



Item No. 14 Town of Atherton

CITY COUNCIL STAFF REPORT – CONSENT AGENDA

**TO: HONORABLE MAYOR AND CITY COUNCIL
GEORGE RODERICKS, CITY MANAGER**

**FROM: MICHAEL KASHIWAGI
COMMUNITY SERVICES DIRECTOR**

DATE: MARCH 18, 2015

**SUBJECT: AWARD A CONSULTANT SERVICES AGREEMENT WITH W-
TRANS FOR THE SERIES STREET LIGHT ANALYSES AND
REPLACEMENT PROGRAM**

RECOMMENDATION

Direct the City Attorney to prepare and authorize the City Manager to execute a professional services contract with W-Trans for a not to exceed fee of \$79,950 to provide design plans, specifications and estimates (PS&E) to replace the Town's series circuit street lights and to provide additional related engineering services.

BACKGROUND

The FY2014-15 Capital Improvement Program (CIP) includes a project to replace obsolete series circuit street light infrastructure. The Town's street light facilities include several areas that are energized using series circuitry, which is difficult and costly to repair. When these circuits are damaged, repairs require extensive investigation and coordination around the high voltage circuitry required to power the lights.

A recently completed visual audit of existing streetlights found some lights blocked by foliage, with others having buried foundations. The audit found that approximately 185 of the 433 street lights in town are owned by PG&E. The remaining 248 lights are Town owned and located on standalone poles or decorative entryways. Maintenance is currently provided by PG&E for both Town and PG&E owned streetlights.

In addition to designing the replacement of the series circuitry with standard circuitry, the project scope includes comparing PG&E records to an actual field inventory, and performing related analyses so the Town can make more informed decisions about items such as the condition of the lighting system infrastructure (conduits, poles, mast arms) converting the existing incandescent and high pressure sodium lights to energy efficient technology, such as light emitting diode (LED) or induction; purchasing the PG&E owned lights and changing maintenance providers.

Issues the Consultant will consider when completing the analyses and making their recommendations to the Town include:

- Cost of purchasing the PG&E owned distribution lights.
- The condition of the PG&E owned distribution lights.
- Whether PG&E would convert their distribution lights to energy efficiency lights if the Town does not buy them.
- The quality of light emitted by the energy efficient lights.
- Estimated savings based on switching PG&E Rates Schedules as a result of the light ownership, maintenance and technology potentially changing.
- Pros and Cons of the lights being maintained by the Town, (through an electrical contractor) rather than by PG&E.

FINDINGS

At the December 1, 2014 meeting, the City Council authorized issuing a Request for Proposals (RFP) for the Street Light Replacement and Upgrade Program. The RFP was advertised on the Town's website, on additional industry sites and through direct solicitation of area firms known to specialize in this industry. Proposals were due on January 21, 2015, providing approximately a five-week response period.

Three proposals were received from the following firms:

- DKS Associates
- Tanko Lighting.
- Whitlock & Weinberger Transportation, Inc. (W-trans)

A selection panel consisting of Steve Tyler, Public Works Superintendent and Andrew Poster, Senior Engineer evaluated all proposals, ranked them according to the RFP's evaluation criteria and short-listed the two highest-scoring firms (Attachment B), Tanko Lighting and W-trans to be interviewed. The firms were interviewed on February 3, 2015 by Steve Tyler and Andrew Poster. Based upon their rankings and interviews, the panel identified W-Trans as the top ranked firm. The W-Trans team has worked on similar projects for Daly City, Redwood City, Contra Costa County, Moraga and Rancho Cordova among others.

Following the selection process, the Town began negotiations with W-Trans based on their initially proposed scope of work. This process resulted in the elimination of two optional tasks (Construction Management and Grant Funding) and a reduction in staff hours initially proposed. The final negotiated scope and fee resulted in a reduction of \$27,150 from the original proposal submitted by W-Trans.

In addition to the primary purpose of eliminating the Series Circuit lights, the recommended scope of services includes an analysis and recommendations related to street light ownership, maintenance operations and energy efficiency options. The proposed contract is based on time and materials basis for a not-to-exceed fee of \$79,950.

