have completed the training and testing listed above and will have performed at least 2,000 lateral inspections before being permitted to work on this project without supervision.

1.6 Standard Traffic Control Plan

During the course of performing pipeline inspections requiring manhole access, Consultant must maintain and protect work areas in a manner that ensures minimal disruption to the normal flow of traffic while fostering a safe work environment for Consultant crews. Safety for our team members and that of the communities in which we work is of the highest priority. Consultant has enjoyed a history of zero job site injuries stemming from traffic related incidents. We attribute this success to our strict compliance with applicable regulations, as well as, compliance with state and local DOT laws. In order to continue our tradition of maintaining safe work environments Consultant proposes the following measures:

Consultant employs the use of a pre-mobilization checklist to confirm each crew arrives on site with the following standard traffic control equipment.

- (20) 28" cones with dual reflective collars
- Two signs for advanced warning and lane closure notification
- All Consultant vehicles are equipped with DOT approved strobes, light bars, multidirectional arrow lights, and reflective decals
- High visibility ANSI Class (2) PPE, as well as pertinent materials for flagging traffic
- Wheel chocks appropriate for the grade of the work site
- Adequate barriers for protection of opened manhole
- Adequately trained personnel to ensure traffic control and job site protection can be observed in light traffic areas.

Consultant has based its pricing on the premise that when working on city streets the standard traffic control equipment listed in Section 4.6 is adequate. City street traffic control requirements in excess of traffic cones, portable signs and arrow boards on the CCTV vehicles is at additional cost to City. If additional equipment and labor is required to safely perform inspections on City of City streets, it shall be invoiced at cost plus 10% for rental equipment and at $75.00 per hour.
for additional labor more than the standard two person inspection crew, including labor of transportation of equipment to and from the inspection location.

On roadways where California Law requires delineators or arrow boards for advanced warning, buffer zone, work zone, and taper zones, Consultant will ensure a sufficient amount of approved equipment is utilized. Such traffic control for CALTRAN is at no additional cost to City. Consultant shall submit traffic control plans to City for approval prior to work commencement. It is the policy of Consultant to request on site meetings with traffic regulatory officials to direct Consultant as to the desired patterns, time restrictions, and communication requirements Consultant is to adhere to. Consultant project managers also performs random, periodic safety checks and grades individuals on the compliance with state and local requirements, as well as, enforcement of Consultant internal safety requirements.

Should work occur during night hours or on state routes, Consultant requires all technicians to be in ANSI Class (3) personal protective equipment.

1.7 Public Outreach Plan
Consultant will cooperate with City's efforts to educate and interact with the public to increase the real and perceived success of cross bore projects. Consultant encourages City's public outreach for cross bore education through many different mediums has proven effective in mitigating the risk of cross bore exposure for all potentially affected parties and will distribute literature to structure residents who may inquire as to the operations during such operations. If efforts to contact residents include knocking on the door, Consultant will hang literature created by City on the door knob. It has been typical for the below listed methods to be the responsibility of the gas distribution utility by which Consultant has been contracted. Consultant has seen many different methods employed and will discuss the most direct routes for transferring this knowledge to the public.

1. Consultant employees are well accustomed to dealing with the questions and curiosities posed by the public during the course of our inspections. Consultant team members are trained to approach the delicate issues surrounding cross bores in a responsible and diplomatic manner without inciting unnecessary fears or alarm. Consultant push rod technicians having the greater part of exposure to residents through the course of entering homes and businesses are trained and have acquired the communications skills necessary convenient to communicating with occupants and the general public.

2. City shall provide templates for door tags and no parking signs with City logo and contact information to Consultant. Consultant shall post door tags in a conspicuous location at least 7 days prior to inspections and “no parking” signage as directed by City Police Department. No additional charges shall be incurred for the placement of these City provided materials. In addition Consultant field technicians will place a City provided tag denoting completion of lateral inspection on the external riser for gas service at the meter upon successful completion of inspection.

1.8 Emergency Plan
Consultant will direct the project manager to review the awarded work areas and compile information pertaining to the following necessary components of an emergency plan.
1. Location, route, and contact information for the nearest urgent care, hospitals, fire, and police departments compiled and posted in all Consultant vehicles involved in this project.
2. Predetermined meeting place in the event of disaster.
3. Accountability plan and designated chain of command in the event project manager cannot be reached.
4. Evacuation routes determined and posted in all Consultant vehicles involved in this project.
5. Training for Consultant technicians for confined space and blood borne pathogens confirmed prior to allowing any employee to work on this project.
7. Contact information and emergency contact protocols as provided and updated by the City.
8. Earthquake preparedness training to be performed by Consultant project manager upon arrival of Consultant crews in City.
9. Continuation of work plan shall be discussed with and approved by authorized City contacts should major public emergency occur.

