

**Council Meeting: November 9, 2010****SUBJECT: Award of Sunnyvale Works! Contract (RFP No. F0905-97) for Energy-Efficient Streetlight Conversion****BACKGROUND**

Council approval is requested to award a contract to Team Econolite, of Anaheim, in the amount of \$1,142,065, to provide and install approximately 2,400 Light Emitting Diode (LED) energy-efficient streetlights to replace existing high pressure sodium (HPS) lights. This project is fully funded by an Energy Efficiency and Conservation Block Grant (EECBG) from the federal Department of Energy through the American Reinvestment and Recovery Act (ARRA). It is anticipated that the City will save approximately \$151,000 in annual energy costs upon project completion, or more than \$3 million over a twenty-year period in today's dollars.

DISCUSSION

The City owns and maintains over 6,000 streetlights, mainly utilizing High Pressure Sodium vapor (HPS) incandescent lighting technology. Once considered standard for cities which replaced more expensive mercury vapor lights, HPS lighting is now being replaced by much more energy-efficient and evolving technologies such as LED or Induction lighting. Over the past several years, Public Works staff has done considerable testing and evaluation of energy efficient street lighting products, and has installed LED lighting in several test locations, including West Olive Avenue by City Hall.

In order to capitalize on immediate and ongoing energy savings, as well as maximize the number of streetlight conversions with the use of available EECBG funding, staff developed and issued a Request for Proposals (RFP) with an emphasis on selecting a proposal that provided the greatest long-term energy cost savings to the City. The RFP was issued in May 2010. Three responsive proposals were received on June 2, 2010, from: Pacific Gas & Electric Co. (PG&E), Republic ITS, and Team Econolite.

The RFP contained minimum threshold requirements to be considered for contract award, including at least 5 years professional experience maintaining, installing, distributing or manufacturing streetlights, appropriate contracting and subcontracting licensure, and completion of at least 5 projects of similar type/complexity. The RFP also requires a photometric analysis of existing streetlight pole placements (to be completed once the contract is awarded) to

provide minimum and appropriate safe lighting levels. Additionally, the proposed energy efficient lighting was required to be listed on PG&E's approved rate schedule to immediately maximize energy cost savings and quickly obtain rebates (the successful proposer is required to obtain the rebates on the City's behalf), which will be used to purchase and install additional energy efficient streetlights as part of the project scope. Finally, the RFP required strict compliance with all federal grant guidelines, including Davis-Bacon wage requirements and the Buy America provisions of ARRA.

The rating criteria used to evaluate proposal responses is shown in the table below:

Rating Criteria	Possible Points
Maximum long-term cost savings offered to the City	70
Work experience and past job performance	10
Adherence to and understanding of RFP requirements and technical specifications	10
Overall management plan for implementation	10
Total	100

Proposal Evaluation Process

Responsive proposers were initially evaluated by Public Works and Purchasing staff on the basis of their written proposals to assign points associated with relevant work experience/performance, adherence to the RFP requirements, and management plan for implementation. Proposers were also asked to provide the following cost conversion elements so that the estimated long-term cost savings could be calculated:

- Total number of streetlights to be converted
- Total capital and unit cost of conversion
- Considerations applied against capital costs, i.e., rebates
- Annual energy cost per unit
- LED unit replacement cost per occurrence, frequency and by component type.

Once the cost conversion elements were verified with each proposer to ensure that "apples-to-apples" comparisons were made, estimated cost savings were calculated, and the proposal with the greatest cost savings over a twenty-year period received the highest number of points for the cost savings category (70). The remaining proposals received a pro-rated number of points relative to the proposal receiving the highest number of cost-savings points. After applying the remaining points for the other rating categories, Team Econolite's proposal received the highest number of total points, and provided the greatest long-term cost savings, followed by PG&E and then Republic ITS.

It is interesting to note that all of the proposers recommended the same product manufacturer, BetaLED. Proposals initially ranged from a low of 1,990 streetlight conversions to a high of 2,614.

PG&E Proposal

PG&E's proposal included 2,192 streetlight conversions with a mix of 60-count LED and 80-count LED fixtures at a ratio of 89% and 11% respectively. The 60- and 80-counts represent the number of light emitters on a single head to provide appropriate lighting distribution, (the higher the number, the brighter the lumen output). PG&E's proposal of 11% of the brighter fixtures roughly estimates the number of lighted intersections in the City (where light output requirements are higher). The mix of 89%/11% was uniformly applied to the other proposals for cost comparison purposes.