POLICY ISSUES

The Town's street light facilities include several areas that are energized using series circuitry, which is difficult and costly to repair. When these circuits are damaged, repairs require extensive investigation and coordination around the high voltage circuitry required to power the lights. Replacement or refurbishment of these existing light facilities was identified as a critical public infrastructure need. While the 2014-2015 Capital Improvement Budget identified the series street light replacement program as a budgeted item, policy issues revolve around whether to begin the effort this fiscal year or push the project into future years.

FISCAL IMPACT

The approved 2014/15 Capital Improvement Program included \$150,000 in the Series Street Light Replacement Program and is the source of funding for this contract. Sufficient funds are budgeted in the Capital Improvement Program from Measure A to pay for the proposed engineering services.

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically.

Information about the issue is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,200 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders – to include, but be not limited to, media outlets, school districts, Menlo Park Fire District, service providers (water, power, and sewer), and regional elected officials.

ATTACHMENTS

Attachment A: Evaluation Score Sheet

Exhibit A

Series Circuit Street Light Update
Consultant Scoring
January 21, 2015

Member: Summary

Firm	Ranking			
	Steve	Andy	Total	Final
DKS Associates	3	3	6	3
W-Trans	1	1	2	1
Tanko Lighting	2	2	4	2

Note: Total column is the sum of individual rankings. Lowest point total is the highest rank.

Exhibit A

Scope of Services

The following services shall be performed by the consulting team led by Whitlock & Weinberger Transportation, Inc. (Consultant) in completing this project:

Task 1: Project Coordination

Consultant will work closely with Town and PG&E staff to learn about issues such as historical maintenance and modifications, available power sources, and constraints, and to develop alternatives to upgrade the lights in the most cost efficient manner. Consultant team members will meet with stakeholders to provide technical assistance and input to staff, and to provide at least one public presentation.

This scope assumes the following meetings:

- A kick-off meeting with Town staff.
- One field meeting with PG&E to locate the transformers for the series circuits and, if possible, to test each circuit and record the locations of fixtures on each circuit.
- Review meetings after submittal of deliverables listed in Task 2, 3, 4 (after the 65% submittal only), and a combined meeting for Tasks 6 and 7.
- One public meeting to discuss draft streetlight standards. It is suggested that the Environmental Programs Committee be relied up to provide the public forum since their responsibilities include “the town’s natural and built environment”.

Deliverables: Meeting minutes, response to comments memos, presentation for public meeting

Task 2: Street Light Inventory

The Town has conducted a preliminary audit to help determine the size and scope of the project. The audit results were furnished to Consultant. Consultant will perform an investigation and work closely with Town and PG&E staff to determine critical information such as the wattage, locations, types and power sources of existing distributions, street and safety lighting in the Town. It is assumed that Town staff will make existing documentation, PG&E invoices and maps available to the Team to assist in their research. Consultant will provide a bucket truck to physically access the lights in the air, as well as qualified staff to open hand holes and pullboxes as necessary to positively determine power sources, wattages, conditions, etc.

Inventory results will be summarized in a technical memorandum.

Deliverables: Technical Memorandum with graphical data summaries

Task 3: Develop Alternatives

It is believed that there are currently three series circuits in the Town. A minimum of two options to upgrade each of the circuits will be developed, including preliminary budgetary level cost estimates and projected implementation schedules for each option. Based on input from PG&E and field observations, the location of available service points will be marked. Alternatives will be developed based on a comparison of cost; construction staging will also be considered to minimize the length of time fixtures are without power.

Consultant will prepare a design memorandum with conceptual plans of each option, clearly illustrating the benefits and differences between each option. The memorandum will make recommendations regarding how best to replace each circuit. This proposed scope of work includes conceptual sketches drawn as 1"=100' scale plans, using a combination of commercially available aerial photos that show pavement and pole locations, and either GIS or County Assessor information to show right-of-way.

Deliverables: Technical memorandum with concept sketches and construction cost estimates

Task 4: Prepare Design Plans Specifications and Estimates (PS&E)

Upon receiving staff feedback on the recommended mitigation options, Consultant will prepare preliminary and final PS&E by expanding the 35% (conceptual) submittal from Task 3. Consultant will field check the conditions of the existing conduit and conductors to determine locations where new conduits are required. It is assumed that the Town will supply an electronic set of Special Provisions from a recent, similar project.

