



AGENDA REPORT

Meeting Date: June 21, 2011
Item Number: F-6
To: Honorable Mayor & City Council
From: Ara Maloyan, Deputy City Engineer *AM*
Samer Elayyan, Civil Engineer *SE*
Subject: APPROVAL OF AN AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND ADVANCED SEWER TECHNOLOGIES TO PROVIDE PROFESSIONAL SERVICES FOR THE SANITARY SEWER CLOSED CIRCUIT TELEVISION (CCTV) AND CONDITION ASSESSMENT AND RECOMMENDATIONS FOR 48 MILES OF SEWER MAINLINE AND ASSOCIATED MANHOLES; AND

APPROVAL OF A PURCHASE ORDER IN THE AMOUNT OF \$226,950 TO ADVANCED SEWER TECHNOLOGIES

Attachments: 1. Agreement

RECOMMENDATION

Staff recommends that the City Council move to approve an Agreement between the City of Beverly Hills and Advanced Sewer Technologies to provide professional services for the Sanitary Sewer Closed Circuit Television (CCTV) and Condition Assessment and Recommendations for 48 miles of sewer mainline and associated manholes (1300) within the City of Beverly Hills; and approve a purchase order to Advanced Sewer Technologies in the amount of \$226,950.

INTRODUCTION

This report requests City Council approval of a professional services agreement with Advanced Sewer Technologies to provide CCTV services and condition assessment and rehabilitation recommendations for approximately 48 miles of sewer pipes ranging in diameter from 6" to 32" and associated manholes (1300 manholes) within the City of Beverly Hills.

DISCUSSION

DISCUSSION

The City of Beverly Hills provides wastewater collection services to a population of approximately 34,000. The 50 to 80-year old City's sewer collection system consists of approximately 100 miles of gravity sewer mains ranging in diameter from 6 inches to 36 inches (covering a 5.7 square mile area). The overall system drains from the hills in the north to a Los Angeles County outfall connection at Gregory Way and to City of LA mainlines in Whitworth Drive and La Cienega Boulevard. All of the wastewater generated by the City of Beverly Hills ultimately makes its way to the Hyperion Wastewater Treatment Plant on the coast, west of El Segundo and south of Marina del Rey in the city of Los Angeles. The City sewer system has been divided up into 21 Maintenance areas by city maintenance staff. The City of Beverly Hills is responsible for the operation and maintenance services of the City's sewer collection system, including cleaning and CCTV inspection.

CCTV inspection is an important tool to assess the condition of the City's sewers and manholes. This method is used to inspect and document the structural conditions of the sewers and manholes identifying the sewers and manholes that require repair, rehabilitation, or replacement. The overall condition of the system of pipes and manholes videoed will be determined and structural deficiencies will be identified for each pipe reach and manhole. In addition, rehabilitation recommendations will be provided, which will be essential in assisting engineering division staff to plan and prioritize future sewer improvement projects. Approximately half of the City's sanitary sewer system was inspected under previous sewer projects and as part of the recently completed Sewer Master Plan (SMP). Consequently, upon completion of this project the entire system will have been inspected.

On May 2, 2011, engineering staff sent the following three CCTV companies a request for proposal (RFP) to provide professional services for the Sanitary Sewer CCTV and Condition Assessment and Recommendations Services for 48 miles of sewer pipes ranging in diameter from 6" to 32" and associated manholes (1300) within the City limits:

- 1) Affordable Pipeline Services.
- 2) Innerline Engineering, Inc.
- 3) Tunnel Vision Pipeline Cleaning and Video Inspection.

The RFP was also posted on the City's website; to solicit proposals from all other interested companies. A mandatory pre-proposal meeting was held in the Public Works and Transportation Department offices on May 9, 2011, and representatives from the following six companies attended this meeting:

- 1) Advanced Sewer Technologies (AST).
- 2) National Plant Services, Inc. (NPS).
- 3) Proven Management
- 4) Provision Pipeline, Inc.
- 5) Quality Pipe Services (QPS).
- 6) Tunnel Vision Pipeline Cleaning and Video Inspection.

Three responsive proposals were received on May 23, 2011, from:

- 1) Advanced Sewer Technologies (AST).
- 2) National Plant Services, Inc. (NPS).
- 3) Quality Pipe Services (QPS).

These three proposals were subsequently reviewed and evaluated by civil engineering staff based on the Qualifications-Based Selection (QBS) process established by the United States Congress as a part of the Brooks Act (Public Law 92-582) and further developed as a process for public agencies to use for the selection of architectural and engineering services for public construction projects Section 4526 of the California Government Code). It is a competitive contract procurement process; whereby, consulting firms submit qualifications to a procuring entity (owner) who evaluates and selects the most qualified firm, and then negotiates the project scope of work, schedule, budget and consultant fee. Under a QBS procurement, the cost of the work (price) is not considered when making the initial selection of the best or most appropriate provider of the professional service required. To ensure this, staff requested in the RFP that consultants provide their cost proposal in a separate sealed envelope.

The evaluation process resulted in staff's unanimous selection of Advanced Sewer Technologies to provide professional services for the sanitary sewer CCTV and condition assessment and recommendations for 48 miles of sewer pipes and associated manholes (1300) within the City of Beverly Hills.

Accordingly, Staff recommends approval of an agreement with Advanced Sewer Technologies to provide professional services for the Sanitary Sewer CCTV and Condition Assessment and Recommendations for 48 miles of sewer pipes and 1300 associated manholes within the City of Beverly Hills.

