

RESOLUTION 2024-09

**BOROUGH OF DUBLIN
BUCKS COUNTY, PENNSYLVANIA**

**A RESOLUTION OF DUBLIN BOROUGH, BUCKS COUNTY AUTHORIZING
COOPERATIVE PURCHASING AND PARTICIPATION IN THE REGIONAL STREETLIGHT
PROCUREMENT PROGRAM ADMINISTERED BY THE DELAWARE VALLEY
REGIONAL PLANNING COMMISSION**

WHEREAS, the Borough of Dublin is located in Bucks County, Pennsylvania (the "Borough"); and

WHEREAS, the Borough qualifies as a "local public procurement unit" as defined under Chapter 19 of the Commonwealth Procurement Code, 62 Pa C.S. §1901 et seq. (the "Code"); and

WHEREAS, the Delaware Valley Regional Planning Commission ("DVRPC") qualifies as a "public procurement unit" under the Code, and has established a Regional Streetlight Procurement Program (the "Program") for the purpose or entering into "cooperative purchasing" agreements with regional municipalities; and

WHEREAS, the Borough, in its capacity as a local public procurement unit, is agreeable to participating in the Program, as reflected by the execution of a letter of intent; and

WHEREAS, participation in the program will allow the Borough to implement its project (the "Project") to improve the performance of municipal street lighting, and specifically to design, procure, install, and finance the transition to light-emitting-diode (LED) street lighting and other street light improvements, and to maintain those improvements; and

WHEREAS, DVRPC has entered into a contract with Keystone Lighting Solutions ("KLS") to provide design services for the Program; and

WHEREAS, participating municipalities, including the Borough, are able to "piggyback off of" contracts entered into by DVRPC for design services, equipment acquisition, distribution, and installation, in accordance with the Code; and

WHEREAS, as part of its contract with DVRPC, KLS has presented a Preliminary Feasibility Study (Phase 1), developed free of charge to the Borough to estimate the equipment and services required for, and to estimate the cost associated with, the Project; and

WHEREAS, as part of its contract with DVRPC, KLS has also estimated the costs to the Borough associated with KLS' services for Phase 2 - 4 of the Program; and

WHEREAS, the Borough has determined that its interests warrant piggybacking off of DVRPC's contract with KLS, thereby forming a separate and new Contract between the Borough and KLS in the form attached hereto as Exhibit A; and

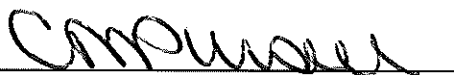
WHEREAS, in accordance with this Contract KLS will provide Professional Design Services to evaluate, recommend, audit, design and manage the Project.

NOW, THEREFORE, BE IT RESOLVED that the Council of the Borough hereby authorizes the Borough to enter into cooperative purchasing in the form of the Contract with KLS and to proceed to Phase 2 of the Program for Project Development Services; and it is

FURTHER RESOLVED that the Council of the Borough hereby authorizes and directs its employees, agents and representatives to take all such further actions and to execute and deliver all such instruments and other documents as may be necessary or appropriate to enable the Borough to carry out the intent and purposes of the foregoing resolutions and the transactions contemplated thereby.

IN WITNESS WHEREOF, the Council of Dublin Borough has adopted and enacted this Resolution this 15th day of October, 2024.

ATTEST:

By: 

Name: Colleen M. Pursell

Title: Borough Manager / Secretary

By: 

Name: Timothy Hayes

Title: Council President

Exhibit A

AGREEMENT FOR PROFESSIONAL SERVICES

REGIONAL STREETLIGHT DESIGN AND PROJECT MANAGEMENT

THIS AGREEMENT, made this 15th day of October 2024, by and between Dublin Borough with offices at 119 Maple Avenue Dublin, PA 18917, and Keystone Lighting Solutions, PO Box 687, Boalsburg, Pennsylvania 16827, agree as follows:

RECITALS

WHEREAS, the Delaware Valley Regional Planning Commission ("DVRPC") has undertaken the Regional Streetlight Procurement Program, or RSLPP (the "Program") as a professional service to municipalities that choose to participate, and

WHEREAS, participation in the Program allows regional municipalities to improve the performance of municipal street lighting, and specifically to design, procure, install, and finance the transition to light-emitting-diode (LED) street lighting and other street light improvements, and to maintain those improvements, and

WHEREAS, the Program will provide comprehensive technical design assistance and project management support to participating municipalities, and

WHEREAS, pursuant to the Program, DVRPC solicited proposals using a request-for-proposal (RFP), appearing here as Attachment A to this Agreement, in order to identify and select a design services professional ("DSP"), to provide technical design solutions tailored to the needs of each participating municipality, and

WHEREAS, in response to the RFP, Keystone Lighting Solutions ("KLS") submitted a Proposal, dated October 12, 2018 (the "Proposal") and appearing here as Attachment B to this Agreement, and

WHEREAS, as a part of its interview, KLS provided a PowerPoint presentation, entitled, "RSLPP Round II Design Services Professional, Selection Interview, October 22, 2018 (the "Presentation," and

WHEREAS, in accordance with the RFP, the Proposal, and the Presentation, DVRPC selected KLS to provide technical design solutions for the participating municipalities, and

WHEREAS, participating municipalities including MUNI, are able to utilize cooperative contracts entered into by DVRPC for design services, equipment acquisition, and installation, in

accordance with Chapter 19 of the Commonwealth Procurement Code, 62 Pa.C.S. § 1901 et seq., and

WHEREAS, KLS is providing to DVRPC a Preliminary Feasibility Study that will benefit Dublin Borough, and

WHEREAS, DVRPC will prepare formal agreements and model agreements to be utilized by the participating municipalities with manufacturers, distributors, and installers, and

WHEREAS, Dublin Borough has agreed to participate in the Program on the terms and conditions hereinafter set forth.

NOW THEREFORE, and intending to be legally bound hereby, the parties agree as follows:

Article I

Statement of the Services

1. **Professional Services.** KLS will provide professional services to enable MUNI to improve the performance of municipal street lighting, and specifically to design, procure, install, and finance the transition to light-emitting-diode (LED) street lighting and other street light improvements, and to maintain those improvements, all as more completely described in the RFP and the Proposal (the "Services"). To the extent that there is inconsistency between the RFP and the Proposal, the provisions found in the Proposal shall govern.
2. **Phases 1 through 4 of the Services.** The Services will be furnished in four phases. Phase 1 shall be performed under the direction of DVRPC pursuant to a DVRPC-KLS contract and will result in a Preliminary Feasibility Study of improvements proposed to be made to MUNI's streetlights. Certain services provided by KLS at DVRPC's direction and expense during Phase 1 will inure to the benefit of MUNI. KLS will undertake in Phase 2 project development and will produce an investment grade audit for the benefit of MUNI in accordance with this Agreement. Thereafter and at the election of MUNI, in Phase 3 KLS will provide project management Services and in Phase 4, post-construction/installation Services.
3. **Phase 2.** KLS shall provide to MUNI project development Services, as more fully described in the RFP and the Proposal. The resolution adopted by MUNI approving this Agreement shall constitute the direction to KLS to proceed with Phase 2.
4. **Phase 3.** Should MUNI elect to proceed with this Phase by resolution, KLS shall provide to MUNI project management Services, as more fully described in the RFP and the Proposal.
5. **Phase 4.** Should MUNI elect to proceed with this Phase by issuance of written direction, KLS shall provide to MUNI post-installation Services, as more fully described in the RFP and the Proposal.
6. **Professional Standard of Performance.** KLS accepts the relationship of trust and confidence established by this Agreement and covenants with MUNI to furnish the best knowledge, skill, care, and professional judgment, and to cooperate with MUNI in furthering its interests. In no event shall the knowledge, skill, care and professional judgment rendered by KLS be less than that ordinarily and customarily accepted within the

industry.

7. **Design Professional Compliance.** KLS' professional activities regarding streetlight improvements shall comply with any applicable permits, laws, regulations and ordinances of all federal, state, and local government in force at the time of design. KLS shall make or cause to be made by the contractor/installers all required submittals to, and shall make their best efforts to obtain all required approvals from, the applicable agencies in a timely manner. Any fees and costs for permits and approvals incurred by KLS shall be reimbursed by MUNI within thirty (30) days from the date of any properly rendered and documented invoice.

Article II

Time of Performance

8. Time shall be of the essence in relation to KLS's performance under this Agreement. Reasonable extensions given in writing shall be granted at the written request of KLS, provided the justifying circumstances are documented by and are beyond the reasonable control of KLS and without fault of KLS. In the event of such an extension, all other terms and conditions of this Agreement shall remain in full force and effect.

Article III

Revisions in the Work to be Performed

9. If during the term of this Agreement, MUNI requires revisions or other changes to be made in the Statement of Services, or the furnishing of additional Services, MUNI will promptly notify KLS. For any changes or additions to the Services necessitated by circumstances or requested for the convenience of MUNI, KLS shall notify MUNI of the associated costs in writing. KLS shall make the necessary changes or additions to the Services only upon receipt of a written acceptance of the costs from MUNI.
10. MUNI will neither unreasonably request revisions or additions to the Services nor unreasonably withhold final acceptance of work by KLS. Any revisions or changes requested by MUNI will not unreasonably depart from the current understanding of the nature of the Services being provided.

11.

Article IV

Payment for Services

12. MUNI's payment to KLS under this Agreement shall be based upon unit prices, as set forth in the Unit Price Schedule and Payment Milestones, appearing here as Attachment C to this Agreement.
13. Payments are due in thirty (30) days from the date of any properly rendered and documented invoice.

Article V

Ownership and Confidentiality of Material, Work Products

14. KLS shall afford MUNI reasonable access to any work product, including but not limited to all work papers, data, reports, questionnaires and other material prepared, produced or collected by KLS under this Agreement.
15. MUNI reserves a royalty-free, nonexclusive, and irrevocable right to reproduce, publish, and otherwise use, and authorize others to use specifically for the benefit of the municipality, the copyright in any work developed under this Agreement, and any rights of copyright acquired with funds provided under this Agreement.
16. MUNI, KLS and DVRPC shall all have full rights to the data, information, and instruments of service produced or delivered under this Agreement.
17. Upon completion of this project or termination for or without cause, KLS shall return any documents, models, tools, plans or items whatsoever belonging to or supplied by MUNI.

Article VI **Duties of Municipality**

18. MUNI shall provide all available information regarding requirements for the Program, including MUNI's objectives, requirements for completion, budgetary constraints and criteria, and schedule for availability of the existing facilities.
19. MUNI shall designate a representative who shall be the point of contact, who is authorized to act on MUNI's behalf with respect to the Project and who will have the authority to render decisions promptly consistent with the schedule and to furnish information with reasonable promptness.
20. Upon written request, MUNI shall provide acknowledgements, approvals, comments, and acceptances of submissions from KLS with reasonable promptness. To the extent that MUNI has comments and objections to the KLS request, those comments and objections should be communicated promptly and with reasonable specificity.