Consultant will prepare 65%, 90% and 100% plans prior to being ready to take the PS&E to Council for approval and advertising. The PS&E will be prepared in accordance with industry and Town standards and shall provide clear bid items and enough direction and information to all stakeholders such that bid inquiries, evaluations, and construction interpretations and contract change orders are minimized. The 90% submittal will include complete construction details and be ready for bidding. It is assumed only minor comments will be made on the 90% submittal. The comments will be incorporated into the 100% submittal, which will serve as bid documents.

This proposal assumes plan sheets will be prepared at 1"=100' scale and four plan sheets will be required to show the fixtures currently powered by series circuits and all connections to new service points. The expected list of sheets includes a Title Sheet and general notes, four plan sheets (4), and one details sheet (1).

Deliverables: PS&E – 11"x17" bond print plan sheets for each submittal, 22" x 34" mylar print plan sheets (1 set) for 100% submittal only, electronic submittals for specifications and estimate

Task 5: Energy Efficient Upgrades

W-Trans will use the field inventory from Task 2 to develop recommendations and bid alternatives to upgrade all of the Town's lights for safe, energy-efficient operation using Light Emitting Diode (LED), Induction, or some other lighting alternative. W-Trans will first complete a life cycle cost estimate for replacing fixtures by comparing installation costs and design life, and using the net differences in PG&E tariff rates over the life of each fixture. This scope assumes mast arm-mounted fixtures will be replaced with LED. Post-top fixtures may be replaced with LED or Inductive fixtures.

Once the lighting technology is selected, W-Trans will develop estimated costs for fixtures including poles, if required, and lighting. This task will include developing a clear and concise bid schedule.

Deliverables: Final Technical memo with cost comparisons and recommendations

Task 6: Light Ownership

The costs as well as the potential benefits and negative impacts associated with the Town taking over ownership of the approximately 185 PG&E owned Distribution lights will be analyzed. Based upon the potential costs and information collected, recommendation will be made as to whether the Town should pursue this option.

Consultant will contact PG&E to determine the viability of converting PG&E-owned fixtures to Town-owned while keeping the same fixture supports in place and obtaining a Contact Permit.

The advantage to taking over fixture ownership is reduction in monthly electricity payments to PG&E. There may also be non-financial benefits of improved maintenance response times. The initial recommendation for changing light ownership will be based on the net change in monthly payments.

Deliverables: Final Technical memo with financial analysis of taking ownership and recommendations

Task 7: Maintenance Operations

Current maintenance practices and costs will be reviewed and a recommendation made regarding whether the Town should continue to utilize PG&E to maintain the lights, or seek an alternative service provider or method. The recommendation will be based on the net change in payment to PG&E compared to a typical cost for maintaining street lights by a private contractor, or by an adjacent agency such as San Mateo County. It is assumed that there are too few fixtures in Atherton to justify the staff training and equipment that would be required for maintenance by Town forces.

Deliverables: Draft and Final Technical memo with cost comparisons and recommendations

Alternative tasks (not included in initial scope or budget):

Task 8: Construction Management

W-Trans will provide construction management and oversight services throughout the construction phase of the project. Construction Management tasks may include, but not be limited to bid analysis, submittal review, Change Order analysis, RFI responses, field inspection and punchlist preparation. It is assumed that inspections will be scheduled on a milestone basis and provides an estimate of construction management costs based on a fixed number of hours. A fee adjustment may be required if the actual number of hours exceeds the assumed number.

Deliverables: Inspection reports, memos, AsBuilt plans (22"x34" mylar plots)

Task 9: Grant Funding

W-Trans will work with Town staff to identify potential sources of funding and apply for grants or programs to help fund the replacement of the series circuits and upgrades to install energy efficient lights.