In the event of an explosion caused by cross bores while Consultant is performing inspections in City, Consultant has made arrangements for a camera system modified for environments requiring explosion proof electronics to be shipped as a loaner to Consultant. Receipt of this unit can occur within 72 hours should inspections of sewer lines be absolutely necessary where natural gas may be present in sewer lines. This equipment is approved for nuclear and gaseous environments. Any expenses related to such specialized equipment shall not be considered part of this agreement and will require addenda to the associated RFP.

1.9  **CCTV Collection Methods**
Consultant proposes to inspect the sanitary sewer mains utilizing Rausch mainline/lateral launching CCTV cameras. This equipment provides optimal picture quality of both main sewers and lateral sewers for defect observation and a rotating lateral camera that provides navigation. Consultant will perform the inspections of main and lateral sewers in a manner that allows for post processing of collected data for the future P.A.C.P. coding if desired. Consultant will ensure range of view, lighting, picture quality, rate of travel and pan and tilt at serious defects are upheld to support this goal without impeding the progress of Consultant's primary goal of cross bore elimination.

Consultant will utilize the minimally invasive methods available to ensure the lowest level of disturbance to the community and property owners. Consultant will return all work sites to equal or greater conditions found prior to performance of said inspections.

In recent conversations, City has stated that their sewers mains are cleaned every two+ years. Because of this aggressive cleaning program we anticipate very little mainline cleaning will be required. However if heavy cleaning is needed Consultant will submit a request to City for cleaning. The area to be cleaned will be clearly identified and communicated in a manner agreed to by both City and Consultant prior to the start of the project. When cleaning is requested our crews will proceed to an area not requiring cleaning. The inspection of sewers with high water levels (greater than 1/3 pipe) will be addressed through night or weekend inspections (times that experience lower flows). If Consultant is still unable to provide quality...
video City will be notified to determine if City wants to take additional steps to decrease flow levels, permit the higher flows, or accept the mainline inspection deliverable for the section of sewer in question as delivered by Consultant.

Consultant will capture all recorded observations and pertinent data from CCTV crews to City above described specifications using P.O.S.M. pipeline data collection software. Collected data will be sent to Consultant headquarters for quality assurance, progress updates, and creation of electronic deliverables defined by contract documents for shipment to City for review.

Consultant technicians and the project manager will communicate regularly with designated representatives of the City in order to provide daily activities, work locations, progress, and findings requiring immediate attention.
EXHIBIT B
SCHEDULE OF PERFORMANCE

CONSULTANT shall perform the Services so as to complete the project in 18 months from the Notice to Proceed (NTP). The NTP is scheduled to be issued on July 18, 2011. All tasks are to be performed simultaneously.

The term of this Agreement is from July 18, 2011 to December 31, 2012.
EXHIBIT C
SCHEDULE OF FEES

Compensation based upon task
CONTRACTOR shall perform the tasks as described and budgeted below. The CITY's Project Manager may approve in writing the transfer of budget amounts between any of the tasks or categories listed below provided the total compensation for the Services including reimbursable expenses, does not exceed $3,523,950. Any services provided or hours worked for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to City.

<table>
<thead>
<tr>
<th>DESCRIPTION OF TASK</th>
<th>NOT TO EXCEED COMPENSATION PER TASK INCLUDING REIMBURSABLES</th>
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<tr>
<td>Task 1 (CCTV &amp; Document Sewer Laterals)</td>
<td>$3,330,000</td>
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<td>Task 2 (Mapping to Track Progress)</td>
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<td>Task 3 (CCTV Sewer Mains)</td>
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<td>Task 4 (Additional Coding for Laterals)</td>
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Basic Services 3,523,950
Additional Services $276,000
Total Not-to-Exceed Amount $3,800,000

Additional Services
The CONSULTANT shall provide additional Services only by the advance, written authorization from the CITY. The CONSULTANT, at the CITY's project manager's request, shall submit a detailed written proposal for additional services. The additional services scope, schedule, and maximum compensation shall be negotiated and agreed to in writing by the CITY's project manager and CONSULTANT prior to commencement of the services. Payment for additional services is subject to all requirements and restrictions in the Agreement.