Article VII **Indemnification**

21. The KLS shall indemnify, defend and hold harmless MUNI and all of its officers, agents and employees, against all suits, claims, demands and liabilities of every name and nature, both at law and in equity and by a third-party, based upon or arising out of any negligent action taken or negligent failure to act by the KLS in its performance of this Agreement

Article VIII **Insurance**

22. The KLS shall secure, and maintain in effect throughout the term of this Agreement, insurance in the amounts set forth in this Article and shall provide MUNI with certification of such, if requested.
23. Unless otherwise agreed in writing, KLS shall maintain (1) general liability coverage in the amount of \$1,000,000 single occurrence and \$2,000,000 in the aggregate, (2) workman's compensation in the amount of \$1,000,000, (3) automobile coverage in the amount of

\$500,000, and professional liability coverage in the amount of \$1,000,000. A certificate of insurance appears here as Attachment D to this Agreement.

24. For coverages (1) and (3), KLS shall name MUNI and DVRPC as additional insureds.

Article IX
Assignment

25. The parties shall neither assign nor transfer their respective interests in this Agreement, in part or in whole, without the prior written consent of the other.

Article X
Severability

26. In the event any provision of this Agreement is found by a court of appropriate jurisdiction to be unlawful or invalid, the remainder of the Agreement shall remain and continue in full force and effect.

Article XI
Termination of Agreement

27. KLS or MUNI may terminate this Agreement upon immediate written notice should the other party fail to perform substantially in accordance with the terms of the Agreement, with no fault attributable to the other, provided that the party which has failed to perform shall be provided fourteen (14) days to cure or to make substantial efforts to commence to cure. Written notice should specifically list and explain performance issues or deficiencies, referencing contract requirements. KLS shall be compensated for work product and Services performed that was not deemed deficient and for work product that has value and is usable.
28. Notwithstanding any language to the contrary within this Agreement, KLS or MUNI may terminate this agreement without cause at any time, effective sixty (60) days from the date of the written notice of termination. In the event of termination, KLS shall be compensated for Services performed prior to the date of termination.

Article XII
Adjustment of Compensation

29. MUNI and KLS shall attempt to resolve all claims and disputes between them arising out of this Agreement. Should the KLS not be satisfied with MUNI's decision regarding a claim or dispute, KLS may request an administrative determination. MUNI shall, within thirty (30) days of a demand for an administrative determination or on its own initiative, designate an individual to serve as Claims Administrator. The parties shall attend administrative conferences at the call of the Claims Administrator. MUNI and KLS shall cooperate fully in the administrative investigation conducted by the Claims Administrator at the administrative conference and at such other times as the Claims Administrator shall

determine, and shall furnish documents and other information required by the Claims Administrator. Within thirty (30) days of the completion of the administrative investigation, the Claims Administrator will render a decision and recommendation to the parties. The decision and the recommendation shall not be binding on any party and will not be admissible in any proceeding. Unless the decision and recommendation is accepted, KLS may submit a claim to a state court within the Commonwealth of Pennsylvania of competent jurisdiction.

Article XIII
Governing Law and Jurisdiction

30. This Agreement shall be governed by, construed, and enforced in accordance with the laws of the Commonwealth of Pennsylvania, without regard to its conflicts of laws provisions.

Article XIV
Complete Agreement

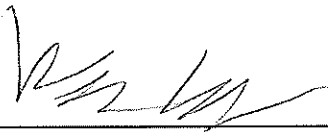
31. This Agreement, and the Exhibits attached hereto and incorporated herein constitute a total agreement of the parties and supersede all prior agreements and understandings between the parties, and may not be changed unless agreed upon in writing by both parties.

ATTEST:

By: 

Name: Colleen M. Pursell

Title: Borough Manager / Secretary

By: 

Name: Timothy Hayes

Title: Council President

Attachment A – Request for Proposal
Attachment B – Proposal
Attachment C – Unit Price Schedule
Attachment D – Certificate of Insurance

Design Services Professional for the Regional Streetlight Procurement Program

The Delaware Valley Regional Planning Commission (DVRPC) is seeking proposals from qualified vendors to serve as the "Design Services Professional" (DSP) for the Regional Streetlight Procurement Program (RSLPP). DVRPC seeks to select a single DSP to serve the program. The selected DSP will contract with DVRPC to provide Preliminary Feasibility Studies and Program-level cooperation, communication, development, and procurement services. As a part of this RFP process, the selected DSP will be qualified to contract directly with municipalities to provide services selected from a menu of Project Development and Project Management Services that will continue through the completion of an LED outdoor lighting system conversion project for the participating municipalities.

DVRPC Tentative Timeline for RFP Process:

Posting of Request for Proposal:	September 21, 2018
Pre-Proposal Meeting:	September 28, 2018 at 3 PM EDT at DVRPC
Submission of Inquiries by Email:	October 3, 2018 at 3 PM EDT
Posting of Responses to Inquiries:	Rolling basis
Proposal Submission Deadline:	October 12, 2018 at 10:00 AM EDT
Respondent Interviews	October 22, 2018 at 10:00 AM EDT
Anticipated Award of Project:	October 25, 2018

The Delaware Valley Regional Planning Commission is the federally designated Metropolitan Planning Organization for a diverse nine county region in two states: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey.

DVRPC's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

DVRPC's mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. For more information, visit www.dvrpc.org/GetInvolved/TitleVI.

DVRPC is funded through a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments.

- Provision of a baseline of standardized services (e.g. auditing, design) and products (lighting equipment) with the ability for municipalities to customize as needed;
- Transparency and accountability on services, products, and labor;
- Arrangement of a pool of low-interest financing that participants can access;
- A clearly defined, smooth process along a common timeline of steps in the decision making process;
- Effective decision-making processes through clearly communicated, useful, and timely information;
- Equal treatment of participating municipalities regardless of project size; and
- Excellent customer service in all communications.

B. Nature of the Relationship between the DSP and DVRPC and the Municipalities

The DSP will contract with DVRPC to provide Preliminary Feasibility Studies for participating municipalities. A participating municipality's Study will provide a preliminary recommended scope of work and estimated cost associated with the desired outdoor lighting retrofit project. The municipality will then have the option of entering into a standardized Project Development contract with the DSP.

Though this RFP, the DSP will be selected to contract directly with municipalities for all Project Development, Project Management, and Post-Construction Operation and Maintenance services associated with an outdoor lighting conversion project. A municipality will not enter into a contract with the DSP until after the Preliminary Feasibility Study is delivered. After its review, each municipality will have the option to contract with the DSP for Project Development services. At the conclusion of the Project Development (Investment Grade Audit) Phase, the municipality will then have the option of entering into a standardized Project Management contract, as well as a standard Post-Construction Operation and Maintenance contract with the DSP. The DSP-municipality contracts will utilize a standardized contract template, with modifications specific to the municipality, including in particular the services that municipality elects to pursue, as described below in the Scope of Work section.

The DSP will participate in program-level coordination with DVRPC. This includes coordinating on the development and delivery of (1) standardized documents, (2) standardized approaches to Project Development, Project Management and Post-Construction Operation and Maintenance services, (3) development of program outreach materials, (4) an appropriate common timeline for participants to follow, and (5) assistance with delivery and review of all program-level solicitations for design, procurement, construction, financing, operations and maintenance. The DSP will be responsible for collaborating with DVRPC on overall program development and approach.

C. Description and Roles of the RSLPP Team

- DVRPC: convenes, manages the program, issues all solicitations, and serves on the selection committees.
- Members of the Municipal Steering Committee (MSC): serve on selection committees and

I. Project Background

Serving the Greater Philadelphia area since 1965, DVRPC works to foster regional collaboration in creating and maintaining a livable, sustainable, and economically competitive region covering our nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. These nine counties together comprise over 3,800 square miles with land use that varies from the dense urban core of Center City Philadelphia to the open rural areas of the New Jersey Pinelands. DVRPC staff works with municipal, city, county, and state representatives and many other partners to improve transportation, promote smart growth, protect the environment, and build the economy.

DVRPC is the federally designated Metropolitan Planning Organization (MPO) for the greater Philadelphia region. DVRPC sponsors and conducts studies, assists member planning agencies, and provides a forum for interagency cooperation and public input into funding decisions.

DVRPC's Regional Streetlight Procurement Program (RSLPP or the Program) assembles the resources needed to design, procure, construct, finance and maintain the transition to light-emitting diode (LED) street lighting tailored to each participating municipality's needs. The RSLPP aggregates the buying power of participating municipalities. Project Development, Project Management, materials, equipment, installation, and financing is anticipated to be procured at a price below that which would be available to any one municipality, and with increased administrative efficiency. Municipalities that retrofit to LEDs will see significant energy cost savings and reduced operational and maintenance costs, due to lower energy consumption and the longer life spans of LED lamps. Participating municipalities follow a common step-by-step timeline guided by technical support.

On behalf of program participants, DVRPC has developed an inventory of streetlights (wattage, type, and count) currently installed in each participating municipality – listed as Attachment C to this RFP – inventory of Equipment. Please email procurement@dvrpc.org if you would like an Excel-based copy of this inventory emailed to you. This inventory was developed using a copy of each participating municipality's most recent utility street lighting bill. As such, the Inventory of Equipment information is accurate to the extent the utility street lighting bills are accurate and there are some known inherent flaws with the data. Additional desired preferences, such as converting decorative or exterior fixtures to LED and re-wiring, is included as part of the scope of work in each project.

A. DVRPC's Goals and Objectives

DVRPC and the municipalities participating in the RSLPP are seeking a DSP that will help them collectively achieve the following goals and objectives:

- Technically developed joint procurements/solicitations on behalf of the program issued by DVRPC that allow
 - Volumetric price discounts on materials, materials distribution, and labor;
 - Quality control on products, labor, services;
- Standardization of project proposals, contracts, and all other supporting documents;

provides DVRPC with information as a program sounding board.

- Design Services Professional (DSP): prepares Preliminary Feasibility Studies for each participating municipality. Qualified to serve as an agency project manager for Project Development, Project Management, and Post-Construction Operation and Maintenance under contract with each participating municipality. Works with DVRPC to develop and negotiate joint solicitations
- DEPI: a representative of this source of funding (State Energy Plan) will serve on MSC.
- Legal Contracts Advisor: reviews and assists with developing all contracts, solicitations, and arrangement of financing. Provides guidance to DVRPC.

D. RSLPP Services for Participating Municipalities

Municipalities may seek the RSLPP to provide the following options for their lighting projects:

- To convert existing HID and incandescent fixtures to more energy-efficient, longer-lasting, brighter, and/or lower-maintenance LED fixtures;
- To procure streetlights from PECO;
- To minimize future maintenance and operating costs, recognizing that they will enjoy significant savings through the use of longer lasting and higher quality of LED lamps;
- To make improvements in illumination, energy efficiency, and aesthetics afforded by replacement street lighting systems;
- To explore the feasibility of implementing an automated wireless control and monitoring system or installing on-fixture, field adjustable manual controls as part of their project;
- To retrofit existing incandescent traffic signals or LED traffic signals that have reached the end of their useful life;
- To retrofit existing exterior lighting, such as municipal lighting, parking or recreational lighting with LEDs;
- To make system-level improvements to outdoor lighting system, such as re-wiring; and/or
- To standardize outdoor lighting system design within the municipality.

This is a regional project and the selected DSP will work to make sure that all participants have equal opportunity to benefit from the services provided through this program.