The contract amount is based upon a linear foot unit price, (regardless of pipeline diameter and the number of associated manholes). This linear footage price constitutes full compensation for furnishing all materials, labor, traffic control set up (heavy and light traffic areas), night-time and/or weekend work, tools and equipment for the cleaning, video inspection/taping, condition assessment and rehabilitation recommendations of the sanitary sewer pipelines and manholes.

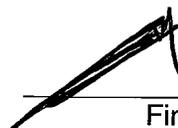
The project timeline is as follows:

August 8, 2011: Notice to Proceed and Project Kick-off Meeting
November 8, 2011: Project Completion

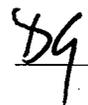
FISCAL IMPACT

Funds for this project are identified in Fiscal Year 2010-2011 CIP budget and are provided as follows:

FUND	PROJECT NUMBER	SUB-PROJECT NUMBER	FUNDING SOURCE	AMOUNT
84	0066	35-84-0066-85040	Wastewater Enerprise Fund	\$226,950



Scott Miller
Finance Approval



David Gustavson
Approved By

Attachment 1

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND
ADVANCED SEWER TECHNOLOGIES TO PROVIDE PROFESSIONAL
SERVICES FOR THE SANITARY SEWER CLOSED CIRCUIT
TELEVISION (CCTV) AND CONDITION ASSESSMENT AND
RECOMMENDATIONS FOR 48 MILES OF SEWER MAINLINE AND
ASSOCIATED MANHOLES

NAME OF CONSULTANT:	Advanced Sewer Technologies
RESPONSIBLE PRINCIPAL OF CONSULTANT:	Jeff Garcia, Administrative Manager
CONSULTANT'S ADDRESS:	4617 Brazil Street Los Angeles, CA 90039 Attention: Jeff Garcia, Administrative Manager
CITY'S ADDRESS:	City of Beverly Hills 455 N. Rexford Drive Beverly Hills, CA 90210 Attention: David Gustavson, Director of Public Works and Transportation
COMMENCEMENT DATE:	June 22, 2011
TERMINATION DATE:	Upon satisfactory completion of all work required under this Agreement as determined by City
CONSIDERATION:	Not to exceed \$ 226,950.00

AGREEMENT BETWEEN THE CITY OF BEVERLY HILLS AND
ADVANCED SEWER TECHNOLOGIES TO PROVIDE PROFESSIONAL
SERVICES FOR THE SANITARY SEWER CLOSED CIRCUIT
TELEVISION (CCTV) AND CONDITION ASSESSMENT AND
RECOMMENDATIONS FOR 48 MILES OF SEWER MAINLINE AND
ASSOCIATED MANHOLES

THIS AGREEMENT is made by and between the City of Beverly Hills (hereinafter called "CITY"), and Advanced Sewer Technologies (hereinafter called "CONSULTANT").

RECITALS

A. CITY desires to have certain services and/or goods provided as set forth in Exhibit A (the "Scope of Work"), attached hereto and incorporated herein.

B. CONSULTANT represents that it is qualified and able to perform the Scope of Works.

NOW, THEREFORE, the parties agree as follows:

Section 1. CONSULTANT's Scope of Work. CONSULTANT shall perform the Scope of Work described in Exhibit A in a manner satisfactory to CITY and consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CITY shall have the right to order, in writing, changes in the Scope of Work. Any changes in the Scope of Work by CONSULTANT must be made in writing and approved by both parties. The cost of any change in the Scope of Work must be agreed to by both parties in writing.

Section 2. Time of Performance. CONSULTANT shall commence its services under this Agreement upon receipt of a written notice to proceed from CITY. CONSULTANT shall complete the performance of services by the Termination Date set forth above and/or in conformance with the project timeline established by the City Manager or his designee.

The City Manager or his designee may extend the time of performance in writing for two additional one-year terms or such other term not to exceed two years from the date of termination pursuant to the same terms and conditions of this Agreement.

Section 3. Compensation.

(a) Compensation. CITY agrees to compensate CONSULTANT for the services and/or goods provides under this Agreement, and CONSULTANT agrees to accept in full satisfaction for such services, a sum not to exceed the Consideration set forth above and more particularly described in Exhibit B, attached hereto and incorporated herein.

(b) Expenses. The amount set forth in paragraph (a) shall include reimbursement for all actual and necessary expenditures reasonably incurred in the performance of this Agreement (including, but not limited to, all labor, materials, delivery, tax, assembly, and

installation, as applicable). There shall be no claims for additional compensation for reimbursable expenses.

(c) Additional Services. CITY may from time to time require CONSULTANT to perform additional services not included in the Scope of Services. Such requests for additional services shall be made by CITY in writing and agreed upon by both parties in writing.

Section 4. Method of Payment. Unless otherwise provided for herein, CONSULTANT shall submit to CITY a detailed invoice, on a monthly basis or less frequently, for the services performed pursuant to this Agreement. Each invoice shall itemize the services rendered during the billing period and the amount due. Within 30 days of receipt of each invoice, CITY shall pay all undisputed amounts included on the invoice. CITY shall pay CONSULTANT said Consideration in accordance with the schedule of payment set forth in Exhibit B, attached hereto and incorporated herein.

Section 5. Independent Contractor. CONSULTANT is and shall at all times remain, as to CITY, a wholly independent contractor. Neither CITY nor any of its agents shall have control over the conduct of CONSULTANT or any of CONSULTANT's employees, except as herein set forth. CONSULTANT shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of CITY.

