

**EXHIBIT “A”**  
**SCOPE OF SERVICES**

Siemens Intelligent Traffic System proposes the following scope of work for services related to the street lights located in the Western Riverside Council of Governments (WRCOG) subregion. These services include the turnkey services related to installation of LED street lights and the ongoing operations and maintenance of the street light systems for member jurisdictions. These services are extended to the street lights currently owned by the member jurisdictions, those to be purchased from Southern California Edison and any additional assets that are installed within the contract period. Siemens extends this contract for 5 years for date of execution, with the option for additional extension if agreed upon by all parties. All services included in the Scope of Services will be billed per the rates outlined in Exhibit C.

**Project Development**

The Project Development phase includes several key elements that must take place for member jurisdictions to effectively acquire street lights from Southern California Edison (SCE), efficiently convert to LED technology and begin operating and maintaining the system.

**1. SCE Coordination- Facilitate the “Cut-Over” Process with SCE**

Siemens will assist WRCOG and member jurisdictions in communication and scheduling with Southern California Edison representatives during the acquisition phase. Siemens will coordinate the development of an agreed upon schedule and geographic plan for the associated field work and cutover of assets from SCE to member jurisdictions. Specific scope includes:

- Participation in SCE calls
- Develop cut over schedule and work flow with SCE subcontractors
- Provide review of “fielding” data from SCE and associated subcontractors
- Update Street light database to include new street lights previously not included in valuations and other associated data corrections/modification/additions.
- Track billing adjustments from SCE as street lights are acquired
- Support WRCOG and its member jurisdictions with the Inventory, Inspection and Transition Activities as identified in the City’s Purchase and Sales Agreement (Agreement) with SCE
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**2. Street light pole tagging and field verification**

Siemens will install street light pole tags during the installation of the LED street light fixture. The tags will either be furnished by WRCOG, member jurisdiction or by Siemens. The associated pole tags will be designed and approved with jurisdiction/regional street light numbering sequence by WRCOG and/or jurisdiction staff. Siemens will install pole tags and update the web based WRCOG database of information for each pole, referencing the associated pole number.

Siemens will verify street light asset attributes during the LED installation utilizing the web based WRCOG database. The information to be reaffirmed in the database upon conversion shall

include condition of asset, GPS coordinates for each asset, pole type, pole height, arm length, luminaire type, wattage, lamp type, voltage, general pole condition, service feed type: overhead or underground, city and SCE pole structure number (in the case the numbers are different) and description of point of demarcation between jurisdiction and SCE facilities.

### **3. Procurement Support- LED Material Selection and Design (optional)**

Siemens can provide support in the process of selecting and procuring fixtures for the project and provide recommendations to the City for final approval. This service includes identifying material vendors, soliciting proposals from vendors and performing a detailed evaluation of material proposals submitted.

Fixture selection is typically based on a variety of factors that ultimately will lead to identification of the best solution for the customer. Some of the factors considered are:

- Fixture efficiency
- Demonstrated durability
- Material cost
- Availability/production lead times
- Design functionality
- SCE rebate eligibility
- Life-cycle cost

Concurrent with the evaluation of fixture alternatives, Siemens can provide additional design support. This includes evaluating basic standard lighting configurations which exist on various street types throughout a jurisdiction. This includes reviewing current existing light levels, performing photometric analysis and recommended replacement fixture standards to apply throughout the conversion process. The process of ordering and staging replacement LED fixtures will be greatly aided by establishing these conventions. These services will be billed at a time and material basis per the labor rates outlined in Exhibit C. In the event that Siemens provides procurement services, Siemens will waive the fees associated with this service.

### **Project Implementation**

The implementation phase addresses the various tasks needed to convert each newly acquired street light with a suitable LED fixture and process all data, billing and rebate applications. Siemens will develop a City specific project plan which will include pre-construction meetings, staging of material, installation, and other acquisition and retrofit project milestones.