E. Pre-Proposal Meeting

An optional Pre-Proposal Meeting will be held for the benefit of all potential design service providers by DVRPC on Friday, September 28, 2018 at 3:00 pm EDT. The Pre-Proposal Meeting will be held at the offices of the Delaware Valley Regional Planning Commission, 190 N. Independence Mall West, Philadelphia, PA 19106. A call-in option may be made available upon request if a hardship is demonstrated. Please e-mail procurement@dvrpc.org to submit your request to be able to participate via a call in no later than Wednesday, September 26, 2018 at 3:00 pm EDT.

Potential Respondents are strongly encouraged to take part in the Pre-Proposal Meeting. Respondents are also encouraged to have, at a minimum, the persons responsible for coordinating the technical

components of any Proposal in attendance. A summary from the Pre-Proposal Meeting will be issued as an addendum, and posted on DVRPC's website.

II. Scope of Work and Deliverables

The DSP will provide the specific services outlined here. The DSP will provide both overall program-level services to DVRPC as well as "one-on-one" services, customized for each municipality. The services the DSP provides will have a common, standardized timeline covering the four phases envisioned: Preliminary Feasibility Study (Phase 1), Project Development (Investment Grade Audit or IGA) (Phase 2), "agency" (not at-risk) Project Management (Phase 3), and Post-Construction Operation and Maintenance (Phase 4).

This scope of work section of this RFP outlines the overall program-level communication and coordination requirements for DVRPC and then the "one-on-one" service requirements in each phase for each municipality. Deliverables are listed at the end of each section. *The Respondent is encouraged to provide recommendations for the addition, removal, or modification of tasks provided below to DVRPC as part of their response to this RFP. Please identify any such recommendations explicitly.*

A. Overall RSLPP Program Communication and Coordination

- The DSP will participate in periodic project status meetings with DVRPC, the Municipal Steering Committee, and other members of the RSLPP team. Project status meetings may include, but are not limited to, updates on:
 - o Project status to date;
 - o Identified issues and proposed resolutions;
 - o On-going review of project changes; and/or
 - o Updated timeline and schedule.
- Coordination with the Electric Utility: While the utility bill update and utility rebate process will take place for each individual municipality in Phase 2 and Phase 3, the primary utility company serving this program (PECO) has requested that the RSLPP coordinate the bill update process holistically to ensure an expeditious updating of the bills that aligns with PECO's data management capabilities. As such, the RSLPP will coordinate meetings throughout the development and delivery of the entire program. Participants in these meetings may include DVRPC, RSLPP participants, the selected DSP, and PECO to develop a strategy to ensure successful bill updates occur. Part of this collaboration will also include reviewing the bill-update process defined by Round 1 of RSLPP and modifying, if needed, so that the DSP and PECO have clearly defined expectations for the bill update process during construction period.
- The DSP will participate in program-level coordination with DVRPC throughout each phase. Within each phase, all program-level tasks, as defined by DVRPC, are described.

B. Phase 1: Preliminary Feasibility Study

The DSP will be responsible for developing a Preliminary Feasibility Study for each municipality participating in the program. This Preliminary Feasibility Study will serve as a decision-making tool for the municipality that will enable it to enter into contract with the DSP for Project Development

services, and will assist with preparing the municipality for subsequent decisions to enter into Project Management and Post-Construction Operation and Maintenance service contract. Municipality participants will be receiving these studies at no cost to them, and they are not required to proceed beyond the Preliminary Feasibility phase to Phase 2, Project Development and the preparation of an Investment Grade Audit.

The DSP will contract directly with DVRPC for Phase 1 of the Program. Given DVRPC's budget constraints, it is essential that the DSP provide conservative pricing estimates. Pricing estimates should reflect the fact that DVRPC will assist with the following tasks: (1) data collection (inventory of equipment, questionnaire providing initial information on decorative, exterior, re-wiring; as well as indicative pricing on LED outdoor lighting project costs based on regional experience); (2) compilation of this information into DVRPC's Outdoor Lighting Tool, which the DSP will be required to use, with the results to be shared with the DSP;¹ and (3) outreach and organization for in-person scheduling of the program-level and one-on-one kickoff meetings.

I. Overall Program-Level Preliminary Feasibility Services

As a part of the Preliminary Feasibility Services, the selected DSP will be required to the following:

1. Work with DVRPC to develop an appropriate Preliminary Feasibility phase timeline and schedule.
2. Provide guidance to the practical impact on program success resulting from the various options for the solicitation of materials and equipment, construction services, and post-construction operations and maintenance.
3. Advise DVRPC on contracting for the benefit of the municipalities with a single distributor or one or more material and equipment vendors.
4. Advise on the issues associated with the assignment of contracts for material and equipment to the installation and construction contractors.
5. Provide advice of the desirability of monitoring savings as a result of the installations on a municipality-by-municipality basis.
6. Advise DVRPC on financing arrangements that the municipalities can employ.
7. Work with RSLPP team to develop standardized contracts for Project Development, Project Management, and Post-Construction Operation and Maintenance Services. It is possible that this will be a single, extendable contract form or template. The contract form or forms will be the basis for contracting between the DSP and each municipality that can be signed at the conclusion of the Preliminary Feasibility Phase

¹ Note that DVRPC recognizes that the DSP may prefer to use their own proprietary tools and to initiate the project development process- if that is the case, we welcome your thoughts on how the Preliminary Feasibility Studies can be developed to your comfort level, while keeping costs to a minimum.

by those municipalities that which wish to proceed into the Project Development (Investment Grade Audit) Phase 2.

8. DVRPC will release all data to the DSP as soon as selection occurs. The DSP will then review already-gathered data from each municipality and define requirements for additional data collection that will be required to make this Phase and the Program successful. In addition to the inventory provide in Attachment C, DVRPC has also gathered RSLPP Questionnaires from each municipality in the program, using the questionnaire form provided as Attachment D.
9. Work with DVRPC to develop a standardized Preliminary Feasibility Study report outline and report template. The report will serve as a decision-making tool for the municipality to enter into contract with the DSP for Project Development, Project Management, and Post-Construction Operation and Maintenance services. This report outline will also need to be able to evolve throughout the Phases so it can be used as a template for the Investment Grade Audit report (with some modifications) as well. The report outline should include: (1) detailed overview of preliminary solutions in project scope; (2) preliminarily specified luminaires and controls; and (3) itemized, transparent preliminary project construction costs. The itemized construction costs should include (1) per unit fixture price; (2) per unit labor price; and (3) all DSP service costs for Project Development, Project Management, and Post-Construction Operation and Maintenance. Note: while other costs will be preliminary, the DSP service costs will be locked in.
10. Provide information regarding preliminary cost savings and project cash flow associated with a utility buyback.
11. Prepare a separate proposal detailing DSP pricing for all Investment Grade Audit related Project Development services including:
 - o Field Audits and Mapping;
 - o Design;
 - o Utility Bill Update Development;
 - o Preparing and Delivering the IGA report;
 - o Populating Construction Contract and Assisting with Municipal Decision Making Process;
 - o Pilot demonstrations; and
 - o Procurement and materials handling.
12. Prepare Preliminary Feasibility Study (PFS) outreach informational materials in concert with DVRPC.
13. Work with DVRPC to plan for and attend one-day in person kick-off event with the RSLPP team and all participating municipalities. This meeting will be mandatory for all municipal participants. This kickoff event will provide overall RSLPP program steps and timeline, as well as the immediate data and project-level information that

municipalities will need to gather to make the Preliminary Feasibility phase successful.

14. Prepare Preliminary Feasibility Study (PFS) outreach informational materials in concert with DVRPC.

II. One-on-one Preliminary Feasibility Services to each municipality

1. Develop a preliminary design of LED lighting system on a one-for-one basis for the replacement of existing street light luminaires using available data. Note: this will be based on the information available to the DSP through data and information gathered and compiled by DVRPC, including a populated DVRPC Outdoor Lighting Tool completed for each municipality. No field audit work will be allowed for this task.
2. Using the information developed, the DSP will work with DVRPC to populate the Preliminary Feasibility Study report template.
3. Meet one-on-one with each municipality to:
 - o Review a populated draft of the PFS report template
 - o Review each municipality's overall LED outdoor lighting project goals and objectives;
 - o Provide education and scoping options for the preliminary design of the replacement system; and
 - o Identify any special requirements (e.g. exterior lighting).
4. Prepare and deliver a final Preliminary Feasibility Study Report.

Note: the DSP can conduct light field work during this visit if it is deemed absolutely necessary, but no additional cost can be associated with this work.

III. Feasibility Study Phase 1 Deliverables

1. Finalized Preliminary Feasibility Report Template;
2. Finalized contract templates between the DSP and the municipalities for Project Development, Project Management and Post-Construction Operation and Maintenance services;
3. Materials for Initial Preliminary Feasibility Study Kickoff Meeting;
4. Approximately 27 in person meetings, one with each participating municipality;
5. Approximately 27 Preliminary Feasibility Studies; and
6. Approximately 27 populated Project Development and Project Management contracts for each participating municipality's consideration.

C. Phase 2: Project Development (Investment Grade Audit):

The Project Development (Investment Grade Audit or IGA) will involve all steps necessary for project development, including but not limited to: (1) field auditing; (2) design; (3) initiation of the utility bill update process; (4) procurement/selection of all materials, distributor, and construction and installation labor for the program; (5) development of an IGA report; (6) development of a form of contract between a selected installation contractor and the municipality; (7) pre-applications for all PECO Act 129 rebates; and (8) assistance with the municipal decision-making process for all construction contracts. Municipalities will contract directly with the DSP for all of the Investment Grade Audit services provided in Phase 2. The IGA report will serve as the basis of the construction contract between one of the selected installation contractors and the municipality. This contract will be developed during this Phase 2 and, if it is executed, will be managed by the DSP through the municipality's contract with the DSP for Project Management services. Please note: Some municipalities may not wish to hire the DSP for all of the below services. For example, some have already completed a field audit of their equipment and may not want this service duplicated – as such, the DSP must be willing to offer the services listed below individually.

In your response, please indicate your ability to provide each service below individually, and your team's approach to utilizing an already-completed field audit. Please note: DVRPC will charge municipalities a 5% Program Fee, recovered in a manner that will be determined. Do not include this fee in your cost component of the Administrative Proposal.

i. Overall Program-Level Services

1. **Timeline and Schedule:** Work with DVRPC to develop an appropriate Investment Grade Audit (IGA) timeline and schedule.
2. **IGA Report Template:** Work with DVRPC to develop a standardized IGA report outline and report template. At a minimum, this report must include:
 - a. Detailed overview of solutions in project scope
 - b. Final specified luminaires and controls
 - c. Itemized, transparent Project construction costs
 - i. Per unit fixture price
 - ii. Per unit labor price
 - iii. All distributor and DSP service costs for Project Development (IGA) and Project Management (construction and post-construction).
 - d. Project savings
 - i. Final project cash flow. Cash flow should demonstrate a lifecycle cost analysis, including the initial capital outlay, annual project costs and all itemized savings (energy cost, operations and maintenance, utility rebates, and other), the net present value (NPV) and return on investment (ROI).