Section 6. Assignment. This Agreement shall not be assigned in whole or in part, by CONSULTANT without the prior written approval of CITY. Any attempt by CONSULTANT to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

Section 7. Responsible Principal(s)

(a) CONSULTANT's Responsible Principal set forth above shall be principally responsible for CONSULTANT's obligations under this Agreement and shall serve as principal liaison between CITY and CONSULTANT. Designation of another Responsible Principal by CONSULTANT shall not be made without prior written consent of CITY.

(b) CITY's Responsible Principal shall be the City Manager or his designee set forth above who shall administer the terms of the Agreement on behalf of CITY.

Section 8. Personnel. CONSULTANT represents that it has, or shall secure at its own expense, all personnel required to perform CONSULTANT's Scope of Work under this Agreement. All personnel engaged in the work shall be qualified to perform such Scope of Work.

Section 9. Permits and Licenses. CONSULTANT shall obtain and maintain during the Agreement term all necessary licenses, permits and certificates required by law for the provision of services under this Agreement, including a business license.

Section 10. Interests of CONSULTANT. CONSULTANT affirms that it presently has no interest and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of the Scope of Work contemplated by this Agreement. No person having any such interest shall be employed by or be associated with CONSULTANT.

Section 11. Insurance.

(a) CONSULTANT shall at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

(1) A policy or policies of Comprehensive General Liability Insurance, with minimum limits of Two Million Dollars (\$2,000,000) for each occurrence, combined single limit, against any personal injury, death, loss or damage resulting from the wrongful or negligent acts by CONSULTANT.

(2) A policy or policies of Comprehensive Vehicle Liability Insurance covering personal injury and property damage, with minimum limits of One Million Dollars (\$1,000,000) per occurrence combined single limit, covering any vehicle utilized by CONSULTANT in performing the Scope of Work required by this Agreement.

(3) Workers' compensation insurance as required by the State of California.

(b) CONSULTANT shall require each of its sub-contractors to maintain insurance coverage which meets all of the requirements of this Agreement.

(c) The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least a B+,VII in the latest edition of Best's Insurance Guide.

(d) CONSULTANT agrees that if it does not keep the aforesaid insurance in full force and effect CITY may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, CITY may take out the necessary insurance and pay, at CONSULTANT's expense, the premium thereon.

(e) At all times during the term of this Agreement, CONSULTANT shall maintain on file with the City Clerk a certificate or certificates of insurance on the form set forth in Exhibit C, attached hereto and incorporated herein, showing that the aforesaid policies are in effect in the required amounts. CONSULTANT shall, prior to commencement of work under this Agreement, file with the City Clerk such certificate or certificates. The general and auto liability insurance shall contain an endorsement naming CITY as an additional insured. All of the policies required under this Agreement shall contain an endorsement providing that the policies cannot be canceled or reduced except on thirty (30) days prior written notice to CITY, and specifically stating that the coverage contained in the policies affords insurance pursuant to the terms and conditions as set forth in this Agreement.

(f) The insurance provided by CONSULTANT shall be primary to any coverage available to CITY. The policies of insurance required by this Agreement shall include provisions for waiver of subrogation.

(g) Any deductibles or self-insured retentions must be declared to and approved by CITY. At the option of CITY, CONSULTANT shall either reduce or eliminate the deductibles or self-insured retentions with respect to CITY, or CONSULTANT shall procure a bond guaranteeing payment of losses and expenses.

Section 12. Indemnification. CONSULTANT agrees to indemnify, hold harmless and defend CITY, City Council and each member thereof, and every officer, employee and agent of CITY, from any claim, liability or financial loss (including, without limitation, attorneys fees and costs) arising from any intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONSULTANT or any person employed by CONSULTANT in the performance of this Agreement.

Section 13. Termination.

(a) CITY shall have the right to terminate this Agreement for any reason or for no reason upon five calendar days' written notice to CONSULTANT. CONSULTANT agrees to cease all work under this Agreement on or before the effective date of such notice.

(b) In the event of termination or cancellation of this Agreement by CITY, due to no fault or failure of performance by CONSULTANT, CONSULTANT shall be paid based on the percentage of work satisfactorily performed at the time of termination. In no event shall CONSULTANT be entitled to receive more than the amount that would be paid to CONSULTANT for the full performance of the services required by this Agreement. CONSULTANT shall have no other claim against CITY by reason of such termination, including any claim for compensation.

Section 14. CITY's Responsibility. CITY shall provide CONSULTANT with all pertinent data, documents, and other requested information as is available for the proper performance of CONSULTANT's Scope of Work.

Section 15. Information and Documents. All data, information, documents and drawings prepared for CITY and required to be furnished to CITY in connection with this Agreement shall become the property of CITY, and CITY may use all or any portion of the work submitted by CONSULTANT and compensated by CITY pursuant to this Agreement as CITY deems appropriate.

Section 16. Records and Inspections. CONSULTANT shall maintain full and accurate records with respect to all matters covered under this Agreement for a period of 2 years. CITY shall have access, without charge, during normal business hours to such records, and the right to examine and audit the same and to make copies and transcripts therefrom, and to inspect all program data, documents, proceedings and activities.

Section 17. Changes in the Scope of Work. CITY shall have the right to order, in writing, changes in the scope of work or the services to be performed. Any changes in the scope of work requested by CONSULTANT must be made in writing and approved by both parties.

Section 18. Notice. Any notices, bills, invoices, etc. required by this Agreement shall be deemed received on (a) the day of delivery if delivered by hand during the receiving party's regular business hours or by facsimile before or during the receiving party's regular business hours; or (b) on the second business day following deposit in the United States mail, postage prepaid to the addresses set forth above, or to such other addresses as the parties may, from time to time, designate in writing pursuant to this section.