Option 1: PACP Coding for mainline pipe would be performed at a cost of 0.135 if performed

Option 2: Cost per additional lateral (Task 1) not to exceed = $185 per lateral, if performed.
EXHIBIT D
INSURANCE REQUIREMENTS

Contractors to the City of Palo Alto (City), at their sole expense, shall for the term of the contract obtain and maintain insurance in the amounts for the coverage specified below, afforded by companies with an Best's Key Rating of A-VII, or higher, licensed or authorized to transact insurance business in the State of California.

Award is contingent on compliance with City's insurance requirements, as specified below:

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<tr>
<th>REQUIRED</th>
<th>TYPE OF COVERAGE</th>
<th>REQUIREMENT</th>
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<td></td>
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<td>GENERAL LIABILITY, INCLUDING PERSONAL INJURY, BROAD FORM PROPERTY DAMAGE BLANKET CONTRACTUAL, AND FIRE LEGAL LIABILITY</td>
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<td>PROPERTY DAMAGE</td>
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The City of Palo Alto is to be named as an additional insured: Contractor, at its sole cost and expense, shall obtain and maintain, in full force and effect throughout the entire term of any resultant agreement, the insurance coverage herein described, insuring not only Contractor and its subconsultants, if any, but also, with the exception of Workers' Compensation, Employer's Liability and Professional Insurance, naming as additional insureds City, its Council Members, Officers, Agents, and Employees.

I. INSURANCE COVERAGE MUST INCLUDE:
   A. A PROVISION FOR A WRITTEN THIRTY DAY ADVANCE NOTICE TO CITY OF CHANGE IN COVERAGE OR OF COVERAGE CANCELLATION; AND
   B. A CONTRACTUAL LIABILITY ENDORSEMENT PROVIDING INSURANCE COVERAGE FOR CONTRACTOR'S AGREEMENT TO INDEMNIFY CITY.
   C. DEDUCTIBLE AMOUNTS IN EXCESS OF $5,000 REQUIRE CITY'S PRIOR APPROVAL.

II. CONTRACTOR MUST SUBMIT CERTIFICATES(S) OF INSURANCE EVIDENCING REQUIRED COVERAGE.

III. ENDORSEMENT PROVISIONS, WITH RESPECT TO THE INSURANCE AFFORDED TO "ADDITIONAL INSUREDS"
A. PRIMARY COVERAGE

WITH RESPECT TO CLAIMS ARISING OUT OF THE OPERATIONS OF THE NAMED INSURED, INSURANCE AS AFFORDED BY THIS POLICY IS PRIMARY AND IS NOT ADDITIONAL TO OR CONTRIBUTING WITH ANY OTHER INSURANCE CARRIED BY OR FOR THE BENEFIT OF THE ADDITIONAL INSURERS.

B. CROSS LIABILITY

THE NAMING OF MORE THAN ONE PERSON, FIRM, OR CORPORATION AS INSUREDS UNDER THE POLICY SHALL NOT, FOR THAT REASON ALONE, EXTINGUISH ANY RIGHTS OF THE INSURED AGAINST ANOTHER, BUT THIS ENDORSEMENT, AND THE NAMING OF MULTIPLE INSUREDS, SHALL NOT INCREASE THE TOTAL LIABILITY OF THE COMPANY UNDER THIS POLICY.

C. NOTICE OF CANCELLATION

1. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR ANY REASON OTHER THAN THE NON-PAYMENT OF PREMIUM, THE ISSUING COMPANY SHALL PROVIDE CITY AT LEAST A THIRTY (30) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.

2. IF THE POLICY IS CANCELED BEFORE ITS EXPIRATION DATE FOR THE NON-PAYMENT OF PREMIUM, THE ISSUING COMPANY SHALL PROVIDE CITY AT LEAST A TEN (10) DAY WRITTEN NOTICE BEFORE THE EFFECTIVE DATE OF CANCELLATION.