12. **Distributor:** The DSP will be responsible for working with DVRPC to competitively select a single distributor or multiple vendors that will serve the program.
13. **Labor:** DSP will be responsible for developing specifications and bids for installation and construction contractors and maintenance contractors. It is assumed that multiple installation contractors will be selected to serve the program. DSP must provide an approach that demonstrates that the selected installation contractors will be able to provide equitable, timely, cost-effective (volumetric) services that align with your project management approach and are provided with high quality of customer service. As the DSP will be responsible for specifying and monitoring the installation contractors on behalf of each municipality, the DSP should include all required specifications for installation labor in this solicitation including, but not limited to:

1. Labor for
 - a. Cobrahead fixture installation
 - b. Decorative fixture installation (retrofit kit and new fixture replacement)
 - c. Traffic Signal lamp installation
 - d. Installation of new arm or pole
 - e. Re-wiring
 - f. Exterior lighting installation
2. Required installation schedule
3. Approach to project management
4. Required data collection, reporting
5. Customer service requirements
6. Warranties
7. Adjusting and Cleaning
8. Disposal

10. **Financing:** Coordinate with the RSLPP project team on the development of a pool of financing for the program. Coordination with the selected financial partner will be required throughout the development of all project cash flows and Construction Contracts. The DSP is not expected to take the lead on the development of financing for the program, but will provide advice and assistance.

ii. One-on-one Project Development (Investment Grade Audit) services to each municipality

A DSP scope of work is provided below for all Project Development services that the DSP will provide to the municipality for the development of an Investment Grade Audit. DSP will be responsible for managing a sole auditing and design team that will be used for each project in the program.

e. Final Installation Schedule

3. **Material and Equipment Contract:** Work with DVRPC to develop the contract or contracts for the acquisition of material and equipment and assist in the solicitation of a distributor or one or more vendors.
4. **Construction Contract:** Work with DVRPC to develop a standardized installation and construction contract form that will be the basis for the contract between the selected installation contractor and each municipality.
5. **Communication and Outreach:** Work with DVRPC to develop IGA communication and informational materials in concert with DVRPC.
6. **Kickoff Event:** Work with DVRPC to plan for and attend an IGA kick-off event with the RSLPP team. This meeting will take place by webinar or in person, and it will be mandatory for all municipal participants. This IGA kickoff event will review project steps and timeline, as well as the immediate data and project-level information that municipalities will need to gather to make the IGA phase successful.
7. **Program-Level Audit and Design Approaches:** Review and finalize with DVRPC the DSP approach to audit and design.
8. **Pilots:** Identify an approach to pilot installations, if deemed necessary by municipal participants. This includes both municipal-specific pilot installations, if requested by the municipality, along with any RSLPP Program Level Pilots installed. This task may involve coordinating with DVRPC Capital Planning and Safety Offices on location of pilots to test for research-specific questions related to the impact of LED luminaires on roadway safety.
9. **Mapping:** DSP will work with DVRPC on the program-defined mapping platform so that the field audit and subsequent design can be used as a tool to (1) communicate data scrubbing and design process to each municipality, and (2) for use as a project management and asset management tool throughout Project Development, Project Management, and Post-Construction Operation and Maintenance. Coordinate with DVRPC on the development of audit/design Web platform.
10. **Solicitations:** Develop required Investment Grade Audit solicitations on behalf of the program.
11. **Materials:** DSP will be responsible for developing product specifications for all equipment to be procured in the program and working with DVRPC to develop a bid and obtain quotes and evaluate responses. DSP will be responsible for providing an aggregate bill of material for all material to be procured through the program. For construction items that cannot be fully defined in the IGA phase process, DVRPC can provide data from round 1 of the RSLPP to assist the DSP with obtaining pricing (for example, volumetric pricing based on expected levels of re-wiring throughout the program, using data gathered from Round 1 participants).

1. **Initial Scoping:** Meet one-on-one with each municipality for an initial scoping meeting to kick off Phase 2. This scoping meeting will refine municipal scope of work for the DSP for this phase. Additionally, the DSP will review project development goals, timeline, and special requests for each municipality. DSP will provide consultation on municipal budgeting for the project, including a discussion of financing that is available through the program, and any recommendations for customer-controlled contingency to be included as part of the project.
2. **Field Auditing and Mapping:** The DSP will be responsible for all data collection, data scrubbing, and mapping tasks listed below.

a. Data Collection:

- i. GPS location of all lighting equipment included in the desired scope of work for the project.
- ii. Pole mounting height (vertical distance from pavement to luminaire) and arm length (horizontal distance from pole to luminaire)
- iii. Identification of poles at intersections and the attributes of those poles and fixture arms (arm length, angle of arm to intersection)
- iv. Identification of junction box at each pole location
- v. Utility Pole and/or Asset ID number
- vi. Electricity feed (overhead or underground)
- vii. Color and type (material) of pole
- viii. Style of luminaire(s) (e.g. cobrahead, decorative) on each pole
- ix. Lamp type (e.g. HPS, MV, etc.)
- x. Lamp wattage
- xi. Fixture manufacture, model number, lens type (clear/flat, clear/sag, prismatic, other). If a standard ANSI C136.15 external label is available, this will be provided in lieu of lamp type
- xii. Nominal line voltage to luminaire
- xiii. One photo of each luminaire type
- xiv. Separate photos of the pole identification tag, the pole and the luminaire
- xv. Additional photos may be taken to identify special conditions such as obstructions, non-standard spacing, etc.

b. Data Scrubbing:

- i. **Utility Scrubbing:** DSP will be responsible for matching all field audit data with the pre-project utility data supplied by PECO and including in the field-audit dataset a tracking system that identifies whether the fixture (1) is matched to the PECO data, or (2) was found in the field but not included in the PECO data, or (3)

was listed on the PECO data set but not found in the field. Further, at the request of the municipality, DSP must be able to provide guidance to the municipality on the characterization each fixture according to the type of "service location" associated with the fixture.

- ii. DSP must meet with the municipality to confirm all equipment that is in question, such as ownership of boundary fixtures, unknown style of wattages of fixtures, etc. This step will overlap with the design process.

c. Mapping:

- i. DSP will either provide DVRPC with the necessary data for mapping, or populate field audit data into the program-defined mapping platform throughout this process.

3. **Design Services:** This suite of services will provide municipalities with the resources they need to complete a desired scope of work for their LED outdoor lighting project. DSP should leverage standardized program-level design approaches where feasible but must also be responsive to municipal-specific design and scope of work requests for their outdoor lighting system. This applies to all lighting equipment candidate for conversion within each municipality's desired scope of work including cobrahead fixtures, decorative fixtures, traffic signals, and all other types of exterior lighting including outdoor area lighting and wall packs, as well as additional requests such as delamping, or adding additional poles and lamps, if requested. Lastly, the DSP should prepare municipalities for all system-level improvement services that could take place as part of construction, such as re-wiring.

- i. **Education:** DSP will be responsible for educating municipalities on design solution and service offerings available for all street, area, and traffic signal lighting equipment, including associated manual and wireless controls if desired by the municipality. The DSP should provide information on the characteristics that differentiate them, and relevant options that may affect performance or price. Consideration of efficacy as well as photometric performance should be included.
- ii. **Pilots:** Municipality-specific pilot installations, if requested by the municipality, should be made possible – along with any RSLPP Program Level Pilots.
- iii. **Photometric modeling:** The DSP will be responsible for managing or conducting Photometric modeling to indicate current light levels and uniformity and to confirm appropriate LED replacement luminaires and

illuminate requirements using IES LM-50 Additional photometric modeling when it supports re-design proposals (i.e. lower lumen output or fixture quantity reduction) showing all photometric assumptions and performance consistent with IES LM-50 illuminance, uniformity and glare/BUG rating requirements. Present photometric data to help the municipality understand how the light levels provided by the model will compare to IES RP8 standards and the light levels likely provided by the existing lights.

- iv. **Preliminary Design:** In concert with a discussion with the municipality, preparing design of new LED lighting system using a standardized replacement of existing fixtures, customized as desired by the municipality. This preliminary project scope of work should include solutions that achieve the illumination levels, aesthetic quality, and energy and maintenance savings desired by each municipality. Design should leverage standardization when possible, yet also allow for the flexibility for each municipality to customize as needed. The preliminary design will include scope of work for all additional system-level improvement services that are requested for the municipality alongside the LED lighting upgrade, including re-wiring, installation of new lighting fixtures, utility-grade metering of lighting equipment, or other needs as defined by the municipality.
- v. **Final Design:** After consultation with the municipality, the DSP should prepare a final project scope and specification of work, cost and cash flow as defined by the IGA Report Template.

4. Utility Update Processes

- i. Initiate and plan for the bill-update process. Bill updates will occur during the construction period and will incorporate the changes made to each municipality's respective inventory of streetlights as they are retrofitted through this project to achieve associated cost savings. Bill updates must also include correction of all inaccuracies in utility data associated with the street lighting system, which will begin during the Data Scrubbing tasks within the field audit and will continue into construction phase.
- ii. Manage process for submitting Act 129 rebate pre-application with utility. This will continue into construction phase, though the pre-applications for all projects must be submitting during the IGA phase, and before a decision is made to proceed with construction on the project.
- iii. Coordination of purchasing of lamps in municipalities from the electric utility in cases where municipal participants do not currently own their street lighting systems (as shown in Attachment C, this represents a certain number

of municipal participants).

- iv. Identify, evaluate, and confirm electric utility rates and structure. Evaluate options for modification or improvements.

5. **Prepare and Deliver Investment Grade Audit Report:** The DSP will be responsible for preparing and presenting a draft IGA report to the municipality, meeting one-on-one with the municipality to review draft report, refining solutions based on municipal input, and then preparing a final IGA report that will serve as the basis of the contract between the municipality and the installation contractor:

- i. Prepare and present draft IGA report
- ii. Meet on-on-one to review draft IGA report with municipality
- iii. Prepare final IGA report and present to the municipality as requested.
- iv. Coordinate all project financials with program financial partner.

6. Populating Contract and Assisting with Municipal Decision Making Process

- i. After all program-level solicitations and municipal-specific scopes of work are finalized, the DSP will be responsible for populating contracts between the installation contractor and the municipality, coordinating with the program-selected financial partner on the development of construction contract, reviewing contract with the installation contractor, and presenting contract to the municipality's elected bodies for their decision.

iii. Investment Grade Audit Phase 2 Deliverables

1. Finalized Investment Grade Audit Report template
2. Finalized construction contract template between the installation contractor and the municipalities
3. Materials for IGA Kickoff meeting(s)
4. One to three in-person meetings with each municipality proceeding with this phase.
5. One Investment Grade Audit Report for each municipality proceeding with this phase.
6. One construction contract for each municipality proceeding with this phase, to cover the services for Project Development and Project Management that the municipality has selected.
7. Whole-program specification and bid for all equipment.
8. Product decision matrix showing specification for all replacement equipment, possible solutions, and lifecycle cost associated with these solutions.
9. An aggregated bill of material for the entire program.
10. Form of solicitation (bid or competitive proposal process) for all installation and construction labor.