Section 19. Attorney's Fees. In the event that either party commences any legal action or proceeding to enforce or interpret the provisions of this Agreement, the prevailing party in such

action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

Section 20. Entire Agreement. This Agreement represents the entire integrated agreement between CITY and CONSULTANT, and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both CITY and CONSULTANT.

Section 21. Exhibits; Precedence. All documents referenced as exhibits in this Agreement are hereby incorporated in this Agreement. In the event of any material discrepancy between the express provisions of this Agreement and the provisions of any document incorporated herein by reference, the provisions of this Agreement shall prevail.

Section 22. Governing Law. The interpretation and implementation of this Agreement shall be governed by the domestic law of the State of California.

Section 23. CITY Not Obligated to Third Parties. CITY shall not be obligated or liable under this Agreement to any party other than CONSULTANT.

Section 24. Severability. Invalidation of any provision contained herein or the application thereof to any person or entity by judgment or court order shall in no way affect any of the other covenants, conditions, restrictions, or provisions hereof, or the application thereof to any other person or entity, and the same shall remain in full force and effect.

EXECUTED the _____ day of _____ 20____, at Beverly Hills, California.

CITY OF BEVERLY HILLS, a municipal corporation

BARRY BRUCKER
Mayor of the City of Beverly Hills, California

ATTEST:

BYRON POPE
City Clerk

ADVANCED SEWER TECHNOLOGIES


ALAINA McDONALD
Vice President


CURT MEYER
Chief Financial Officer

APPROVED AS TO FORM



LAURENCE S. WIENER
City Attorney

APPROVED AS TO CONTENT

JEFFREY KOLIN
City Manager



DAVID D. GUSTAVSON
Director of Public Works & Transportation



KARL KIRKMAN
Risk Manager

EXHIBIT A

SCOPE OF WORK

CONSULTANT shall furnish all labor, materials, equipment, and incidentals necessary to perform Sanitary Sewer Condition Assessment and Recommendations and CCTV Inspection Services to 48 miles of sewer pipes ranging in diameter from 6" to 32" and associated manholes (approximately 1300) within CITY. The purpose of the condition assessment program is to assess the structural condition, hydraulic condition and/or sedimentation level of all pipelines for inclusion in future rehabilitation projects. The overall condition of the system of pipes and manholes videoed will be determined and structural deficiencies will be identified for each pipe reach and associated manholes. Based on the assessment, CONSULTANT shall provide Rehabilitation recommendations for each defected sewer segment/manhole such as; but not limited to, **Point Repair (location and length), CIPP Lining, Pipe Replacement (Location and length), Manhole Replacement.** *These recommendations shall be only for the Sewer Main Line and manholes and NOT to the sewer laterals as they are owned and maintained by the home owner.*

CONSULTANT shall comply with the detailed scope of work herein.

CCTV Inspection:

- A. CONSULTANT shall make a video recording of the television inspection and supply one copy to CITY. The video recordings shall be in color and give clear video/pictures of conditions of pipelines with hydraulic and structural problems. The recording(s) deemed unacceptable by CITY shall be reproduced at no cost to CITY.

All data and video recording will become the sole property of CITY without restrictions of future use, duplication, modification, and dissemination. CONSULTANT shall have no vested rights to the completed work and may not sell or reuse it without CITY's prior written permission. The data furnished to CONSULTANT for use in rendering services under the Agreement shall remain the property of CITY and shall be returned on termination of the Agreement. CONSULTANT may not distribute, sell or otherwise use data without prior written permission of CITY.

- B. CONSULTANT shall create pipeline reports, containing the measurement of faults and other features inside the pipeline. This includes measurements of pipe size, number and location of laterals, water levels and other features, as well as automatic analysis of pipe ovality and pipe available capacity up to 30 times per second.
- C. The camera shall be moved through the line in either direction at a uniform rate stopping when necessary to ensure proper documentation of the sewer's

condition but in no case shall the television camera be pulled at a speed greater than thirty feet per minute (30 fpm).

- D. As the camera approaches a lateral connection or substantial structural defect, the camera progress shall be halted and the camera lens panned to further view the lateral pipe and connection (including looking up the lateral) or defect to thoroughly evaluate its condition.
- E. Manual winches, power winches, TV cable powered rewind or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the line. If during the inspection operation the television camera will not pass through the entire manhole section, CONSULTANT shall re-set his equipment in a manner so that the inspection can be performed from the opposite manhole. If again, the camera fails to pass through the entire section, CONSULTANT shall notify CITY's project manager immediately.
- F. If during the television inspection CONSULTANT encounters a condition where public safety is threatened (such as, but not limited to, a pipe hole, pipe collapse, stoppage, blockage and/or eminent sewer spill) City Project Manager shall be notified immediately. Furthermore, CONSULTANT shall provide a videotape copy of the section of line containing the condition within 24 hours to CITY's project manager.
- G. If during the television Inspection, the camera is jammed inside the sewer and cannot be retrieved, CONSULTANT shall not excavate the pipe to retrieve it. CONSULTANT shall inform CITY immediately for assistance, but it is CONSULTANT's responsibility to remove the camera and ensure that the sewer is not damaged.
- H. Whenever non-remote powered and controlled winches are used to pull the television camera through the line, telephone, radios or other suitable means of communication shall be set up between the two manholes of the section being inspected to ensure that adequate communications exists between members of the crew.

CCTV Operators:

CONSULTANT's closed-circuit television (CCTV) operators shall be certified by the National Association of Sewer Service Companies (NASSCO) by passing the Pipeline Assessment and Certification Program (PACP). The methodology of evaluation, data collection, and reporting criteria used for the NASSCO certification shall be practiced for all CCTV inspections. No work under this Agreement shall be performed by non-NASSCO certified operators.