As stated in the Approach section of this proposal, grant funding opportunities for lighting upgrades are minimal. On-Bill financing (available through PG&E or through a private turnkey approach) is a good option and can be used for more than fixture replacement by lengthening the pay-off period. Low interest loans are a promising source of funds that have seen increasing use by local agencies. W-Trans will compare options over a 30-year assumed life of the installation options developed in Task 5, and make recommendations based on the best available cash flow alternative.

Deliverables: Draft and Final Technical Memorandum

Exclusions: Payment of fees to PG&E is not included.

Series Circuit SL Analysis and Replacement W-Trans Schedule

<i>Task</i>	4/6/15	4/13/15	4/20/15	4/27/15	5/4/15	5/11/15	5/18/15	5/25/15	6/1/15	6/8/15	6/15/15	6/22/15	6/29/15	7/6/15	7/13/15	7/20/15	7/27/15	8/3/15	8/10/15	8/17/15	8/24/15	Sep-15	Oct-15	Nov-15	
1. Project Coordination	*																								
2. Street Light Inventory				*		*																			
3. Develop Alternatives						◇	#	#*																	
4. Prepare PS&E											◇	#	#*		◇	#	#		◇						
5. Energy Efficient Upgrades									◇																
6. Light Ownership											◇														
7. Maintenance Operations									◇																
8. Construction Management																									◇
9. Grant Funding													◇	#	#*		◇								
LEGEND:	* = meeting ◇ = deliverable # = review																								

Series Circuit Streetlight Analysis and Replacement W-Trans Fee Estimate

Task	HOURS BY STAFF MEMBER					Allan Morris (TYL)	Subs/ Misc	Expenses	Total Hours
	Dalene Whitlock	Steve Fitzsimons	Smadar Boardman	William Petker	Tech/ Admin				
1. Project Coordination	0	20	35	0	10	4	12	\$330	81
2. Street Light Inventory	5	20	53	0	10	0	28.5	\$0	116.5
3. Develop Alternatives	5	17	5	58	0	0	0	\$0	85
4. Prepare PS&E	4	14	0	91	0	94	27	\$130	230
5. Energy Efficient Upgrades	1	2	8	0	2	0	0	\$0	13
6. Light Ownership	2	8	8	0	1	0	0	\$0	19
7. Maintenance Operations	2	16	0	0	5	0	9	\$0	32
8. Construction Management (Optional)	0	10	0	0	0	0	68	\$0	78
9. Grant Funding (Optional)	0	10	0	0	0	0	100	\$40	110
TOTAL TASKS 1 - 9	19	117	109	149	28	98	245	\$40	765

Task	FEE AT HOURLY RATES INDICATED						Varies	LS	TOTAL
	\$230	\$205	\$105	\$90	\$90	\$175			
1. Project Coordination	\$0	\$4,100	\$3,675	\$0	\$900	\$700	\$1,200	\$330	\$10,905
2. Street Light Inventory	\$1,150	\$4,100	\$5,565	\$0	\$900	\$0	\$4,560	\$0	\$16,275
3. Develop Alternatives	\$1,150	\$3,485	\$525	\$5,220	\$0	\$0	\$0	\$0	\$10,380
4. Prepare PS&E	\$920	\$2,870	\$0	\$8,190	\$0	\$16,450	\$3,510	\$130	\$32,070
5. Energy Efficient Upgrades	\$230	\$410	\$840	\$0	\$180	\$0	\$0	\$0	\$1,660
6. Light Ownership	\$460	\$1,640	\$840	\$0	\$90	\$0	\$0	\$0	\$3,030
7. Maintenance Operations	\$460	\$3,280	\$0	\$0	\$450	\$0	\$1,440	\$0	\$5,630
SUBTOTAL TASKS 1 - 7	\$4,370	\$19,885	\$11,445	\$13,410	\$2,520	\$17,150	\$10,710	\$460	\$79,950
8. Construction Management (Optional)	\$0	\$2,050	\$0	\$0	\$0	\$0	\$7,820	\$0	\$9,870
9. Grant Funding (Optional)	\$0	\$2,050	\$0	\$0	\$0	\$0	\$10,000	\$40	\$12,090
TOTAL TASKS 1 - 9	\$4,370	\$23,985	\$11,445	\$13,410	\$2,520	\$17,150	\$28,530	\$500	\$101,910