Republic ITS Proposal

Republic ITS provided several options for consideration, including a base proposal of 1,990 streetlights, and several variations which incrementally increased the total number of conversions up to 2,285. These variations proposed to remove certain fixture components that staff determined could potentially impact optimal fixture operation and were thus not desirable. Additionally, Republic proposed an alternative solution which would have provided 2,430 conversions, but this did not meet City specifications.

Republic initially proposed a 40-count LED solution, less than the minimum required by the City, which raised concerns that after photometric analysis the fixtures would not be able to provide adequate lighting. Republic was given the opportunity to revise its proposal to specify the correct fixtures.

Team Econolite Proposal

Team Econolite's proposal initially included 2,614 conversions, but this included only 60-count LED fixtures. Team Econolite's proposal was revised to include both 60-count and 80-count fixtures, based upon the estimate of intersections that would need higher lumen output to provide adequate lighting. This resulted in the total number of conversions to be adjusted downward to 2,400. Even though the number of conversions was reduced by 214 fixtures, Team Econolite's adjusted proposal still provided greater energy cost savings than the other proposals.

Based on the City's extensive evaluation process, the proposal from Team Econolite provides the best value to the City based on the highest number of converted streetlights and the greatest long-term energy cost savings.

Maximum Competition Sought

In comparing the work experience of all three proposers, Republic clearly had more experience in performing LED conversions throughout the country relative to PG&E and Team Econolite. Both PG&E and Team Econolite have completed LED conversion projects, but not on the same scale as Republic. However, the minimum threshold requirements specified that proposers' need only demonstrate prior experience with any type of streetlight conversion, which essentially involves removing and replacing the existing light fixture head. The requirements were structured this way to ensure maximum competition due to the emerging nature of energy-efficient streetlight technology. Though Republic ITS demonstrated greater experience in LED conversions, their proposal provided the least amount of long-term energy cost savings.

Photometric Analysis

As part of the RFP, the successful proposer will complete a photometric analysis of City streetlights which will determine the optimal mix of LED lighting to provide good illumination, using existing placement of streetlight poles, to the extent possible.

Rebate and Rate Change Processes

PG&E has established a rebate program to provide incentives for the installation of energy-efficient street lighting. The RFP was structured to require proposing firms to obtain the rebates on behalf of the City. The rebate amount per LED fixture is currently set at \$125, and will be used to procure a portion of the energy efficient streetlights contained in Team Econolite's proposed 2,400 conversions.

Once the new streetlights are installed, Team Econolite will secure the rate change from PG&E necessary to achieve per fixture cost savings. The energy costs of most streetlights are un-metered, paid on a schedule basis, calculating the average number of hours of usage. Therefore, it is important that any light proposed for use be on an approved PG&E tariff schedule, to obtain a lower rate.

FISCAL IMPACT

A total of \$1,141,861 is available from the initial \$1,142,500 EECBG grant award associated with Capital Project 828620, LED Streetlight Retrofit. Approximately \$640 has been charged for printing, advertising and other administrative tasks associated with the project. The Team Econolite contract is valued at \$1,142,065. The difference of \$204, will be absorbed by the Public Works Department operating budget. Otherwise, there is no direct fiscal impact associated with the installation of the LED fixtures.

Estimated Energy Cost Savings

Each of the City's current 200 watt HPS lights cost approximately \$118.32 per year to operate and have a shorter life-expectancy than the proposed LED lighting. By contrast, a 60 LED fixture costs approximately \$53.60 per year and an 80 LED fixture costs about \$68.65. According to available industry performance data, the LED fixtures fail at a much lower rate. It is estimated that Team Econolite's proposed conversion of 2,400 streetlights, using an assumed failure rate of one LED fixture per year (which is higher than the estimated industry average), will save the City approximately \$151,000 in annual energy costs, or approximately \$3 million over twenty years in today's dollars. Since this project is fully grant-funded, the savings will be immediate.

PUBLIC CONTACT

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

RECOMMENDATION

It is recommended that Council award a contract, in substantially the same format as the attached draft and in an amount not-to-exceed \$1,142,065, to Team Econolite Traffic Engineering and Maintenance, Inc., for completion of the energy efficient streetlight conversion project.