### **1. Procurement Support- LED Material Purchasing (optional)**

Siemens can direct purchase associated material for the project as approved by the WRCOG and member jurisdiction. This procurement support extends to all associated materials, such as LED fixtures, photocells, pole tags, lighting controls, poles, mast arms and all other associated street light system components. Siemens can receive, warehouse and manage all material prior to installation and process all warranty information with manufacturers as needed. Warranty

information will be retained by Siemens with appropriate copies provided to the member jurisdiction for future use.

## **2. LED Fixture Installation**

Siemens will coordinate and complete all aspects of the conversion of HID fixtures to LED fixtures. This includes coordinating with WRCOG staff regarding procurement, receiving materials at a jurisdiction facility during typical working hours, providing equipment and labor for the complete installation of LED fixture and associated materials and field update of WRCOG provided web based GIS database.

Prior to beginning conversion efforts, Siemens will coordinate all traffic control requirements with the member jurisdiction to gain approval for approved methods for various street configurations, including allowable working hours on arterials, in commercial areas and in residential neighborhoods. MUTCD standards will be adhered to.

Installation progress will be tracked on a daily basis by the project's Siemens Field Supervisor and Project Manager, and a brief status report that includes project status and any current issues will be provided to WRCOG and the jurisdiction on a weekly basis.

## **3. House Side Shield Installation**

Siemens will install manufacturer approved house-side shields on LED street lights, as instructed by member jurisdiction. All requests for shields will be reviewed and approved by member jurisdiction staff prior to installation. Siemens can collaborate with member jurisdiction on specific strategies for implementing house side shields during the LED conversion. Siemens will install house-side shield on up to 10% of new LED street lights upon request, within the first year. Full cost of material and labor included in retrofit costs.

Siemens recommends that house side shields for LEDs be installed at sites where HPS fixtures currently have them. The like-for-like replacement can increase customer satisfaction and reduce the amount of visits to the same location.

## **4. HID Fixture Disposal**

Siemens will be responsible for all fixture disposal and recycling. Disposal of existing luminaires and any other discarded materials will follow all applicable California Recycle and Disposal Laws. Siemens will produce a recycling plan, to be approved by the member jurisdiction. Following disposal, a manifest of disposal will be provided to the member jurisdiction, that specifies what was recycled, what was sent to the landfill, and how hazardous material was disposed of. Siemens reserves the right to select disposal and recycling firms. This includes use of approved bins and locations for temporary holding locations of fixtures, etc. All disposal costs, fees, etc. are included in the retrofit costs.

## **5. Record Documents**

Following the completion of the implementation phase and City acceptance, Siemens will generate project close out documentation. This includes (but is not limited to) the following:

Appendix 4 – Lake Elsinore – Exhibit A

- Final Installation Data
- A summary report of the LED installation database information updated throughout the installation. This is based on the WRCOG provided web based database.
- As-built documentation (as-needed)
- As-built schedule of the project and a comparison of the actual installation vs. the scheduled baseline.
- A summary of any scope changes that occurred

Siemens will prepare and submit the final rebate documentation to the utility. In addition, Siemens will verify that the billing rate change has been submitted and accepted, and that the utility bill is correct.

Once the rebate is secured, the billing is verified then a final project closeout report will be generated. This will consist of a complete inventory database of the installed system with GIS locations and attributed of the LED street light system. Furthermore, this report will also include the final results of the rebate allocation, the energy savings to date and the final estimated energy savings for future years, summarizing the final results of the project.

## **Maintenance Phase**

This phase will begin once a member jurisdiction pays SCE for a group of assets. This will be done in phases to be determined by SCE, the City and Siemens.

The maintenance phase will transition from initial maintenance of the existing poles with HID fixtures to maintenance of existing poles with new LED fixtures as the project progresses. Siemens will provide maintenance services for all fixtures acquired by the City from SCE and provide a monthly bill prorating the fixtures acquired throughout the previous month, by technology and fixture type.