11. Form of solicitation (bid or competitive proposal process) for materials and equipment.
12. All line by lines (audited, scrubbed, design, and final) for each communities lighting system(s) that show all pre-and post-project lighting information, as well as a list of any discrepancies identified between field audit data and the utility inventory. The finalized inventory that contains the required attributes in a file suitable for use in common GIS software (e.g. ESRI ArcMap), as well as Microsoft Excel.
13. Implementation schedules for each municipality.
14. A summary table documenting all high-level data for the program.

D. Phase 3: Project Management Services

DSP will be responsible for all Project Management services desired on behalf of municipalities.

i. Program-Level Project Management Services

1. Host a program-wide kickoff meeting with installation contractors to review and confirm installation schedule, project management approach, and overall customer service expectations.
2. Perform any necessary training for installers on relevant data collection technologies
3. Work with DVRPC to plan and host a kickoff meeting with all participants to review construction timeline, communication and project management process, and participation requirements for all municipalities to make the construction period run smoothly and successfully.
4. Work with DVRPC to plan and schedule and participate in monthly PECO bill update calls throughout the duration of the construction period. All construction activity must be reported to PECO on a monthly basis in the PECO-approved bill update format for each municipality.
5. Work with DVRPC to participate in monthly PECO Act 129 rebate status call with PECO's rebate team.
 - a. Work with DVRPC to identify the best approach to applying for PJM Capacity Market rebates for all interested municipalities in the program (note: this task may begin in Investment Grade Audit phase).
 - b. Host weekly project management check-ins during construction to update DVRPC and the MSC on overall status of construction.
 - i. Review and finalize with DVRPC the DSP approach to audit and design.
 - ii. Throughout the phase, identify proposed approach to pilot installations, if deemed necessary by municipal participants.

ii. One-on-one Construction Management services

1. Bill update and rebate process

- Using the pre-approved PECO bill update template, develop monthly bill updates for each municipality with active construction. Submit data in advance of each monthly program-level bill update calls with PECO.
- Apply for utility rebates and execute appropriate paperwork for billing changes
- Finalize all Act 129 rebate applications throughout construction and post-construction period.

2. Monitor installation contractor

- Assist in the execution of contract with each municipality for the installation and construction, using the template contract form.
- Provide installer with maps identifying which lights to be installed on each streetlight.
- Host a kickoff meeting with the municipality and the Installation contractor to review proposed installation maps, timeline, and any municipal-specific requests regarding installation notice or communication.
- Be responsive to municipal questions and request as they arise through construction. Provide kind, patient, and transparent customer service. Be the best human(s) you can be. DSP should anticipate 1 or 2 in-person meetings per municipality during the course of the construction administration.
- Observe installation work on a periodic basis as a "spot check" on compliance with design specifications. Contractors and not the DSP will be responsible for failure to comply with the design.
- Electronically send municipality weekly updates on installation progress and any installation issues.
- Remotely verify that the installer is reporting that the appropriate light is installed in each location per final design (i.e. reported data matches design).
- Manage request for change orders from installers and coordinate response and decision (i.e. approval/disapproval) from the municipality.
- Develop punch-list and review with municipality.
- Certify that installation is completed properly, meaning that the reported data matches the finalized design including any change orders.
- Update the line by line GIS layer with any changes to design from construction
- Updated analysis of gross cost, savings, incentives, net cost, and payback of finalized design, including any operation and maintenance costs and savings

iii. Project Management Phase 3 Deliverables:

- Executed contracts with the participating municipality

- Installer maps and schedules for each community
- Materials for construction kickoff meetings
- Punch lists for each community
- Weekly project management update reports
- Change orders
- Final line by line showing any changes to design from construction
- Updated project cash flows for each community showing gross cost, savings, incentives, net cost, and payback of finalized design, including any operation and maintenance costs and savings
- One to three in person meetings with each municipality proceeding with this phase.

E. Phase 4: Post-Construction Operation and Maintenance Services

For this phase, DSP will be responsible for all Post-Construction Operation and Maintenance Services requested by the municipality.

i. Whole Program Construction Management Services

- Timeline and Schedule:** Work with DVRPC to develop an appropriate Post Construction Operation and Maintenance timeline and schedule.
- Report Template:** Work with DVRPC to develop standardized Post Construction Operation and Maintenance reports templates (annual O&M report, Operation and Maintenance Plan report, Outdoor lighting ordinance) as needed.

ii. One-on-one Post-Construction Operation and Maintenance Services

- Evaluation of project annual energy and operational savings
- Development of an operations and maintenance plan for a municipality's new LED system.
- Development of an operations and maintenance manual that can be used as an in-house asset management tool and help guide all future lighting development in each community.
- Development or updating of a lighting ordinance for enforcing future lighting development in each municipality.

iii. Post-Construction Operation and Maintenance Services Deliverables

- Post-construction operations and maintenance plan, timeline and schedule
- Report template
- Operations and maintenance manual
- Lighting ordinances

III. Submission Information:

Technical and Administrative Proposal submissions are due no later than 10:00 AM EDT on Friday, October 12, 2018. Please note that file sizes must be under 25 MB. Acceptable file types are .pdf, .doc, and .docx.

Proposals submitted after the submission deadline, that do not strictly adhere to the submission instructions, or that are non-responsive to any of the requirements of this RFP may be deemed disqualified and may be ineligible for award.

IV. Technical Proposal Requirements

The proposal, transmitted as a .pdf, .doc, and/or .docx file should contain the firm name and be titled "Technical Proposal." Please submit your Technical Proposals via email to procurement@dvrpc.org. The firm who submits the proposal, Respondent, must include the following elements in order:

- Cover letter** from a principal of the Respondent, providing summary of proposed solution of the project, along with primary contact information (phone number and email address), the Respondent's most recent financial statement, and a certification that the Respondent's submission meets substantially, and that the Respondent accepts, the requirements of the RFP. (2 page maximum)
- Project Team Description** For this section, please provide the following information:
 - Describe the roles and organization of your proposed Project Team for this project for each task within each Phase. Please identify the project manager, key personnel, and any sub-consultants (hereinafter, the "Project Team"), and include an organizational chart of the Project Team.
 - Provide the qualifications and relevant experience for each Project Team member. Resumes and references for all Project Team members should be provided that show relevant experience, for the Project's Scope of Work as well as the length of employment with the proposing DSP. Key members, especially the project manager, shall have significant demonstrated experience with this type of project, and should be committed to stay with the project for the duration of the project (through Phase 3 at a minimum).
 - List facilities and equipment available to Project Team members throughout the project.
 - Describe your project management approach. Provide a detailed description of how the Project Team and Scope of Work will be managed.
 - If you a presenting a team of consultants, explain how team may have previously worked together.
 - For both the project manager and any sub-consultants, please provide company names, addresses, telephone numbers, fax number (if available), email addresses, and company websites (if available). If the Respondent has multiple offices, the description of the Respondent shall include information about the location of the parent company and any and all branch offices from which projects will be managed.

- Please provide a brief history of the Project Team, including general information about the Respondent's personnel resources, including disciplines and numbers and classifications of employees. (Collectively, 5 page maximum)

C. Detailed Summary of Experience

The Respondent must demonstrate its ability to undertake all four Phases of the RSLPP. Please provide the following:

- A narrative of technical qualifications of the Respondent, principal subcontractors, and individual team members.
- A list of relevant projects, including the approximate geographic size, project's beginning and end dates, project outcomes, explanations of significant delays, and lessons learned.
- Provide three references from clients for whom the Respondent has provided similar projects, indicating whether the work was that of the Respondent and/or specific staff who will be assigned to the Project. Identify the client contact name, organization, type of work provided, and the contact's address, telephone number and e-mail (if applicable). Respondent must indicate whether any of these clients were public entities.
- Provide a narrative explanation that describes your ability and experience with modeling appropriate photometric performance of street lighting systems. Describe your approach and ability to design LED street lighting conversions to maximize energy savings and achieve overall value. Include a sample of your photometric design approach along with the narrative.
- Provide a narrative of previous experience providing consulting services to multiple customers at once. Discuss approach and results.
- Additional information may be requested during the evaluation of technical qualifications. (Collectively, 5 page maximum, not including sample documentation)

D. Proposal Narrative

The Proposal narrative must provide sufficiently detailed information of project methods and discussion of Respondent's approach so that the Respondent team's competence and ability to provide the required deliverables and services within the four Phases of the RSLPP are clearly demonstrated. The narrative should specify which tasks will be done by the lead consultant and which tasks will be done by sub-consultants, if applicable. Respondents are encouraged to present alternative methods to all tasks and deliverables within the four Phases that would enhance the success of this program.

Provide a narrative along with supporting relevant documentation of your team's unique approach to:

- Providing all services listed in the Scope of Work section provided in this RFP.
- Achieving design standardization across an entire program in a way that meets the requirements of the program and also ensure that high-quality and customized street lighting design will be achieved by the program participants.
- Communicating project details in a transparent and clear way.
- Project design, equipment specification, development of solicitation documents, and product

selection. Approach must demonstrate that it best meets the goals of the RSLPP. Unique approaches to product selection and procurement are highly valued. Please provide any supporting documentation that shows past examples of your experience with this work.

5. Negotiating volumetric prices for the size and scope of the RSLPP. Elaborate on methods that meet the goals and objectives of the RSLPP including transparency, accountability, volumetric pricing and the selection of high quality materials and services.
6. Developing and/or utilizing a Web based tool for this work. Please propose the extent to which you feel a Web based tool would be useful to your process and to the municipal customer. Propose whether this will be an in-house service, or if you can collaborate with DVRPC on the development of this, based on cost, efficiency, and feasibility. DSP must describe their Project Teams approach to pilots for the RSLPP. This should include an overview of program-wide pilots for standardized solutions, as well as municipal specific pilots as requested by the municipality.
7. Being flexible and responsive to the needs and schedules for multiple municipalities across the project area.
8. Providing project development services individually, and your Project Team's approach to utilizing an already-completed field audit.

(Collectively, 10 page maximum, not including sample documentation)

E. Detailed Project Schedule

In outlining the Respondent's proposed sequence of activities, the Respondent must provide a detailed schedule for all phases of the project as a whole, including but not limited to, all program-level and municipal specific tasks associated with the following:

- Phase 1: Preliminary Feasibility Study
- Phase 2: Investment Grade Audit
- Phase 3: Construction Management
- Phase 4: Post Construction Operation and Maintenance Assistance
(1 page maximum)

Please Note: All Technical Proposals are to be sent via e-mail separate from the Administrative Proposal to procurement@dvrpc.org.

V. Administrative Proposal Requirements

The proposal, transmitted as a .pdf, .doc, and/or .docx file should contain the firm name and be titled "Administrative Proposal." Please submit your Administrative Proposals via email to slee@dvrpc.org. The Administrative Proposal should contain elements A through C:

- A. **Certification of Eligibility** – A certificate is to be included in the proposal for each firm stating that: "The firm is not ineligible to receive award of a contract due to the firm's inclusion on any Federal, Pennsylvania, or New Jersey state lists of debarred contractors, or otherwise ineligible to be awarded a contract using Federal or state funds." This statement should be written on your firm's

letterhead and should be signed by an officer of the firm.