Reviewed by:

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

Reviewed by:

Marvin Rose, Director, Public Works

Approved by:

Gary M. Luebbbers
City Manager

Attachments

- A. Draft Contract Between City of Sunnyvale and Team Econolite for Completion of the Energy Efficient Streetlight Conversion Project

**ATTACHMENT A
DRAFT
CONTRACT BETWEEN CITY OF SUNNYVALE
AND TEAM ECONOLITE TRAFFIC ENGINEERING AND MAINTENANCE, INC.
FOR COMPLETION OF THE PROJECT ENTITLED ENERGY
EFFICIENT STREETLIGHT CONVERSION 2010**

THIS CONTRACT, dated _____, is by and between the CITY OF SUNNYVALE, a municipal corporation of the State of California ("CITY"), and TEAM ECONOLITE TRAFFIC ENGINEERING AND MAINTENANCE, INC. a California corporation ("CONTRACTOR").

RECITALS:

The parties to this Contract have mutually covenanted and agreed, as follows:

1. Contract Documents. The complete Contract consists of the following documents which are incorporated by reference: Request for Proposals No. F0905-97, including five (5) Addenda; the Proposal Response and any modifications thereto; and a Performance Bond and Payment Bond. The documents comprising the complete contract are collectively referred to as the Contract Documents. Any and all obligations of CITY and CONTRACTOR are fully set forth and described in the Contract Documents.

2. The Work. CONTRACTOR agrees to furnish all tools, equipment, materials, apparatus, facilities, labor, transportation, supervision and management necessary to complete the project entitled Energy Efficient Streetlight Conversion 2010 (Project No. TR-10/01-10) in a good and workmanlike manner and in strict conformity with the Contract Documents. CONTRACTOR agrees to provide and install no less than 2,400 Beta LED fixtures as proposed, comprised of a mix of 60 LED and 80 LED configurations, provided that the number of 80 LED fixtures does not exceed 11% of the total fixtures being replaced. The optimal lighting configuration will be based on a photometric analysis to be performed by the CONTRACTOR as part of the scope of work for this project. In the event the analysis determines that the number of 80 LED fixtures exceeds 11% of the total fixtures to be replaced, CITY agrees to reduce the total number of fixtures to be replaced based on a methodology approved in advance in writing by CITY and CONTRACTOR. In the event the analysis determines that the number of 80 LED fixtures falls below 11% of the total fixtures to be replaced, CONTRACTOR agrees to increase the total number of fixtures to be replaced based on a methodology approved in advance in writing by CITY and CONTRACTOR.

CONTRACTOR agrees to comply with Pacific Gas & Electric Co. (PG&E) requirements for pole numbering and labeling and shall affix an appropriate label on each converted pole with a stencil and spray paint method consisting of characters at 2" in height and viewable from the street, and other specifications as may be required by PG&E.

CITY agrees to wave the 15% spare photocell requirement contained in Section C.10. of the Request for Proposal document.

3. Project Documentation CONTRACTOR agrees to provide all necessary documentation required for federal grant reporting, and will strictly comply with all federal grant requirements.

CONTRACTOR agrees to process and obtain all applicable PG&E rebates and to revise PG&E electricity billing from existing to the appropriate rates for the converted streetlights within four weeks of completion of installation, but shall not be held liable for processing delays beyond CONTRACTOR'S control, provided that CITY agrees in writing to extensions of time. The limit of liability in this section shall apply only to rebate and rate change time periods and does not apply to or have an impact on stated pricing or the overall number of streetlights to be converted.

4. Contract Price. CITY agrees to pay and CONTRACTOR agrees to accept in full payment for the work above agreed to be done, the lump sum of One Million One Hundred Forty Two Thousand Sixty five and No/100 Dollars (\$1,142,065.00) for the purchase and installation of approximately 2,032 LED streetlights as specified in Section 2 above.

CONTRACTOR agrees to provide and install additional LED street lights, subject to the provisions in Section 2, equal in number to the total value of the PG&E compounded rebate, currently estimated at \$300,000.00.

5. Permits; Compliance with Law. CONTRACTOR shall, at its own expense, obtain all necessary permits and licenses for the completion of the project, give all necessary notices, pay all fees required by law, and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public health and safety.