Pre-Inspection Cleaning:

All sewer pipelines to be inspected shall be sufficiently cleaned by CONSULTANT within 72 hours prior to CCTV inspection to provide clear examination of the pipe's interior and to provide sufficient opening for the camera to pass through the pipe. CONSULTANT shall be careful not to damage any pipes, including existing plastic lining.

Cleaning methods shall be employed to sufficiently clean the pipe so the camera can pass and fully ascertain and document the structural integrity and operational condition of the pipe. Any costs associated with CCTV work that is necessitated by CONSULTANT's failure to sufficiently clean the main line shall be borne by CONSULTANT.

All sludge, dirt, sand, rocks, grease, roots, and other solid or semisolid material resulting from the cleaning operations shall be removed and hauled away from the downstream manhole of the section being cleaned. Passing material from sewer section to sewer section shall not be permitted. CONSULTANT shall be responsible for removing all solid and semisolid materials from the cleaning operation from the work site no less often than at the end of each workday. Materials, which accumulate during the workday, shall be placed in totally enclosed and watertight containers. Handling, transport, and disposal of materials shall be in full compliance with all applicable Federal, State, and local requirements.

CONSULTANT shall verify the manhole locations and information that will be provided by CITY's Project Manager in the kick-off meeting prior to the CCTV inspections. CONSULTANT shall notify Project Manager of any discrepancies within 24 hours of discovering discrepancies.

CCTV Equipment:

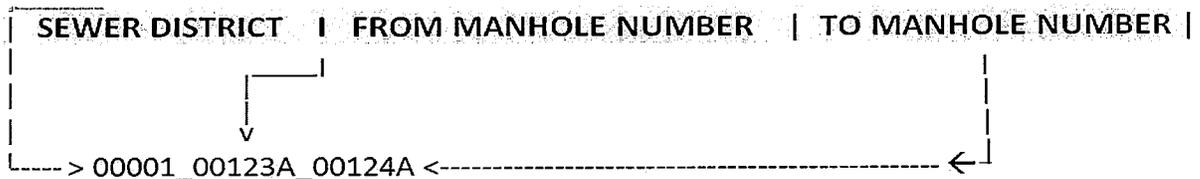
- A. CONSULTANT's CCTV equipment shall include video cameras, a video monitor cable, power sources, and all equipment necessary to perform a CCTV inspection.
- B. The cameras shall meet Cal-OSHA requirements for operating in a sanitary sewer environment.
- C. The cameras shall have Pan-and-Tilt capabilities, and shall have a minimum of 360 x 270 degree rotation and illumination sensitivity shall be three lux or less and provide a minimum of 460 lines of resolution. The focal distance shall be adjustable through a range from 25 mm (1 inch) to infinity.
- D. During CCTV inspection, lighting intensity shall be adjusted to minimize glare. Lighting and picture quality shall be adjusted to provide a clear, in-focus picture of the entire periphery of the pipeline for all conditions encountered.

- E. All camera systems shall be able to navigate around minor objects, roots, and debris. The system used to move the camera through the pipe shall not obstruct the camera's view or interfere with proper documentation of the sewer conditions.
- F. The camera cable shall be retracted to remove slack and to ensure an accurate footage reading.
- G. The distance shall be measured between the exit of the start manhole and the entrance of the finish manhole for a true measurement of the length of the pipe segment, as required by PACP. It shall be recorded in standard units and the video display readout shall display units to one-tenth of a foot.
- H. The cable footage-counter shall be accurate to plus or minus 2 feet per 1,000 feet. CONSULTANT shall calibrate their measuring device monthly with a known distance prior to starting the inspection and recording process.
- I. Video inspection and reporting shall be submitted in a NASSCO-compatible format.
- J. The camera lens shall be kept clear of condensation and debris during the CCTV inspection.
- K. A Nationally Recognized Testing Laboratory must approve all electrical equipment, including CCTV cameras, for use in a Hazardous location and wet environments. This equipment must be approved for use in Class I, Division I, Group 0 Hazardous Locations as defined by the National Fire Protection Association (NFPA) Code 820-1999.
- L. CONSULTANT shall have the ability to communicate with its crew at all times (i.e., cellular phone, radio, etc.).
- M. CONSULTANT shall have replacement equipment available within twenty-four (24) hours in the event of equipment breakdown.

Software Requirements:

CONSULTANT shall perform all CCTV inspections using the WinCan V8 software in the PACP module. WinCan America Inc. can be contacted at (505) 341-0109. It is intended that CONSULTANT shall make a continuous digital recording of the complete pipe inspection. The recording shall also be used as a permanent record of defects. Unless directed otherwise by CITY, the recording shall be MPEG 4. CONSULTANT shall pause the digital recording at any time there is a delay in the inspection and restart the digital video recording in the same digital file. The pause shall in no way affect, freeze, or interrupt the reply of the video and shall not close the video file during the inspection. CONSULTANT shall store a single video file for each segment inspected. The recorded files shall have a

resolution of 352 by 240 pixels and an interlaced frame rate of a minimum of 24 frames per second. The naming of the video file shall be automatic, consisting of "UPSTREAM AND DOWNSTREAM DISTRICT NO. AND MANHOLE ID", as shown in the following example,



All pictures shall be recorded as a JPEG image. For each picture, indexing shall exist as a separate text file of the observation noted. The data shall be time coded using the elapsed time from the video file. This shall allow the user in WinCan to use the indexing feature and go to that defect with a click instead of fast forwarding or rewinding. All pictures shall have the same file name as the pipeline video plus the footage where the picture is taken.