- B. **DBE/SBE Letters** – If applicable, the Respondent and/or any sub-consultants must submit letters demonstrating that they are certified as a DBE/SBE firm by the Commonwealth of Pennsylvania and/or New Jersey.
- C. **Project Cost Budget** – Respondent will be asked to provide a detailed project cost budget estimate utilizing the schedule attached to this RFP. Please see Attachment A: Contract Pricing Proposal. A separate detailed budget is to be prepared by the Respondent and each subconsultant. During negotiations, the Respondent or DVRPC may suggest that deliverables or tasks be modified or deleted. Please note that Title 41 Code of Federal Regulations limits the amount of profit or fee to 10 percent of the direct labor and indirect costs.

Please Note: All Administrative Proposals are to be sent via e-mail separate from the Technical Proposal to the attention of Sonia Lee, at slee@dvrpc.org.

VI. Evaluation Criteria

A selection committee consisting of representatives from DVRPC, the RSLPP Municipal Steering Committee, and our planning partners will evaluate each proposal properly submitted and, at its discretion, recommend an awardee to DVRPC's Board that is in the best interests of DVRPC and the participating municipalities. The selection committee's evaluation will be based on the following criteria:

- Knowledge of and experience with municipal LED street lighting projects in PECO territory.
- Knowledge of Pennsylvania DOT regulations for permitting and construction of roadway and outdoor lighting projects.
- Knowledge of PECO Act 129 Rebates and PJM capacity Market Rebates.
- Familiarity with the relevant sections of the PECO Electric Tariff as it relates to this project.
- Knowledge of billing processes, transferring of ownership to municipalities, and Act 129 rebates for streetlights, exterior lighting, and traffic signals.
- Demonstrated ability to concomitantly manage multiple municipalities' schedule requirements for auditing, design, procurement, and construction of an outdoor lighting project.
- Demonstrated commitment to excellent customer service.
- Ability to be consistently and frequently present in the region.
- Responsiveness to phone, emails, and other communications.
- Utilization of Disadvantaged Business Enterprises and Small Businesses.
- Experience with effectively communicating project details to municipal staff and elected officials.
- Demonstrated excellence in customer service. References must be able to describe your key personnel as thorough, patient, and kind.
- Creative solutions, with the ability to think out of the box and respond iteratively with changes.
- An organized Project Management approach to this project, including all communications with the RSLPP team, the municipal customer, and the selected installation contractors.
- Familiarity with and support of the objectives and philosophy behind of the Regional Streetlight Procurement Program.

- History and financial strength of the Respondent.
- Ability to effectively and expeditiously communicate within your defined Project Team.
- Presentation of an approach to design for this project that allows the RSLPP to meet its goals of standardization (yet flexible as well), quality, and cost efficacy.
- Presentation of an approach to equipment specification and procurement (material, labor, distributor) that will allow the RSLPP to meet its goals of transparency, accountability, standardization, quality, volumetric pricing, and cost efficacy from a lifecycle perspective.
- Demonstrated commitment to transparency when communicating project development process, solutions, and pricing.
- Quality of your Proposal: it is clearly written, organized, and thorough, yet concise.

Criteria have been established to guide the evaluation of each Respondent's proposal. The following criteria will be used to evaluate and rank proposals:

- A. **Technical approach:** Respondents should clearly detail their methods and approach to the project. Respondents are encouraged to offer suggestions for enhancing specific tasks or the overall work and/or propose innovative techniques to improve the results of this analysis.
- B. **Understanding of familiarity with and commitment to the goals and objectives of the RSLPP and the specific regional factors that will make this program successful:** Respondents should show that their past experience demonstrates an understanding of the goals and objectives specific to the RSLPP. Regional knowledge is strongly preferred. A past demonstrated commitment to regional cooperation is valued.
- C. **Professional qualifications and experience in similar work:** Respondents should demonstrate their qualifications and experience as it relates to carrying out the project.
- D. **Ability to perform within schedule:** Respondents should demonstrate an ability to perform the tasks proposed within the proposed time.
- E. **Disadvantaged Business Enterprises and Small Business Participation:** DVRPC seeks the participation of such entities, as Respondents and as consultants included in the Project Team. Use Attachment B.
- F. **Cost:** DVRPC will evaluate the cost to it as well as the prospective cost to participating municipalities. Use Attachment A.

Negotiations for award of the contract will be to the Respondent(s) that best meet the evaluation criteria. DVRPC reserves the right to award in part or as a whole. DVRPC may reject all proposals. DVRPC further reserves the right to negotiate cost and scope elements with the leading Respondent(s).

VII. Contract

The contract will be between DVRPC and the selected Respondent(s) who will be technically and administratively responsible to DVRPC. DVRPC will authorize all payments to the selected firm(s). The contract will be cost reimbursable with a fixed fee, not to exceed type.

Length of contract and availability of funds will be provided in the contract details. Should additional funding become available for related work DVRPC may negotiate with the selected Respondent(s) to perform the work for up to three additional years.

The selected DSP will enter into a contract with each participating municipality.

VIII. Inquiries Regarding this Solicitation

All inquiries related to this RFP should be to procurement@dvrpc.org and submitted no later than Wednesday, October 3, 2018 at 3 PM EDT. Inquiries may not be considered if not received by then. DVRPC will respond to questions it considers appropriate to the RFP and of interest to all Respondents, but reserves the right, in its discretion, to amend or to not respond to any question.

All inquiries and responses will be posted on a rolling basis on the DVRPC website at the location of the posting of the original RFP at www.dvrpc.org/Consultant.

Responses posted on DVRPC's website become part of the RFP upon posting. DVRPC reserves the right, in its discretion, to revise questions and responses to questions after posting, by posting the modified response. No oral response to any Respondent question by any DVRPC employee or agent shall be binding on DVRPC or in any way considered to be a commitment by DVRPC.

IX. Disadvantaged Business Enterprises

The Delaware Valley Regional Planning Commission is committed to providing opportunities for Disadvantaged Business Enterprises (DBE) to compete for work. DBEs are certified by the Pennsylvania Unified Certification Program (PAUCP) and the New Jersey Unified Certification Program (NJUCP) in accordance with 49 CFR Part 26. Any party that enters into an agreement with DVRPC is encouraged to involve DBEs in the required work and to submit documentation of any such involvement in the proposal narrative and budget.

For this opportunity, the DBE goal shall be 10%.

Any party that enters into an agreement with DVRPC shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any agreement or in the administration of its DBE program or the requirements of 49 CFR part 26. All parties to DVRPC agreements shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of any subagreements and in addition each prime contractor or subrecipient must include the following assurance in any subcontracts entered into:

"The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of this agreement."

DVRPC Disadvantaged Business Enterprise Policy: www.dvrpc.org/Consultant/files/dba_program.pdf

DVRPC encourages all prospective Respondents to use the following links to the PA and NJ Unified

Certification Program to locate DBE firms to utilize as sub-consultants.

PA - Unified Certification Program: www.dotsbe.pa.gov/PAUCFWeb/paucp/viewHome.do

NJ - Unified Certification Program: www.njucp.dbesystem.com

Submission Requirements

The Respondent, using the attached DBE Participation Schedule (Attachment B), is required to furnish the following documentation as part of its technical proposal:

- The names and addresses of DBE firms that will participate in the Contract;
- A description of the work that each DBE will perform; and
- The percentage of participation of each DBE firm participating.

X. Small Business Enterprise & Emerging Small Business Enterprise Programs

In addition to DBEs, DVRPC encourages the use of small businesses under the following programs: Small Business Enterprise (SBE) in Pennsylvania, and Emerging Small Business Enterprise (ESBE) in New Jersey.

Small business concerns are those entities seeking to participate in contracts that meet the definition of a small business concern set forth in Section 3 of the Small Business Act and Small Business Administration regulations as per 13 CFR Part 121.

These programs are designed to facilitate greater participation of small businesses in transportation related procurements. Any party that enters into an agreement with DVRPC is encouraged to involve SBE/ESBEs in the required work and to submit documentation of any such involvement in the proposal narrative and budget.

Contractors looking for certified SBEs can search these online databases:

Pennsylvania Small Business Enterprise Program: www.dotsbe.pa.gov/SBEWeb/sbe/viewHome.do

New Jersey Emerging Small Business Enterprise (ESBE) Program:
www.nj.gov/transportation/business/civilrights/pdf/ESBEDirectory.pdf

Contractors must maintain records to ensure compliance with 49 C.F.R. Part 26 obligations by indicating the number of DBE, SBE/ESBE, and non-DBE/SBE/ESBE subcontractors, the type of work performed on the project, documentation of efforts to secure DBE/SBE/ESBE firms for available subcontracting opportunities and the means of communication used to obtain the services of DBE/SBE/ESBEs, and dollar amounts paid to DBE/SBE/ESBEs.

ATTACHMENT A

Contract Pricing Proposal Sample

www.dvrpc.org/consultant/files/price_proposal.xls

www.dvrpc.org/consultant/files/price_proposal-non-profit.xls

This chart is intended to illustrate how the Respondent may cost out its services. Respondent may depart from this proposed chart by adding requirements from this RFP or by dividing an item described below into sub-items.

Item	Price per Unit	Unit
Preliminary Feasibility Study (0-90 fixtures)	\$	Municipality
Preliminary Feasibility Study (>90 fixtures)	\$	Municipality
Field Audit	\$	Fixture
Mapping	\$	Fixture
Design	\$	Fixture
Utility bill update and rebate processes	\$	Municipality
Materials Specification, IFB and selection	\$	Program
Labor RFP and selection	\$	Program
Distributor solicitation and selection	\$	Program
Project Management Services	\$	Fixture
Project annual energy and operational savings	\$	Fixture
Operations and Maintenance Plan for a municipality's new LED system	\$	Fixture
Development of Operation and Maintenance Manual	\$	Fixture
Development or update of a lighting ordinance for	\$	Municipality

ATTACHMENT B

Disadvantaged Business Enterprise (DBE) Participation Schedule

As specified in the DBE Participation Section included in the Request for Proposal Documents, the Respondent shall furnish to DVRPC's satisfaction the details of disadvantaged business enterprise participation.

Table I: All Work to be Performed by DBEs

Name of DBE Firm	Contact Person (Business Address & Telephone Number)	Description of Work to be Performed	Total DBE Agreed Percentage to be Credited to DBE Goal
			%
			%
			%
			%

Project Name: _____

Name: _____

Title: _____

Firm or Corporation: _____

Email: _____

Telephone Number: _____

Respondents are hereby notified that the information contained herein will be verified with the designated DBE firm. Additionally, if and when the award of a contract is made, all DBE firms listed herein will be simultaneously notified of the award. DVRPC reserves the right to waive informalities herein in its sole reasonable discretion. All percentages must be expressed as a percentage of the Respondent's total maximum price to DVRPC.

Signature: _____ Date: _____

ATTACHMENT C

Inventory of Equipment



☐ Yes
☐ No
☐ I don't know
 Comment:

[illegible]

☐ Yes
☐ No
☐ I don't know

Comment:

Connecting People, Places & Prosperity in Greater Philadelphia | DVRC fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. DVRC public meetings are always held in ADA accessible facilities, and at transportation locations when possible. Auxiliary services, such as interpretation, can be provided to individuals who submit a request at least seven days prior to a public meeting. For more information, visit www.dvrc.org/GetInvolved/TitleVI.