General Maintenance will consist of all operations and repairs starting at the pull box or bottom of street light pole where the fuse holder or secondary power source necessary to keep all street lights operations, and associated wiring within the street light circuit.

### **1. Customer Service**

Siemens will develop and implement a customer service portal for each member jurisdiction to effectively manage all incoming street light inquiries from public and from the member jurisdiction. General customer services include:

- 24/7 telephone and web based reporting service
- Web portal access for member jurisdiction and designated representatives
- Quarterly reporting/summaries of customer inquiry activity
- Customer service feedback survey

## **2. Routine Street light Maintenance Duties**

A base monthly fee is established for maintenance of the street light system on a per month, per light basis. Siemens will respond to standard maintenance calls within 5 working days. The fee will reflect the total number of lights being served along with and adjustments for special fixtures/poles.

Routine Maintenance tasks include but are not limited to:

- RMA of LED Fixture (Shipping and handling)
- Warranty management of defective LEDs
- Traffic Control
- General Cleaning During Call Out
- Outage Nights Checks
- Photocell Replacement
- Fuse Replacement
- Fuse Holders Replacement
- Hand Hole Covers (up to 0.05% of stock, annually)
- False Calls

The fee is expected to be all inclusive, with the sole exceptions being those items identified in the extraordinary maintenance section. Annual services include:

- System problem assessment/diagnostics
- Repair and replacement of damaged/inoperable fixture material
  - For HID fixtures this can include repair or replacement of constituent parts. Such as lamps, ballasts, starters, reflectors, diffusers, etc.
  - For LED fixtures this can include repair or replacement of constituent parts. Such as drivers, lenses, and LED arrays. Typically LED fixtures will be covered under warranty and will be processed accordingly.
- Photocell repair and maintenance
- Hand hole cover replacement of standard hand hole covers. Limited to 0.05% of stock annually.
- Coordination with 3<sup>rd</sup> party attachment licensees
- Quarterly review of system operation (night check)
- General cleaning of fixture during maintenance call out
- Customer service portal operations
- LED fixture warranty processing

## **3. Extraordinary Street light Maintenance Duties**

Siemens recognizes that there will be situations that can and will occur during the maintenance phase of the project that are best addressed individually based on the actual occurrence and not covered under a monthly fixture price. Items such as accidents resulting in the street lights being damaged and replaced or the need for specialized shielding devices are expected to

occur, though the frequency may vary considerably. These items are being defined as extraordinary maintenance and not included in the base monthly fee for standard maintenance. The following items have specifically been identified as extraordinary maintenance:

- 24/7 emergency response and securing field location for basic public safety. This would typically include pushing pole out of the right-of-way or from private property, taping off the area of the debris, capping/taping live wires, checking street light circuit and documenting all work activities for insurance purposes.
- Pole knockdown repair. Services can include:
  - removal of all associated spoils and debris from original installation
  - installation of new street light pole and associated system components
  - installation of associated foundation
  - Adjacent concrete repair/cap replacement
- House side shield installation (if occurs after year one)
- Overhead wiring replacement
- Pole graffiti abatement
- Pole painting
- USA Dig Alert services

**EXHIBIT “B”**  
**SCHEDULE OF SERVICES**

Streetlight Timeline								
Acquisition Process	SCE sends to CPUC	CPUC approval date	Financial Closing	SCE Transition Start	Phase 1 Transition (retrofit start)	Phase 2 (if needed)	Phase 3 (if needed)	Phase 4 (if needed)
Retrofit, O&M, LED fixture, and financing GOALS		Retrofit, O&M service selection GOAL		Finance Closing and LED selection GOAL	LED fixture delivery date GOAL			
Lake Elsinore	Complete	3/31/2018	11/1/2018	6/7/2019	Est. Sept. 2019			



May 29, 2019

Mr. Tyler Masters  
Western Riverside Council of Governments  
3390 University Avenue, Suite 450  
Riverside, CA 92501-3315