NOTICES SHALL BE MAILED TO:

Purchasing and Contract Administration
City of Palo Alto
P.O. Box 10250
Palo Alto, CA 94303
**CERTIFICATE OF LIABILITY INSURANCE**

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.**

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

**PRODUCER**
- New Albany, IN Branch
- Logan Lavellie Hunt
- 810 Charlestown Rd., Ste. 2
- New Albany, IN 47150
- Trent Hunt

**CONTACT NAME**
- Shannon Shoulders
- 812-949-7444
- 812-949-7442
- P.O. Box 90
- New Albany, IN 47150

**ADRESSES**
- CUSTOMER ID: HYDROMAX

**INSURED**
- Hydromax, Inc., Hydromax USA, LLC, Hydromax Services LLC & Roto Rooter
- Po Box 70
- Chandler, IN 47610

**COVERAGES**

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**CERTIFICATE HOLDER**
- CITY OF PALO ALTO
- PURCHASING AND CONTRACT ADMIN.
- CAROLYN BISSETT
- 250 HAMILTON AVE MEZZANINE
- PALO ALTO, CA 94301

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**CANCELLATION**

- SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

**AUTHORIZED REPRESENTATIVE**
- Erica Vaughan

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COMMON POLICY CONDITIONS

All Coverage Parts included in this policy are subject to the following conditions:

A. Cancellation

1. The first Named Insured shown in the Declarations may cancel this policy by mailing or delivering to us advance written notice of cancellation.

2. We may cancel this policy or any Coverage Part by mailing or delivering to the first Named Insured written notice of cancellation at least:

   a. 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or
   b. 30 days before the effective date of cancellation if we cancel for any other reason.

3. We will mail or deliver our notice to the first Named Insured's last mailing address known to us.

4. Notice of cancellation will state the effective date of cancellation. If the policy is cancelled, that date will become the end of the policy period. If a Coverage Part is cancelled, that date will become the end of the policy period as respects that Coverage Part only.

5. If this policy or any Coverage Part is cancelled, we will send the first Named Insured any premium refund due. If we cancel, the refund will be pro rata. If the first Named Insured cancels, the refund may be less than pro rata. The cancellation will be effective even if we have not made or offered a refund.

B. Changes

This policy contains all the agreements between you and us concerning the insurance afforded. The first Named Insured shown in the Declarations is authorized to make changes in the terms of this policy with our consent. This policy's terms can be amended or waived only by endorsement issued by us as part of this policy.

C. Examination Of Your Books And Records

We may examine and audit your books and records as they relate to this policy at any time during the policy period and up to three years afterward.

D. Inspections And Surveys

1. We have the right to:

   a. Make inspections and surveys at any time;
   b. Give you reports on the conditions we find; and
   c. Recommend changes.

2. We are not obligated to make any inspections, surveys, reports or recommendations and any such actions we do undertake relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for the health or safety of workers or the public. And we do not warrant that conditions:

   a. Are safe or healthful; or
   b. Comply with laws, regulations, codes or standards.

3. Paragraphs 1. and 2. of this condition apply not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations.

4. Paragraph 2. of this condition does not apply to any inspections, surveys, reports or recommendations we may make relative to certification, under state or municipal statutes, ordinances or regulations, of boilers, pressure vessels or elevators.

E. Premiums

1. The first Named Insured shown in the Declarations:

   a. Is responsible for the payment of all premiums; and
   b. Will be the payee for any return premiums we pay.

2. We compute all premiums for this policy in accordance with our rules, rates, rating plans, premiums and minimum premiums. The premium shown in the Declarations was computed based on rates and rules in effect at
THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

BLANKET ADDITIONAL INSURED (CONTRACTORS)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

1. WHO IS AN INSURED—(Section II) is amended to include any person or organization that you agree in a "written contract requiring insurance" to include as an additional insured on this Coverage Part, but:
   a) Only with respect to liability for "bodily injury", "property damage" or "personal injury"; and
   b) If, and only to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the "written contract requiring insurance" applies. The person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

2. The insurance provided to the additional insured by this endorsement is limited as follows:
   a) In the event that the Limits of Insurance of this Coverage Part shown in the Declarations exceed the limits of liability required by the "written contract requiring insurance", the insurance provided to the additional insured shall be limited to the limits of liability required by that "written contract requiring insurance". This endorsement shall not increase the limits of insurance described in Section III — Limits Of Insurance.
   b) The insurance provided to the additional insured does not apply to "bodily injury", "property damage" or "personal injury" arising out of the rendering of, or failure to render, any professional, architectural, engineering or surveying services, including:
      i. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and
      ii. Supervisory, inspection, architectural or engineering activities.
   c) The insurance provided to the additional insured does not apply to "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the "written contract requiring insurance" specifically requires you to provide such coverage for that additional insured, and then the insurance provided to the additional insured applies only to such "bodily injury" or "property damage" that occurs before the end of the period of time for which the "written contract requiring insurance" requires you to provide such coverage or the end of the policy period, whichever is earlier.