Lighting Information		
City	No. of Luminaires	Wattage per Luminaire
202234	8	425
202234	13	275
202235	1	425
202236	4	125
202237	30	30
Sub Total		
Street Lighting Customer Owned Service - Current Period Detail		
Service 06/04/2018 to 07/03/2018 - 29 days		
Sum of Luminaires Charge	202234	3,412.50
Transformer Charge	202234	1,072.50
Alt. Energy Service Standard	202234	2,274
Transformer Charge	202234	1,072.50
Chiller/Boiler Charge	202234	12.50
Sum of All Charges		\$8,844.00
Total Current Charges		\$8,844.00

EXTERIOR LIGHTING

4. Is your municipality interested in retrofitting other outdoor area lighting applications/("Exterior"), such as parking lot, recreational lighting or wall packs?

- ☐ Yes
☐ No
☐ I don't know

Comment:

If known, please indicate below the quantity and wattage of fixtures you may be interested in retrofitting to LEDs:

[illegible]

3

CONTROLS

5. Is your municipality interested in implementing a controls system along with your LED upgrade? If yes, please indicate which kind. If you're not yet sure, please indicate that you are interested in exploring this as a possible addition to your scope of work for this project.

- ☐ Yes, Manual Controls (such as field adjustable wattage selectors)
- ☐ Yes, Wireless networked controls
- ☐ I don't know/we are interested in learning more about manual and wireless controls
- ☐ No, we do not wish to install controls

Comments:

RE-WIRING

6.. Is your municipality interested in including re-wiring as part of your project?

- ☐ Yes
- ☐ No
- ☐ I don't know
- ☐ I don't know/we are interested in learning more about this

Comment:

STREETLIGHT/OUTDOOR LIGHTING MAINTENANCE

5. How do you maintain your existing streetlight and outdoor lighting system? Please explain your answer in the comments section. If you use an outside maintenance provider, please name the provider in the comments section.

- ☐ We use in-house staff
- ☐ We hire an outside maintenance provider
- ☐ We use both in-house staff and an outside maintenance provider
- ☐ Our system is owned by PECD
- ☐ I don't know

Comment:



Connecting People, Places & Prosperity in Greater Philadelphia | DWPFC fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. DWPFC public meetings are always held in ADA accessible facilities, and in hard-to-reach locations when possible. Auxiliary services, such as live captioning, can be provided to participants who submit a request at least five business days prior to a public meeting. For more information, visit www.dwpfc.org/GetInvolved/TitleVI

Connect With Us!    

PROJECT FUNDING

6. Has your municipality budgeted internal funds for all or a portion of this project?

- ☐ Yes
- ☐ No
- ☐ I don't know

Comment:

7. Does your municipality expect to access the pool of financing from the RSLPP to complete all or a portion of this project or pay using internal funds

- ☐ Finance
- ☐ Internal funds
- ☐ Both
- ☐ I don't know

Comment:

5

8. Has your municipality received a grant for all or a portion of this project. If yes, please explain the source and amount of grant funds in the comment section.

- ☐ Yes
- ☐ No
- ☐ I don't know

Comment:



Connecting People, Places & Prosperity in Greater Philadelphia | DRPC fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. DRPC public meetings are always held in ADA-accessible facilities, and in transit-accessible locations when possible. Auxiliary services, such as interpretation, can be provided to individuals who submit a request at least seven days prior to a public meeting. For more information, visit www.drpc.org/GetInvolvedTab.

Connect With Us    



Connecting People, Places & Prosperity in Greater Philadelphia | DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all of its work. DVRPC public meetings are always held in ADA accessible facilities, and in barrier accessible locations when possible. Auxiliary services, such as Interpretation, can be provided to individuals who submit a request at least seven days prior to a public meeting. For more information, visit www.dvrpc.org/section60106

Connect With Us    

ATTACHMENT E
Form of Certification

In connection with the submittal of the Proposal for Design Services for DVRPC's Regional Streetlight Procurement Program,

(1) The Respondent certifies that neither it nor its principals are currently ineligible, debarred, suspended, or otherwise excluded from bidding or contracting with the Commonwealth of Pennsylvania, any other state, the federal government, or any agency, subdivision, department, or authority of the foregoing.

(2) The Respondent certifies that neither it nor its principals have been terminated for cause, are currently in default, and/or have been declared in default on any public works contract or guaranteed energy savings performance contract within the five (5) years preceding the submittal of its Response.

(3) The Respondent certifies it has a current Professional Liability (Errors and Omissions) Insurance policy for design professionals, consulting engineers and architects, and all other applicable consultants with the minimum coverage of one million dollars (\$1,000,000) per claim.

(4) The Respondent certifies it has all necessary, valid and current licenses to do business in the Commonwealth of Pennsylvania.

(5) The Respondent certifies it has demonstrated a commitment to safety with regard to Worker's Compensation by having an Experience Modification Rate (EMR) over the past three (3) years of 1.2 or less.

(6) The Respondent has included with this Attachment F one or more exceptions or qualifications to the certifications made in parts 1 to 7 hereto.

(7) The Respondent certifies that all statements set forth in parts 1 to 7 and the exceptions and qualifications included with this Attachment are true and correct.

Signature

Printed name

Title

Dated: _____

31/31



Save. Sustain. Light.

October 12th, 2018

RE: Certification of Eligibility

Keystone Lighting Solutions is not ineligible to receive award of a contract due to the firm's inclusion on any Federal, Pennsylvania, or New Jersey state lists of debarred contractors, or otherwise ineligible to be awarded a contract using Federal or state funds.

Michael S. Fuller

Michael S. Fuller
President
Keystone Lighting Solutions

814.880.7747
mfuller@keystonelights.com



RSLPP Round 2
Design Services Professional RFP
Administrative Proposal



Submitted by:

Keystone
Lighting Solutions

Michael S. Fuller
President
224 Rimmey Road
Centre Hall, PA 16828
814.880.7747

October 12th, 2018



Save. Sustain. Light.

October 12th, 2018

RE: SBE Certification Status & DBE Participation

The following is the status of SBE Certification for Keystone Lighting Solutions (KLS) and Evari GIS Consulting (EGC):

- Neither KLS or EGC are currently certified as SBE firms in Pennsylvania.
- KLS has researched SBE eligibility with PADOT and feel we meet all the requirements. KLS has initiated an application but will need more time to submit all the supporting documentation required and obtain approval. We anticipate achieving SBE certification in the coming weeks.
- EGC has the following SBE certifications in California:
 - o City of San Diego: Small Local Business Enterprise
 - o CA Department of General Services: SB Micro
 - o Los Angeles Metro: SBE
 - o LABAVI: SBE
 - o San Diego County Water Authority: SBE
 - o City of Long Beach: SBE
 - o Metropolitan Water District: SBE
- Neither KLS or EGC are or will be certified as DBE firms in Pennsylvania.
- Through the KLS Strategic Procurement™ process we can inquire with manufacturers, distributors and installers about their SBE or DBE status. It would be an option to give a positive weighting in the procurement scoring to those firms that have SBE or DBE certifications.

Michael S. Fuller

Michael S. Fuller
President
Keystone Lighting Solutions

814.880.7747
mfuller@keystonelights.com

Attachment A:
Project Cost Budget

Item	Price per Unit	Unit	Qty	Total Fees	Comments
Feasibility Phase					
Preliminary Feasibility Study (500 features)		Municipality	4	\$0	Use pricing method below
Preliminary Feasibility Study (1000 features)		Municipality	23	\$0	Use pricing method below
Preliminary Feasibility Study (2000 features)	\$5	Future	15,046	\$55,170	5% Future, with a minimum fee of \$100 and maximum fee of \$5,000 per municipality; average municipality cost less than \$3,500
Project Development Phase					
Field Audit	\$9	Future	15,046	\$135,414	
Mapping	\$1	Future	15,046	\$15,046	
Design	\$7	Future	15,046	\$105,322	
Utility Bill update and rebate processes		Municipality	23	\$0	Use pricing method below
Utility Bill update and rebate processes	\$1	Future	15,046	\$15,046	
Materials Specification, RF and selection	\$20,000	Program	1	\$20,000	KLS fees for Strategic Procurement™ savings typically offset by initial procurement cost savings and long term operating cost savings
Labor RFP and selection	\$10,000	Program	1	\$10,000	KLS fees for Strategic Procurement™ savings typically offset by initial procurement cost savings and long term operating cost savings
Distributor selection and selection	\$5,000	Program	1	\$5,000	KLS fees for Strategic Procurement™ savings typically offset by initial procurement cost savings and long term operating cost savings
Project Management Phase					
Project Management Services	\$10	Future	15,046	\$150,460	
PECO Backlog Support	\$5	Future	3,841	\$19,205	5% Future, with a minimum fee of \$1,000 and maximum fee of \$5,000 per municipality
Optional Field Deploy Installation Data Capture	\$3	Future			Not included as optional, and would be to have costs offset by lower total prices avoiding manual reporting requirements
Operations					
Initial annual energy and operational savings	\$1	Future	15,046	\$15,046	
Operations and Maintenance Plan for a municipality's new LED system	\$1	Future	15,046	\$15,046	
Development of Operation and Maintenance Manual	\$1	Future	15,046	\$15,046	
Development or update of a lighting ordinance for		Municipality	27	\$0	\$1,800 - \$15,000 (municipality depending on scope of work to create/update ordinance)
TOTAL				\$561,001	

* The above fees cover all the program and municipality level services that were requested in the RFP, even if not explicitly listed in the table. For example, for the Feasibility Phase there is only one fee line item. The total fees for all program and municipality services provided in the Feasibility Phase are represented in that single line item. Changes in the requested service scope may require changes in the above fee structure.

- Our commitment to the municipalities is proven. We have 100% of the municipalities we worked directly with as an Owner's Agent providing letters of recommendation. We strongly advocated for their interests (and other municipalities in the program) at every possible opportunity. We will be equally committed with our time and effort for all the municipalities in this round of the RSLPP. We have a great track record of performance with your constituents and neighbor municipalities.

We look forward to the opportunity to meet the selection committee in person. If afforded the opportunity, we would enjoy reviewing our RFP response with you and discussing any aspects of our capabilities or the needs of RSLPP.

Sincerely,

Mike

Michael S. Fuller
President
Keystone Lighting Solutions

814.880.7747
mfuller@keystonelights.com

October 12th, 2018

RSLPP Selection Committee,

Thank you for the opportunity to submit a response for the RSLPP Design Services Professional (DSP) RFP. We have thoroughly reviewed the RFP and all the published clarifications and agree to all requirements and terms.

Keystone Lighting Solutions (KLS) is very familiar with the 1st round of the RSLPP as we were selected to be the program's Technical Advisor and later hired by 16 municipalities to additionally act as their Owner's Agent or Advocate. The last three years supporting the RSLPP in these roles has been a professional highlight and something we are very proud of. The scope and results of this program are significantly positive and an approach for others nationally to consider. It is estimated that by 2025 close to 80% of all roadways will be upgraded to LED, but we feel it is the small to medium size municipalities that will be late adopters. We feel the RSLPP is the type of program to assist these communities overcome known obstacles and to get all benefits associated with lighting upgrade projects.