Separate video and data files shall be created for each sewer line segment. In case of reverse setup, such inspection shall be stored in a separate video and data files. If an undocumented manhole is discovered during the inspection, then a separate inspection shall be started for the additional pipe segment. At the kick-off meeting, CITY will provide CONSULTANT with a list of unused manhole IDs for naming the undocumented manholes.

Video:

- A. CONSULTANT shall make a continuous color digital recording in MPEG 4 format for each pipe segment inspected, unless specified by CITY.
- B. Video files shall have a minimum resolution of 352 x 240 pixels and an interlaced frame rate at a minimum of 24 frames per second.
- C. Video inspection will not exceed a traverse rate of 30 feet per minute.
- D. CONSULTANT shall pause the digital recording at any time there is a delay in the inspection and restart the digital video recording in the same digital file. The pause shall in no way affect, freeze, or interrupt the replay of the video and shall not close the video file during the inspection.
- E. Each pipe segment (manhole to manhole) shall be identified with an initial text screen and completed in accordance with PACP's CCTV inspection form header Instructions and shall be as follows:

<u>Line Number</u>	<u>Description</u>
Line1:	Surveyed By
Line2:	Street
Line3:	Location Code*
Line4:	Weather*
Line5:	Direction of Survey (upstream/downstream)
Line6:	Use of sewer*
Line7:	Pipe Material
Line8:	Pipe Diameter/Height
Line9:	Pipe Length (on plans)
Line10:	Start Manhole City ID Number
Line11:	End Manhole City ID Number
Line12:	Pipe ID
Line 13:	Inspection Time/Date

- F. Line items noted with an asterisk (*) are optional at the written request of CITY's Director of Public Works or his designee depending on the line capacity of the text overlay equipment.
- G. This data must completely match the data entered in the database header information.
- H. CONSULTANT shall provide a sample submittal of the CCTV video output, inspection log, digital photos, and inspection evaluation database, after completing 1 day of CCTV inspection. CITY staff shall determine the typical video quality, quality of cleaning of the pipe, and judgment exercised on the evaluation of pipe condition.
- I. The initial text screen shall appear no more than 15 seconds at the beginning of the video footage, and shall appear before the 360 degree pan of the starting manhole.
- J. During the CCTV inspection, the video shall show the following text at all times:

<u>Line Number</u>	<u>Description</u>
Line1:	City
Line2:	Street/ Start Manhole City ID Number/ Direction of Inspection/End Manhole City ID Number
Line3:	Pipe Material/ Pipe Size
Line4:	Inspection Time/Date/Running Total

- K. During the CCTV inspection, the camera shall stop at all defects and significant observations to ensure a clear and focused view of the pipe condition and shall rotate the camera head at the defect to allow for adequate evaluation.
- L. The video recording shall include on-screen observation text for every observation recorded in the database, including AMH, in addition to the text in Section J above.

Photographs:

- A. Digital photographs in JPEG format shall be made of all recorded defect observations. These photographs will be computer generated with the use of the inspection reporting system software.
- B. JPEG images shall be captured at a minimum resolution of 640x480 pixels.
- C. At a minimum, all photographs shall be named consisting of the following descriptions: "FROM MANHOLE CITY ID NUMBER", "TO MANHOLE CITY ID NUMBER", the defect location along the pipe. It is in CONSULTANT's discretion as to additional data information that may be needed in the naming of the files to make each file unique within the file naming constraints of their inspection software.
- D. Any additional information shall be included after the mandatory info specified above. The naming convention shall be consistent throughout the project.
- E. A minimum of **ONE** photograph of each defect shall be taken.
- F. **ONE** photograph is required for each lateral connection looking directly at the connection and each AMH observation from the bottom of the manhole looking up.

Additional Inspection Procedures:

- A. A full 360 degree pan of all manholes is required. This video footage shall occur at the beginning of each pipe segment survey inspection from the bottom of the manhole panning up the manhole shaft. CONSULTANT shall cover the manhole opening to prevent too much light from entering the structure and to ensure a clear and focused view of the manhole interior. In instances when the manhole is the terminating manhole, then the pan shall occur at the end of the pipe segment survey inspection.
- B. Video footage shall be taken centered on the pipe with the water level running horizontally. The camera shall run along the invert of the pipe and not at its side, unless it is passing a point obstacle. If extended driving on the side of the pipe is required, then either the pipe needs a more thorough cleaning or an observation should be noted from the PACP codes describing the nature of the obstacle.
- C. Obstructions may be encountered during the course of the CCTV inspection that prevent the travel of the camera. In instances when obstructions are not passable, CONSULTANT shall withdraw the equipment and begin a CCTV inspection from the opposite end of the sewer reach.

- D. If a particular line is inspected more than once, then CONSULTANT shall include all versions of the inspections in the database. The Miscellaneous General Observation ("MGO") shall be used on all inspections except at the first occurrence. CONSULTANT shall provide an explanation for the additional inspections in the Remarks section.