3. The insurance provided to the additional insured by this endorsement is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured for a loss we cover under this endorsement. However, if the "written contract requiring insurance" specifically requires that this insurance apply on a primary basis or a primary and non-contributory basis, this insurance is primary to "other insurance" available to the additional insured which covers that person or organization as a named insured for such loss, and we will not share with that "other insurance". But the insurance provided to the additional insured by this endorsement still is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured when that person or organization is an additional insured under such "other insurance".

4. As a condition of coverage provided to the additional insured by this endorsement:
   a) The additional insured must give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:
COMMERCIAL GENERAL LIABILITY

i. How, when and where the "occurrence" or offense took place;

ii. The names and addresses of any injured persons and witnesses; and

iii. The nature and location of any injury or damage arising out of the "occurrence" or offense.

b) If a claim is made or "suit" is brought against the additional insured, the additional insured must:

i. Immediately record the specifics of the claim or "suit" and the date received; and

ii. Notify us as soon as practicable.

The additional insured must see to it that we receive written notice of the claim or "suit" as soon as practicable.

c) The additional insured must immediately send us copies of all legal papers received in connection with the claim or "suit"; cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.

d) The additional insured must tender the defense and indemnity of any claim or "suit" to

any provider of "other insurance" which would cover the additional insured for a loss we cover under this endorsement. However, this condition does not affect whether the insurance provided to the additional insured by this endorsement is primary to "other insurance" available to the additional insured which covers that person or organization as a named insured as described in paragraph 3. above.

5. The following definition is added to SECTION V – DEFINITIONS:

"Written contract requiring insurance" means that part of any written contract or agreement under which you are required to include a person or organization as an additional insured on this Coverage Part, provided that the "bodily injury" and "property damage" occurs and the "personal injury" is caused by an offense committed:

a. After the signing and execution of the contract or agreement by you;

b. While that part of the contract or agreement is in effect; and

c. Before the end of the policy period.
Resolution No.
Resolution of the Council of the City of Palo Alto Approving An Amendment to Utilities Rule and Regulation 23 of the City of Palo Alto Utilities Pertaining to Special Wastewater Utility Regulations

The Council of the City of Palo Alto does hereby RESOLVE as follows:

SECTION 1. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utilities Rule and Regulation 23 (Special Wastewater Utility Regulations), Part B, pertaining to Hauled Waste, and Part C, pertaining to Maintenance of the Wastewater Collection System, is hereby amended to read in accordance with sheet numbers 1 through 11, attached hereto and incorporated herein. The foregoing Utilities Rule and Regulation 23, as amended, shall become effective July 11, 2011.

SECTION 2. The Council finds that the adoption of this resolution does not constitute a project under the California Environmental Quality Act, California Public Resources Code section 21080, subdivision (b)(8).

INTRODUCED AND PASSED:

AYES:
NOES:
ABSENT:
ABSTENTIONS:
ATTEST:

___________________________  ___________________________
City Clerk     Mayor

APPROVED AS TO FORM:    APPROVED:

___________________________  ___________________________
Senior Asst. City Attorney   City Manager

___________________________
Director of Utilities

___________________________
Director of Administrative Services
A. GENERAL

In addition to the general requirements outlined in Rule and Regulation 18 for Utility Service Connections and Facilities on Customers’ Premises, the following is required:

B. HAULED LIQUID WASTE

The discharge of hauled liquid wastes is regulated by the Palo Alto Municipal Code 16.09.110. The following Rules and Regulations are to implement this Provision.

1. PURPOSE

To provide a means of treating certain waste prohibited from entering the Wastewater system, City of Palo Alto Public Works Department operates a Hauled Liquid Waste Treatment Site at the Regional Water Quality Control Plant (RWQCP). Certain wastes may be hauled to this site for treatment and disposal.

2. WASTES ACCEPTABLE FOR TREATMENT

   a. Hauled septic tank wastes
   b. Portable toilet pumpings
   c. Grease Trap wastes

3. HOURS OF OPERATION

   Hours of operation for the Liquid Waste Hauler’s Treatment Site shall be as established by the Manager, Water Quality Control.