**Subject: Amended and Restated Western Riverside Council of Governments  
Professional Services Agreement (Proposal No. 17-04) Consumer Price Index  
Adjustment (2.8%)**

Extension Term: July 1, 2019 – June 30, 2020  
Labor, Materials and Equipment Pricing Sheet

EXHIBIT "C"

Billing Rates

	Item	Description	Unit Cost
<b>Project Development</b>			
1	Street light pole ID tag	This includes the labor for installation of a unique pole ID tag for each pole. Pole tags will be affixed to poles with adhesive, no riveting or drilling will be performed. The pole tags will be installed at the same time as the LED fixture conversion.	\$10.00/pole
<b>Project Implementation</b>			
2	LED Replacement Cobra head	This includes the costs for labor, equipment (trucks, lifts, tools, traffic control, etc.) and materials needed to replace existing cobra head fixtures with a new LED fixture. Includes update of WRCOG database with model number installed and installation date. This also included the cost for disposal of HID materials.	\$57.00/ Each
3	LED Replacement Decorative	This includes the cost for labor, equipment (trucks, lifts, tools, traffic control, etc.) and materials needed to replace existing post top fixtures with a new LED fixture. Includes update of the database with model number installed and installation date. The cost per pole shall not include the cost of the actual fixture.	\$114.00/Each
4	House side shield installation As Separate call	This includes the cost for labor, equipment (trucks, lifts, tools, traffic control, etc.) and incidental materials needed for the installation. Includes update of the database. The cost does not include the cost of the shield itself.	\$64.00/Each



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Routine Maintenance - Pre-LED Conversion			
5	HPS Fixture Maintenance - Cobra (labor, materials, equipment)	This includes the monthly costs for maintenance of all HPS cobra head fixtures during the period from acquisition of poles through retrofit with new LED fixture. Costs include all labor, materials and equipment needed to keep the existing fixtures functioning properly until the new LED fixtures are installed. This includes all anticipated costs for repairs and maintenance during that time including bulb replacements, ballast replacements, field calls etc. as assumed and prorated across the HPS inventory.	\$1.59/Each
6	HPS Fixture Maintenance - Post Top Acorn (labor, materials, equipment)	This includes the monthly costs for maintenance of all HPS post top fixtures during the period from acquisition of poles through retrofit with new LED fixture. Costs include all labor, materials and equipment needed to keep the existing fixtures functioning properly until the new LED fixtures are installed. This includes all anticipated costs for repairs and maintenance during that time including bulb replacements, ballast replacements, field calls etc. as assumed and prorated across the HPS inventory.	\$3.60/Each
7	HPS House side shield installation (labor, materials, equipment)	This includes the cost for each HPS house side shield installation that may be requested during the pre-retrofit stage. Costs include all labor, equipment and materials including the cost of the shield. These would be billed on an individual basis (not monthly or per pole being maintained).	\$65.79/Each
8	LED Fixture Maintenance Cobra head	This includes the cost for all regular maintenance and associated tasks to maintain the cobrahead fixtures in the street light system. Detailed scope is included in the Part 1. Scope of Work document above.	\$0.67/each/month
9	LED Fixture Maintenance Decorative	This includes the cost for all regular maintenance and associated tasks to maintain the post top fixtures in the street light system. Detailed scope is included in the Part 1. Scope of Work document above.	\$2.06/each/month
10	LED Replacement Cobra head	This includes the costs for labor, equipment (trucks, lifts, tools, traffic control, etc.) and materials needed to replace existing cobra head fixtures with a new LED fixture. Includes update of WRCOG database with model number installed and installation date. This also included the cost for disposal of HID materials.	\$58.60/Each
11	LED Replacement Decorative	This includes the costs for labor, equipment (trucks, lifts, tools, traffic control, etc.) and materials needed to replace existing post top fixtures with a new LED fixture. Includes update of database with model number installed and installation date. The cost per pole shall not include the cost of actual fixture.	\$117.19/Each