Excessive Depth of Flow:

- A. Maximum depth of flow for CCTV inspections shall be 25 percent of the pipe diameter. If the depth of flow is greater, then the CCTV inspection shall be performed during the low flow periods between the hours of 10:00 p.m. to 6:00 a.m.
- B. *CONSULTANT shall abide by all local jurisdiction rules and regulations, especially regarding activities during off-peak hours. CONSULTANT shall obtain at no cost an "after hours permit" from Department of Community development located at 455 N. Rexford Drive if work is anticipated in the weekends or before 8:00 am or after 6:00 pm in the week days.*
<http://www.beverlyhills.org/civica/filebank/blobdload.asp?BlobID=5094>
- C. If the flow is still above 25 percent on the return trip, then CONSULTANT can use a flow-controlling mechanism (i.e. flow reducer) to control the flow and proceed with the inspection. After the initial screen and accessible manhole ("AMH") observation, the MGO shall be used to note the reason for the return to this location and indicate the use of such flow-controlling equipment, in the appropriate box in the section header information screen.
- D. CONSULTANT shall include the original inspection in the final submittal even with high flow conditions.
- E. If CONSULTANT encounters a surcharging manhole (whereas the flow at the manhole is at least 50 percent of the sewer pipe diameter), then CONSULTANT shall immediately notify the Public Works Drainage System Supervisor (Ken Gettler) at (310) 285-2469, and CITY's Project Manager (Samer Elayyan) at (310)285-2524.

Project Submittals and Deliverables and Review:

Submittal:

CONSULTANT shall submit the following to CITY upon completion of services:

- A. An external hard drive (provided by CONSULTANT at CONSULTANT's expense) or DVD(s) containing the database, video, and photo files with a folder for **each district**.

B. A printed Report in a hardcover white clear view 3-ring binder labeled as described in the "Deliverables Section" below containing the following information:

- a. Footage calibration report for each camera used.
- b. PACP Certificate copies of all operators.
- c. Summary table of all pipeline segments inspected within each district with the following fields in the order listed:

Column 1: Date of Inspection
Column 2: Start Manhole City ID
Column 3: Stop Manhole City ID
Column 4: Total Pipe Length
Column 5: Televised Length
Column 6: Quick Maintenance Rating (per PACP)
Column 7: Quick Structure Rating (per PACP)
Column 8: Section Number

(*NOTE: The table shall be sorted by Start Manhole)

- d. An observation table of all pipeline segments inspected with the following fields in the order listed:

Column 1: Section Number
Column 2: Position of Defect
Column 3: Observation Code (per PACP)
Column 4: Observation Description (per PACP)
Column 5: Structural Grade (per PACP)
Column 6: O&M Grade (per PACP)
Column 7: Recommendations (e.g. Point Repair, CIPP Lining, etc.)

(*NOTE: The table shall be sorted by Section Number)

Deliverables:

CONSULTANT shall deliver to CITY the following upon completion of services:

- A. All video recording, image files, and databases shall be submitted in a digital format approved by CITY's project manager and electronically stored in a WinCan V8, PACP database format, for proper data management. All video recording, image files, databases, and reports shall be generated using the Win Can V8 software. The digital CCTV inspections shall be submitted on an external hard drive with USB 2.0 connection. All submittals shall become the property of CITY.
- B. DVD's or External hard drive(s), binder cover and binder spine label shall include the following information on computer-generated labels:

1. City of Beverly Hills, Department of Public Works and Transportation, Engineering Division
2. General Consultant Name and Sub-Consultant Name
3. Project Number 5077
4. District Number
5. Start Date of CCTV Inspections (e.g. MM/DD/YYYY)
6. 6. Finish Date of CCTV Inspections (e.g. MM/DD/YYYY)

Video or DVD and written reports shall be submitted to:

**City of Beverly Hills
Department of Public Works and Transportation
Civil Engineering Division
345 N. Foothill Road
Beverly Hills, CA 90210
Attn: Samer Elayyan**

CITY Review

- A. The video recordings, photographs, and data shall be reviewed by CITY for focus, lighting, clarity of view, and technical quality.
- B. Videos or photographs recorded while a camera has flipped over in the process of traveling or the viewing of laterals, obstructions, or defects are blocked by cables, skids or other equipment will not be accepted.
- C. Shape, focus, proper lighting, and clear, distortion-free viewing during the camera operations shall be maintained. Failure to maintain these conditions will result in the rejection of the video and/or photographs by CITY.
- D. Videos or photographs recorded showing steam, inadequate lighting, or other poor image quality will be cause for rejection by CITY.
- E. Any reach of sewer where recording quality, inspection, and/or report is not acceptable to CITY shall be re-televised, or data modified at no additional cost to CITY.

Performance Schedule

Work shall be completed within 3 calendar months after the date of the Notice to Proceed.

EXHIBIT B

SCHEDULE OF PAYMENT AND RATES

- A. Measurement and payment for CCTV and condition assessment and recommendations of existing sanitary sewer pipelines and manholes shall be at the unit price per linear foot, regardless of diameter. CCTV Inspections for 48 miles and 1300 manholes of system-wide inspection
- B. Payment shall be made at the unit price per linear foot, regardless of pipeline diameter. Price shall constitute full compensation for furnishing all materials, labor, traffic control set up (heavy and light traffic areas), tools and equipment for the cleaning and video inspection/taping and condition assessment and rehabilitation recommendations of the existing sanitary sewer pipelines and manholes identified by CITY's Project Manager, including, but not limited to, submittals, deliverables, and review of the specifications, permitting, safety requirements, reports, DVD discs, hard drive, and all other incidental work not specifically described herein
- C. In general, the actual length video inspection should be used for invoicing purposes. The actual length is the distance that CONSULTANT was able to video inspect in lineal feet from the inside face of the upstream wall of the downstream manhole, where the CCTV equipment was placed into the pipe, to the farthest point along the pipe segment that cleaning was conducted with a maximum length being up to the inside face of the upstream wall of the upstream manhole.
- D. If a clean pipe is only able to be partially inspected due to an obstruction, CONSULTANT shall immediately alert CITY's Project Manager.
- E. If the obstruction is found to be a physical defect which did not allow the video inspection to take place, then CONSULTANT may invoice for the amount actually videotaped by CONSULTANT.
- F. For pipes that are able to be videotaped in their entirety, the invoiced length will be compared to the GIS length to identify inconsistencies. Also, CITY's Public Works Inspector and Project Manager will be inspecting work sites and measurement techniques during this project.
- G. Compensation for all debris removed from a pipeline segment shall include the cost of removal, transportation, reporting and tip fees associated with the complete removal and legal disposal of all material in compliance with all standards and requirements for debris disposal and shall be included in the Linear Foot unit price.