6. Extra or Additional Work and Changes. At any time during the progress of the work, CITY shall have the right at any time to request alterations or additions to, or deviations or omissions from the Contract Documents; and the contract price shall be adjusted by a fair and reasonable valuation, agreed to in writing by CITY and CONTRACTOR. Contractor shall perform no extra or additional work or alter or deviate from the work specified herein unless agreed in writing by City. Extra work to which City has not agreed in advance in writing will not be compensated by City.

7 Time for Completion. CONTRACTOR shall complete all installation work within One Hundred Eighty (180) calendar days from the date specified in the Notice to Proceed. All other contract work shall be completed within Two Hundred Forty (240) calendar days from the date specified in the Notice to Proceed.

The time of completion shall be extended for such reasonable time as CITY may decide if CITY authorizes the delay or if the delay is caused by the acts or neglect of CITY or its employees or those under it by contract or otherwise; by changes ordered in the work; by strikes, lockouts by others, fire, unusual delay in transportation, unavoidable casualties or any causes beyond CONTRACTOR's control; or by any cause which CITY decides justifies the delay.

This provision does not exclude the recovery of damages for delay by either party under other provisions.

8. Termination. CITY may provide written notice to CONTRACTOR and its surety of CITY's intention to terminate the contract under one or more of the following conditions:

- A. CONTRACTOR is adjudged bankrupt;
- B. CONTRACTOR makes a general assignment for the benefit of creditors;
- C. A receiver is appointed on account of insolvency;
- D. CONTRACTOR or any subcontractors violate any of the provisions of the Contract.

The notice shall contain the reason(s) for CITY's intention to terminate the Contract. CONTRACTOR shall be given ten (10) days after serving such notice to cease the violation described in the notice or to make satisfactory arrangements for correction of the violation. Otherwise, the Contract shall cease and terminate at the end of the ten (10) day period.

In the event of any such termination, CITY shall immediately serve written notice thereof upon surety and CONTRACTOR; and the surety shall have the right to take over and perform the contract, provided that the surety informs CITY, in writing, of its intent to do so within fifteen (15) days after it was served the notice of termination or that the surety commences performance of the contract within thirty (30) days after it was served the notice of termination. Should the surety fail to take one or both of these actions, CITY may take over and complete the work by contract or by any other method it deems advisable, for the account and at the expense of CONTRACTOR. CONTRACTOR and its surety shall be liable to CITY for any cost incurred in the completion of the work which exceeds the original contract price. In such event, CITY may, without liability for so doing, take possession of and use such materials, equipment and other property belonging to CONTRACTOR as may be on the site and necessary for the performance of the work.

9. Notices

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

To CITY: Jack Witthaus, Transportation and Traffic Manager
Public Works/Transportation and Traffic Division
CITY OF SUNNYVALE
P. O. Box 3707
Sunnyvale, CA 94088-3707

To CONTRACTOR:
TEAM ECONOLITE TRAFFIC ENGINEERING
AND MAINTENANCE, INC.
Attn: John Cane
3390 De La Cruz Blvd., Unit R
Santa Clara, CA 95054

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

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

10. Assignment. Neither party shall assign or sublet any portion of the Contract without the prior written consent of the other party.

11. Compliance with Specifications of Materials. CONTRACTOR shall provide only those materials, processes or articles specified in the Contract Documents unless CITY agrees in writing to some other material, process or article offered by CONTRACTOR.

CITY reserves the right to substitute alternate LED fixtures if CONTRACTOR satisfactorily demonstrates that such fixtures meet CITY specifications and provide greater energy cost savings than the originally proposed product(s), subject to the minimum installation and configuration requirements listed in Section 2.

12. Contract Security. CONTRACTOR shall furnish a surety bond in an amount equal to 100 percent of the contract price as security for the faithful performance of the Contract. CONTRACTOR shall also furnish a separate surety bond in an amount equal to 100 percent of the contract price as security for the payment of all persons furnishing materials used in the performance of work in connection with the Contract, for the payment of amounts due under the Unemployment Insurance Code with respect to work or labor in connection with the Contract, and for the payment of reasonable attorney's fees to be fixed by the court should suit be brought upon the bond.

13. Insurance.

CONTRACTOR shall take out and maintain throughout the life of the Contract, at its own expense and from an admitted insurer authorized to operate in California, Workers' Compensation and Employer's Liability Insurance for its employees. The amount of insurance shall not be less than \$1,000,000 per accident for bodily injury or disease.