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12	House side shield installation	This includes the costs associated with the installation of a house side shield on a LED fixture excluding the cost of the actual shield. The costs should include labor, equipment, tools and incidental materials needed to complete a standard installation. This assumes a standard cobra head style fixture and a factory standard shield available for purchase (does not include custom installations and decorative fixtures).	\$65.79/Each
Extraordinary Maintenance (Reference pricing only- this scope will be quoted on time and material basis)			
13	Knockdown pole replacement No foundation	This includes the costs associated with the replacement of an entire street light pole, luminaire arm, fixture and wiring typically associated with a street light knockdown that does not require replacement of the foundation. This is based on the following assumptions: a 30 foot, marbelite pole with a standard 150 watt equivalent LED cobra head fixture. The City understands that there will be considerable variation in costs for these repairs under the contract and anticipates work being authorized individually through a quote process. These repairs will not be completed as part of an initial emergency response. Costs are based on a single replacement with work completed during normal work hours scheduled within the requested repair interval.	\$4,728.80/Each
14	Knockdown pole replacement with foundation	This includes the costs associated with the replacement of an entire street light pole, luminaire arm, fixture and wiring typically associated with a street light knockdown that does not require replacement of the foundation. This is based on the following assumptions: a 30 foot, marbelite pole with a standard 150 watt equivalent LED cobra head fixture. The City understands that there will be considerable variation in costs for these repairs under the contract and anticipates work being authorized individually through a quote process. These repairs will not be completed as part of an initial emergency response. Costs are based on a single replacement with work completed during normal work hours scheduled within the requested repair interval.	\$7,118.90/Each
15	Pull box lid replacement	This includes the cost of labor, materials and equipment to purchase, supply and replace a pull box lid with a fiberlyte lid due to damage or missing lid.	\$169.62/Each
16	Pole graffiti abatement	This includes the estimated cost per pole to remove or cover reported graffiti. Costs include labor, equipment and materials needed to complete each individual abatement assuming time required to abate graffiti is less than 30 minutes. Work limited to under 4SF and/or lower than 7ft.	\$66.82/Each

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17	Overhead wiring replacement	Total cost to repair or replace damaged overhead wiring. Cost provided per foot of wire being replaced. Costs include labor, equipment and materials to complete the repair during normal working hours. The City understands that there will be considerable variations in costs for these repairs under the contract and anticipates work being authorized individually through a quote process.	\$15.42/foot, or lump sum as quoted
18	Pole painting	This includes the costs on a per occurrence (per pole) basis for all labor, equipment and materials needed to prep and paint a standard metal street light pole (assume 30 foot). It is assumed that a minimum of 5 poles and a maximum of 20 poles would be scheduled for painting as a group.	\$492.41/Each
19	USA Dig Alert	Siemens typically prices this service out on a per occurrence basis. This includes the following: Siemens technician identifies the point of demarcation on site using field equipment. This is typically limited to approximately 100-150 linear ft per call out.	\$231.30/Each

1. Labor	Regular Time*	Overtime*	Premium Time*
Maintenance Superintendent	\$107.94	\$138.78	\$164.48
Foreman	\$107.94	\$138.78	\$164.48
Electrician	\$100.74	\$128.50	\$149.06
Laborer	\$87.38	\$118.22	\$138.78
Energy Engineer	\$185.04	N/A	N/A
2. Equipment		Rate per Hour	
Bucket Truck		\$28.78	
Service Truck		\$25.70	
3. Material Mark up (from actual invoice cost)			
Street light LED Retrofit			
Installation Materials		15%	
Street light Maintenance Materials		15%	

\* Work hours are as follows:

- Regular Hours – 7:30am to 4:00pm Monday Thru Friday except Holidays
- Overtime
  - 1. Monday thru Friday after 4:00pm (for the first four hours)
  - 2. Saturday for the first 12 hours worked
- Premium Time
  - 1. Monday thru Saturday After 12 working hours
  - 2. Sunday & Holidays all day (24 hours)