4. WASTE IDENTIFICATION

   The hauler must provide a liter sample, taken in the presence of a waste treatment plant operator, of the contents of each tank to be discharged. The nature and source of the waste will be verified before the truck is permitted to unload. If laboratory analysis indicates that the material is not as represented (septic tank waste or toilet piping from a domestic source) the hauler’s permit may be revoked.
5. **HAULING OPERATIONS**

a. To discharge at the Regional Water Quality Control Plant, a hauler must:

1. Obtain a Trucker’s Discharge Permit from the Manager, Water Quality Control;

2. File with City of Palo Alto Public Works Department a Certification of insurance and a hold harmless clause:

3. Post a bond or cash deposit with City of Palo Alto Public Works Department’s appropriate division.

b. The Trucker’s Discharge Permit shall be issued for twelve-month periods and is revocable for the violation of any of these Rules. The fee for Trucker’s Discharge Permits shall be as stated in City of Palo Alto Public Works Department Rate Schedule S-4.

c. Insurance policies in force with limits of liability shall not be less than those specified below as follows:

<table>
<thead>
<tr>
<th>Coverage for Which Insurance is Afforded</th>
<th>Limits of Liability</th>
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</thead>
<tbody>
<tr>
<td>Worker’s Compensation &amp; Employers’ Liability</td>
<td>Compensation Statutory</td>
</tr>
<tr>
<td>Bodily Injury Liability except automobile including the following coverages:</td>
<td>$1,000,000 each Person $1,000,000 each occurrence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coverage for Which Insurance is Afforded</th>
<th>Limits of Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective, Completed Operations, Board Form Contractual and</td>
<td></td>
</tr>
</tbody>
</table>
SPECIAL WASTEWATER UTILITY REGULATIONS

RULE AND REGULATION 23

Personal Injury

Property Damage Liability $1,000,000 each occurrence
except automobile including the following coverages:
Protective, Completed Operations,
Board Form Contractual and Personal Injury

Property Damage Liability $1,000,000 each occurrence
except automobile including the following coverages:
Protective Completed Operations
and Board Form Contractual

Bodily Injury & Property Damage Liability Automobile $1,000,000 each Person

The hauler must agree to save and hold harmless City of Palo Alto Public Works Department CPAU, its officers, agents, and employees from any liability of any nature whatsoever caused in whole or in part, by the negligence of the hauler, or his agents, or employees, arising out of such operation.

6. BILLING

Waste Haulers will be billed directly for grease, septic tank and portable toilet wastes.

7. REFUSAL OF WASTES

City of Palo Alto Public Works Department CPAU reserves the right to reject any Load of hauled waste under the following conditions:

a. If the waste is not properly identified
b. If there is not sufficient storage capacity at the plant for the Load
c. For reasons of public health or safety at the discretion of the Manager, Water Quality Control Plant.
d. If the Load contains waste materials not authorized by these Regulations.
C. MAINTENANCE OF THE WASTEWATER COLLECTION SYSTEM

Depending on whether the City’s Wastewater main is located in the public right-of-way or in an easement, the Customer may be solely responsible for the inspection, maintenance and repair of a portion of the lateral or the entire lateral. (A lateral is the pipe connecting a building’s plumbing system with the City's Wastewater main.)

1. CITY’S WASTEWATER MAIN IN THE PUBLIC RIGHT-OF-WAY

If the City’s Wastewater main is located in the public right-of-way, the Customer is responsible for the upper portion of the lateral, from their home or structure up to and including the connection to the City’s Wastewater main cleanout box, as shown on the diagram below. In cases where a cleanout at the property line does not exist or the existing cleanout is greater than five (5) feet from the property line, the City is responsible for only the portion of the lateral located between the property line and the City’s Wastewater main. The City will install a cleanout in the planting strip, at the back of the sidewalk, or matching the water meter box setback distance and the cleanout will be installed on private property within five (5) feet of the property line. If the Customer (or the Owner, if the Customer is not the owner of the property) refuses to permit the City to install a cleanout, then the Customer (or the Owner, if the Customer is not the owner of the property) shall be solely responsible for the lateral running from the City’s Wastewater main to the home or other structure.
2. CITY’S WASTEWATER MAIN IN AN EASEMENT