Item No.	Description of Work	Estimated Quantity	Units	Total Cost
1	Clean, CCTV, Assess condition and Provide recommendations of sewer lines and associated manholes identified by CITY's Project Manager and in accordance with the detailed scope of work, including traffic control, nuisance water protection, debris removal, hauling, and dump fee, safety requirements, etc.	255,000	Linear Feet ("LF")	\$226,950.00

The quantities estimated above are not guaranteed work. CITY reserves the right to assign more or less quantities/work for the same unit price provided herein. CITY is not obligated to any minimum or maximum quantities/work under the Agreement.

CONTRACTOR NAME:

Advanced Sewer Technologies

TOTAL COST NOT TO EXCEED

Words: Two Hundred Twenty Six Thousand Nine Hundred and Fifty Dollars

Figures: \$226,950.00

EXHIBIT C

CERTIFICATE OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below :

NAMED INSURED

COMPANIES AFFORDING COVERAGE

ADDRESS

- A.
- B.
- C.

COMPANY (A.B.C.)	COVERAGE	POLICY NUMBER	EXPIRATION DATE	B.I.	LIMITS P.D.	AGGREGATE
	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> GENERAL LIABILITY <input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS <input type="checkbox"/> BLANKET CONTRACTUAL <input type="checkbox"/> CONTRACTOR'S PROTECTIVE <input type="checkbox"/> PERSONAL INJURY <input type="checkbox"/> EXCESS LIABILITY <input type="checkbox"/> WORKER'S COMPENSATION					

It is hereby understood and agreed that the City of Beverly Hills, its City Council and each member thereof and every officer and employee of the City shall be named as joint and several assureds with respect to claims arising out of the following project or agreement:

It is further agreed that the following indemnity agreement between the City of Beverly Hills and the named insured is covered under the policy: Contractor agrees to indemnify, hold harmless and defend City, its City Council and each member thereof and every officer and employee of City from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against City, its City Council and each member thereof and any officer or employee of City which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by Contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right of contribution with insurance which may be available to the City of Beverly Hills.

In the event of cancellation or material change in the above coverage, the company will give 30 days' written notice of cancellation or material change to the certificate holder.

Except to certify that the policy(ies) described above have the above endorsement attached, this certificate or verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE : _____ BY : _____

 Authorized Insurance Representative

TITLE : _____
 AGENCY : _____ Address : _____

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

06/09/2011

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).

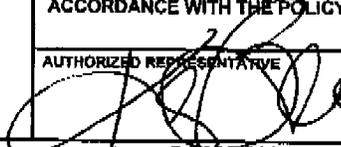
PRODUCER Colonial Western Insurance Agency License Number OE50896 751 Daily Drive, Suite 230 Camarillo, CA 93010		CONTACT NAME: PHONE (A/C, No, Ext): 805.388.7130 FAX (A/C, No): 805.388.7138 E-MAIL ADDRESS: PRODUCER CUSTOMER ID #:																						
INSURED Russell Warner Inc. DBA: Roto Rooter Service & Plumbing DBA: Advanced Sewer Technologies 24971 Avenue Stanford Valencia, CA 91355-1278		<table border="1"> <thead> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A:</td> <td>Wausau Underwriters Ins Co</td> <td></td> </tr> <tr> <td>INSURER B:</td> <td>Scottsdale Insurance Co</td> <td></td> </tr> <tr> <td>INSURER C:</td> <td>SeaBright Insurance Co</td> <td></td> </tr> <tr> <td>INSURER D:</td> <td></td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> <td></td> </tr> </tbody> </table>		INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Wausau Underwriters Ins Co		INSURER B:	Scottsdale Insurance Co		INSURER C:	SeaBright Insurance Co		INSURER D:			INSURER E:			INSURER F:		
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COVERAGES **CERTIFICATE NUMBER: PKG/UMB/AUTO/WC CA** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR \$5,000 Deductible GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC		X	YVJ-291-438234-030	09/01/2010	09/01/2011	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	<i>de KK cel/13/11</i>						
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS		X	ASJ-291-438234-020	09/01/2010	09/01/2011	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
B	UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE RETENTION \$ 0			XLS0069169 EXCESS	09/01/2010	09/01/2011	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$ \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	BB1103378	07/01/2010	07/01/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 30 Days Notice of Cancellation EXCEPT 10 Days for Non-Payment of Premium
 City of Beverly Hills, its Council and each member thereof and every officer and employee of the City are named as Additional Insured under the General Liability and Auto Liability per the attached endorsements. Coverage is Primary and Non Contributory per endorsement. Waiver of Subrogation*

CERTIFICATE HOLDER City of Beverly Hills Arrn. Samar Elayyan 455 North Rexford Drive Suite G-10 Beverly Hills, CA 90210	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 
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City of Beverly Hills

Certificate issued to City of Beverly Hills
Colonial Western Insurance Agency

06/09/2011

06/09/2011

*applies to the General Liability, Auto Liability, and Workers Compensation per the attached endorsements attached.