CONTRACTOR shall take out and maintain throughout the life of the Contract, at its own expense and from an admitted insurer authorized to operate in California, such Commercial General Liability Insurance as shall protect CONTRACTOR, CITY, its officials, officers, directors, employees, and agents from claims which may arise from work performed under the Contract, whether such work is performed by CONTRACTOR, by CITY, its officials, officers, directors, employees, or agents or by anyone directly or indirectly employed by either. The amount of insurance shall not be less than the following: Single limit coverage applying to bodily and personal injury liability and property damage - \$1,000,000.

The liability insurance shall include, but shall not be limited to:

- Protection against claims arising from bodily and personal injury and damage to property, resulting from CONTRACTOR's or CITY's operations, and use of owned or non-owned automobiles.
- Coverage on an "occurrence" basis.
- Broad form property damage liability. Deductible shall not exceed \$5000 without prior written approval of the CITY.
- Notice of cancellation to City at least thirty (30) days prior to the cancellation effective date.

The following endorsements shall be attached to the liability insurance policy:

- The policy shall cover complete contractual liability. Exclusions of contractual liability as to bodily injuries, personal injuries and property damage shall be eliminated.
- CITY shall be named as additional named insured with respect to the work to be performed under the Contract.
- The coverage shall be primary insurance so that no other insurance effected by CITY will be called upon to contribute to a loss under this coverage.

14. Indemnification. CONTRACTOR shall indemnify and hold harmless CITY and its officers, officials, employees and volunteers from and against all claims, damages, losses and expenses, including attorney fees, arising out of the performance of the work described in the Contract Documents, caused by any negligent act, omission, or willful misconduct of CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

15. Wage Rates. Pursuant to the Labor Code of the State of California or any applicable local law, CITY has ascertained the general prevailing rate per diem wages and rates for holidays and overtime work in CITY for each craft, classification or type of worker needed to execute the Contract. CITY has adopted by reference the general prevailing rate of wages applicable to the work to be done under the Contract as adopted and published by the Division of Labor Standards Enforcement and Labor Statistics and Research of the State of California Department of Industrial Relations.

It shall be mandatory upon CONTRACTOR and upon any subcontractor to pay not less than the specified rates to all workers employed in the execution of the Contract. CONTRACTOR agrees to comply with all provisions of Section 1775 of the Labor Code of the State of California.

16. CONTRACTOR's Guarantee. CITY shall not, in any way or manner, be answerable or suffer loss, damage, expense or liability for any loss or damage that may happen to the building, work, or equipment or any part thereof or in, on or about the same during its construction and before acceptance.

CONTRACTOR unqualifiedly guarantees the first-class quality of all workmanship and of all materials, apparatus and equipment used or installed by CONTRACTOR, or by any subcontractor or supplier, in the project which is the subject of this Contract unless a lesser quality is expressly authorized in the Contract Documents in which event CONTRACTOR unqualifiedly guarantees such lesser quality. CONTRACTOR also unqualifiedly guarantees that the work performed by CONTRACTOR will conform with the Contract Documents and any written authorized deviations therefrom. In case of any defect in work, materials, apparatus or equipment, whether latent or patent, revealed to CITY within one year of the date of acceptance of completion of this Contract by CITY, CONTRACTOR will forthwith remedy such defect or defects without cost to CITY.

17. Liquidated Damages. Time shall be the essence of this contract. If CONTRACTOR fails to complete, within the time fixed for such completion, the entire work described in the Contract Documents, CONTRACTOR shall become liable to CITY for liquidated damages in the sum of Two Hundred Fifty and No/100 Dollars (\$250.00) for each and every calendar day during which work shall remain uncompleted beyond such time fixed for completion or any lawful extension thereof. The amount specified as liquidated damages is presumed to be the amount of damage sustained by CITY since it would be impracticable or extremely difficult to fix the actual damage. The amount of liquidated damages may be deducted by CITY from moneys due CONTRACTOR at the time of completion of the work; and CONTRACTOR and its sureties shall be liable to CITY for any excess.

IN WITNESS WHEREOF, the parties have executed this contract.

ATTEST:
City Clerk

CITY OF SUNNYVALE ("CITY")

By _____
Deputy City Clerk

By _____
City Manager

APPROVED AS TO FORM:

TEAM ECONOLITE TRAFFIC ENGINEERING
AND MAINTENANCE, INC.
("CONTRACTOR")

By _____
City Attorney

By _____

Title and Date

By _____

Title and Date