The City’s Wastewater mains that are located in easements are often, but not always, located at the rear of the property rather than under the public street or public right-of-way surface. If the City’s Wastewater main is located within an easement, CPAU will be responsible for the inspection, maintenance and repair of the City’s Wastewater main located therein. The Customer is responsible for inspecting, maintaining and repairing the City’s Wastewater lateral, including, but not limited to, clearing any stoppages and any clean-up related to lateral backups. The diagram below illustrates the Customer’s area of responsibility.
3. CUSTOMER’S RESPONSIBILITY REGARDLESS OF LOCATION OF CITY’S WASTEWATER MAIN

These rules shall apply no matter where the location of the City’s Wastewater main is located.

a. If the City’s Wastewater main’s maintenance is necessitated by or otherwise results from a violation of the Municipal Code and/or these Regulations, CPAU may assign responsibility to the Customer, and may refuse to perform such maintenance.

b. The Customer will be responsible for replacing non-plastic Wastewater laterals whenever the Customer is building a new structure or constructing additions/remodels that have a value greater than fifty percent (50%) of the current value of the existing structures on the lot. Reconnection to a City’s Wastewater lateral will only be allowed on existing plastic pipe laterals meeting current WGW Utility Standards. All laterals constructed of non-standard pipe materials must be replaced, per the WGW Utility Standards, from the main up to and including the cleanout at the property line at the fees listed in Utility Rate Schedule S-5, or by the Customer’s contractor at the Customer’s expense.

c. The inspection, maintenance and repair of private sewer mains and laterals shall be the responsibility of the Customers (or the Property Owners, if the Customers are not the Property Owners) up to and including the connection of the private sewer mains and laterals to the City’s Wastewater mains or manholes. However, the City will conduct at
its cost (without cost to the Customers or the Property Owners) and assume temporary responsibility for the inspection and maintenance or repair, if required, of the private sewer mains and laterals if the City determines that an unsafe condition exists with respect to such private sewer mains and laterals and CPAU has created such unsafe condition. CPAU’s temporary responsibility and obligation to inspect and maintain or repair, if required, any private sewer main and lateral will continue until CPAU has restored the private sewer main and lateral, which are initially determined to be in an unsafe condition, to a safe condition, and the City at its cost has taken such other reasonably necessary actions regarding any other utility facilities that may have contributed, directly or indirectly, to the existence of the unsafe condition.

d. The Customer will be responsible for the on-site Wastewater Collection System in accordance with the Municipal Code, including:

1. Preventing storm \( \text{WW} \)ater, roof or yard drainage, basement, foundation or under-drainage from being discharged into the Wastewater Collection System, unless a permit is granted by Regional Water Quality Control Plant. In addition, any plumbing or piping that is connected or could be connected that would allow the future discharge of storm \( \text{WW} \)ater or ground \( \text{WW} \)ater into the Wastewater Collection System is prohibited.

2. Maintaining the condition of the on-site Wastewater Collection System so that it is water-tight and does not allow the infiltration of groundwater.

3. Keeping the clean-out box at ground level and visible. If, after receipt of a 30-day notice from CPAU, the Customer has not made the clean-out box accessible, CPAU may remedy the inaccessibility by performing the work and charging the Customer for the actual costs incurred.

4. Installing, maintaining, and ensuring the proper usage of Grease Control Devices in accordance with the Sewer Use Ordinance (Section 16.09.103 of the Municipal Code). If the source of grease contamination in the Wastewater Collection System can be linked to a particular Customer, the Customer may be held responsible for cleaning or causing the cleaning of the Wastewater Collection System, including any associated costs or damages incurred by the City.

5. Limiting the \( \text{WW} \)ater inflow rate to the Wastewater Collection System during fire system testing to 30 GPM. Higher flushing rates must be diverted to a detention
6. Limiting Wastewater ejector pumps usage so that the following conditions are met: The pump(s)’ output capacity may not exceed 100 GPM. The Wastewater lateral must change to a 4” gravity flow lateral at least 20’ from the City-owned clean-out. The velocity in the 4” gravity flow lateral must not exceed 3 feet per second. The tank and float shall be set up such that the pump runtime does not exceed 20 seconds or 33 gallons pumped during each cycle.

7. Installing an approved backwater valve per the latest adopted version of the California Plumbing Code, Section 710.0, when the floor elevations with fixtures or drains connected to the Wastewater Collection System are less than one foot above the next upstream Wastewater main manhole cover. The upstream Wastewater main manhole rim elevation shall be shown on the plans.

4. NOTIFICATION TO CPAU

If a Wastewater stoppage occurs, the Customer shall timely notify CPAU. CPAU will then determine whether the stoppage has occurred in the portion of the system maintained by CPAU or the Customer (or the Property Owner, if the Customer is not the owner of property). CPAU will clear the stoppage that has occurred from the property line or clean out to the main in the portion of the system maintained by CPAU.

D. SAMPLING OF INDUSTRIAL DISCHARGES IN EXCESS OF 25,000 GALLONS PER DAY

In order to properly apportion costs of operation and maintenance of the RWQCP to the large industrial or commercial users, it is essential to determine both the quantity and quality of Wastewater produced by each user discharging 25,000 gallons per day or its equivalent.

The following is adopted as a fair and equitable method of developing the necessary criteria:

1. FLOW

The quantity Charge shall be based upon the metered Water served to the industrial or commercial user being billed. Exceptions will be made for the following:

a. For Customers with one or more cooling towers, the volume of evaporated Water associated with cooling (inflow less outflow) may be used to offset flow calculations.
for Wastewater billing. To be eligible for such offsets, the Customer must comply with the following items:

1. Inflow Water data
   (a) Customer must have inflow Water Meter(s) on all cooling tower inlet(s);
   (b) Meter(s) must be annually certified by County Department of Weights and Measures;
   (c) Proof of Certification(s) must be submitted to Utilities along with annual Meter Reads;

2. Outflow Water data
   (a) Five (5) cycles of concentration will be assumed for outflow calculations;
   (b) Customers whose cycles of concentration are greater than five (5) and who want to have this reflected in their calculations must have outflow Meter(s) installed;
   (c) Outflow Meter(s), if installed and used for purposes of calculation, must be annually certified by County Department of Weights and Measures;
   (d) Proof of Certification(s) must be submitted to Utilities along with annual Meter Reads;

3. Data acquisition and submittal
   (a) Customer is responsible for reading and recording each inflow Meter(s) flow (and each outflow Meter, if applicable) on a monthly basis;
   (b) Meter Reads should be performed at approximately the same time each month;
   (c) The following data, at a minimum, must be recorded at each reading:
      i. Date of read
      ii. Inflow read(s) for each inflow Meter
      iii. Outflow read(s) for each outflow Meter (if applicable)
   (d) The City of Palo Alto reserves the right to periodically review Customer's Meter(s) for accuracy;
SPECIAL WASTEWATER UTILITY REGULATIONS

RULE AND REGULATION 23

4. Participation rules and restrictions
   (a) Customer must have six (6) months of data in the first year to be eligible for participation;
   (b) Customer must annually submit twelve (12) months of data thereafter;
   (c) Inflow data (and outflow data, if applicable) must be submitted to the Utilities Customer Service Division annually by May for consideration in calculations for July (the start of the City's fiscal year);

b. In cases where the user has extensive landscape irrigation and summer monthly consumption exceeds the average monthly consumption of January, February, and March by more than 50 percent (50%), the average of the January, February, and March consumption shall be used for calculating wastewater discharge for the remaining months of the year.

c. If an outflow Meter has been installed, such metered outflow will be used to determine flow in lieu of recorded water meter consumption.

2. CHEMICAL OXYGEN DEMAND, SUSPENDED SOLIDS, AMMONIA
   a. Measurements of the concentration of these constituents shall be taken from 24-hour composite samples collected periodically for each industrial discharger discharging in excess of 25,000 gallons per day to the wastewater collection system.

   1. The constituent concentrations found in these samples and previous samples shall be averaged to provide the basis for establishing the Wastewater Treatment Charge to be levied to the discharger being sampled.

   2. All samples shall be analyzed at the laboratory of the RWQCP. Treatment Charges will be based upon the quantity and concentration found in the waste stream monitored.

b. If an establishment’s piping configuration, or other physical considerations, render representative Effluent sampling prohibitively complex or infeasible, then CPAU shall set the establishment’s level of sewage effluent constituents
for billing purposes at the average effluent levels of industries in CPAU, or where feasible, at the average effluent constituent levels of similar establishments.

c. Sampling results are intended to provide an estimate of the quality of Effluent discharge by the facility. Sampling results can vary significantly depending on the facility processes operating on the day of sampling. If the annual sampling results in combination with the flow data indicate a revised annual bill to the Customer, the amount of the increase or decrease shall not exceed 25 percent. The 25 percent limitation is independent of any change in rates or Charges to Rate Schedule S-2.

(END)