We feel that KLS is the best qualified candidate to lead the DSP effort for the second round of the RSLPP and will be a great collaborator with the Program Team led by DVRPC. We made every attempt to provide a clear narrative in our RFP response, providing sufficient detail to understand how our experiences and approaches may differ from other respondents. If we are to highlight the key reasons that we feel KLS is the best choice for the program it would be the following:

- No other RFP respondent has the familiarity with the RSLPP goals and unique model requirements. No other respondent is likely to have the experience and familiarity helping such a large number of municipalities move along a common timeline resulting in project approvals. Our previous roles with RSLPP and experience will allow us to "hit the ground running" with no learning curve, which is critical given the timeline goals. Finally, KLS is uniquely positioned to understand opportunities for improvement from Round 1, which we hope you will see reflected in our proposal.
- KLS and our assembled DSP Team are the most knowledgeable and expert in the industry. We have the best technical, design and program management capabilities as well as excellent communication skills. With many options, we choose the best industry partner we could find, Evri GIS Consulting, to be part of our DSP Team.
- Our DSP Team is made up of very experienced working managers that can not only collaborate on the strategic and tactical program issues, but also give attention to the smallest details that can impact the final project quality and performance. KLS has always focused on serving only a small number of customers with large multi-year programs at any given time. RSLPP has been a significant focus for our business over the last three years and we are ready and able to commit even more time for the DSP role.



RSLPP Round 2
Design Services Professional RFP
Technical Proposal



Submitted by:

Keystone
Lighting Solutions

Michael S. Fuller
President
224 Rimmey Road
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814.830.7747

October 12th, 2018

DSP Project Team

This section will provide an overview and approach of the DSP Project Team, as well as defining key team member roles, responsibilities and qualifications.

DSP Project Team Overview

We would characterize our team as highly expert, committed, responsive and focused. Unlike Round I, where the project ESCO initially offered many staff members that were not lighting or GIS experts, and ultimately many left the company or were re-assigned during the project, our team is made up of working owners and managers.

Mr. Fuller is the Founder and President of KLS and obviously will not be re-assigned during the project. KLS is a highly specialized firm that consistently works on large complex lighting upgrade projects but commits to only a few customers at any given time. The first round of the RSLPP represented an average of 50% or more of KLS time commitments over the last 3 years. KLS anticipates committing up to 80% of our time and resources to the RSLPP over the next 18-24 months and expect many weeks where 100% of our time will be spent on RSLPP work. We believe this commitment level with the multiplier effect of high levels of expertise, easily allows us to perform at the highest level for the RSLPP.

KLS performed multiple roles for the first round of the RSLPP. We acted as both a program/technical advisor but also as an owner's agent for 15 municipalities. The future volume for these directly supported municipalities exceeds that currently forecasted for this round in total. We firmly believe that the DSP model will be much more efficient than the ESCO model from Round I. Finally, all parties involved with Round I learned a great deal and can apply that knowledge to further increase efficiency and improve processes for this round of the RSLPP. In total we believe this model will be more streamlined making all hours invested more effective.

KLS believes that we are partnered with the best service provider for auditing and GIS mapping. Evari's capabilities and performance are impressive. Mr. Fuller and Mr. Isaak have been communicating for years looking for the right opportunity to partner, and this is that opportunity. KLS sees that Evari will provide all the quality audit data, utility address matching and mapping results and tools we experienced in Round I, plus more. We have left room in our proposal pricing to allow for other value-added services Evari can offer including, but not limited to, real-time map dashboards and field-deployable technology for use by contractor teams to track real-time installation progress.

While we know that the DSP Project Team identified in our proposal has the capacity to perform against all RSLPP requirements and more, we do have additional capacity available. Evari has offered additional support for some analysis functions that KLS will perform, if ever needed. If shifting portions of this work from KLS to Evari ever makes sense, we would not hesitate to utilize these additional resources. It should also be noted that KLS has previous employees that we use as contract resources as needed for analysis and administrative tasks.

DSP Project Team Roles and Responsibilities

The following section will define the DSP Project Team roles and responsibilities for the RSLPP.

Program Manager – Michael Fuller, Keystone Lighting Solutions

The following lists the primary responsibilities of the Program Manager role:

- Overall management of all phase functions and deliverables required for the program's success
- Attendance at all meetings at the program and municipality level
- Communication from the DSP Team at the program and municipality level

1

Team Member Qualifications

Michael Fuller, LC, IESNA
President/Founder
Keystone Lighting Solutions, LLC

Mr. Fuller will have the following project lead roles (as defined above):

- Program Manager
- Phase Lead (for all Phases)
- Project Management Lead

The following is a list of qualifications for Mr. Fuller

- Mr. Fuller is Lighting Certified (LC) by the National Council on Qualifications for the Lighting Professions
- Mr. Fuller is a member of the Illumination Engineering Society of North America (IESNA)
- Mr. Fuller founded Keystone Lighting Solutions in 2009
- Mr. Fuller's previous employment includes:
 - National Energy Services – VP, Sales & Marketing (1 year)
 - WESCO Distribution – National Sales Manager, Lighting Solutions (5 years)
 - WESCO Distribution – District Manager, Central PA (4 years)
 - Whitehill Lighting & Supplies – Manager, Sales & Operations (7 years)
 - Strategic Planning Associates/Mercer Management Consulting – Research Analyst (2 years)
- Mr. Fuller received his B.S. dual degrees in Industrial Management and Economics from Carnegie Mellon University
- Mr. Fuller has over 24 years of experience in the lighting technology and energy efficiency profession

Ari Isaak, GISP
CEO/Founder
Evari GIS Consulting

Mr. Isaak will have the following project lead roles (as defined above):

- Project Advisor

The following is a list of qualifications for Mr. Isaak

- Mr. Isaak is a Certified Geographic Information Systems Professional (GISP) and obtained a Certificate in GIS from the University of California, Riverside (2004)
- Mr. Isaak founded Evari GIS Consulting in 2009
 - As Founder and CEO Mr. Isaak leads of 22 GIS professionals
- Mr. Isaak's previous employment includes:
 - New School of Architecture and Design – Part-Time Faculty (1 year)
 - Master's Course "GIS for Environmental Design"
 - Unified Port of San Diego – GIS Coordinator (3 years)
 - Helix Environmental Planning – GIS Specialist (3 years)

3

- Reporting of all DSP activities and progress

Phase Lead (for all phases) – Michael Fuller, Keystone Lighting Solutions

The following lists the primary responsibilities of the Phase Lead role:

- Management of all functions and deliverables required for each program phase
- Management of all partners (e.g. Evari) providing services for any phase
- Relationship manager with all municipalities
- Attendance at all meetings at the program and municipality level to support any phase

Auditing & PM Data Capture Lead – Kevin Voltz, Evari GIS Consulting

The following lists the primary responsibilities of the Auditing Lead role:

- Collaborate with KLS to define all auditing processes, data management practices and the attribute list to be captured during the field audits
- Collaborate with KLS to schedule auditing teams based on defined master program schedules
- Track auditing progress and report to KLS as requested
- Address any issues identified during the auditing process
- If requested, provide field-deployable tools to capture installation progress and relevant data

Data QC and Mapping Lead – Tyler Packett, Evari GIS Consulting

The following lists the primary responsibilities of the Auditing Lead role:

- Geo-Code (clean-up) all PECO inventory address fields to allow for GIS locating and possible mapping to assist the address matching requirement
- Manage all data captured during the audit and installation process and scrub/clean-up as necessary
- Utilize audit data to generate GIS maps viewable by the RSLPP Program Team and municipalities
- Collaborate with KLS to represent new design solutions on updated versions of GIS maps
- Utilize installation data (real-time or manually generated) to create install status and as-built versions of GIS maps
- Address any issues identified with GIS maps

Project Advisor – Ari Isaak, Evari GIS Consulting

The following lists the primary responsibilities of the Project Advisor:

- As needed, provide advice on all services offered by Evari GIS Consulting

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- Aerial Information Systems – GIS Analyst (3 years)
- Mr. Isaak received his B.A. in Marine Conservation Biology from the University of Redlands, Johnson Center in 2001
- Mr. Isaak has over 16 years of experience in the GIS profession
- Reference projects for Mr. Isaak and Evari Consulting are provided in Appendix A.

Tyler Packett, GISP
Technology & Innovation Lead
Evari GIS Consulting

Mr. Packett will have the following project lead roles (as defined above):

- GIS Mapping Lead

The following is a list of qualifications for Mr. Packett

- Mr. Packett is a Certified ArcGIS Desktop Professional 10.3
- Mr. Packett is currently the Technology and Innovation Lead with Evari Consulting
- Mr. Packett's previous employment includes:
 - City of San Diego via Quatic Solutions LLC – Enterprise GIS Administration (4 years)
 - Resilience System – Health Initiative Foundation Inc. - Digital Communications, GIS Visualization and Web/Mobile Mapping Development (4 years)
 - County of San Diego Health & Human Services Emergency Medical Services - Spatial Epidemiology Analyst – Graduate Intern (2 years)
 - HALO Counter-Terrorism Summit – Technical Support (1 year)
 - College of Business and Economics, University of Hawaii, H-1 – Computer Technical Support and Software Training (4 years)
 - Homeland Infrastructure Foundation – Working Group (1 year)
- Mr. Packett received his M.S. in Homeland Security (GIS Focus) from San Diego State University in 2014. Mr. Packett received his B.A. in Geography (GIS and Decision Support) from the University of Hawaii in 2011
- Mr. Packett has over 10 years of experience in the GIS and technology profession
- Reference projects for Mr. Packett and Evari Consulting are provided in Appendix A.

Kevin Voltz
Operations Lead
Evari GIS Consulting

Mr. Voltz will have the following project lead roles (as defined above):

- GIS Auditing & Installation Lead

The following is a list of qualifications for Mr. Voltz

- Mr. Voltz is currently the Operations Lead with Evari Consulting
- Mr. Voltz is proficient with many GIS software and analysis tools including GIS, Python, SQL, ArcGIS Enterprise, GitHub, Data Analysis
- Mr. Voltz's previous employment includes:
 - Quatic Solutions LLC – GIS Programmer / Analyst (2 years)

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- Deccan International – LED Tactical Analyst (6 years)
- UMN Department of Agronomy and Plant Genetics – GIS Analyst/Research Assistant (1 year)
- City of Huntington Beach – GIS/Planning Intern (2 years)
- DVD Landscape Architects – Consultant/Design Services (7 years)
- Mr. Volz received his B.S. in Geography (GIS Focus) from San Diego State University in 2009. Mr. Volz received a Certificate in GIS from San Diego State University in 2009
- Mr. Volz has over 9 years of experience in the GIS and technology profession
- Reference projects for Mr. Volz and Evari Consulting are provided in Appendix A.

- Mr. Fuller is an experienced speaker and communicator, with both small and large groups.
- Mr. Fuller met over 100 times with municipalities and presented at municipality council meetings over 40 times during the first round of the RSLPP.
- For the 16 municipalities who hired KLS as their owner's agent in Round I, Mr. Fuller handled most of the communication (written and in-person at meetings) with the project ESCO, always advocating for municipality needs and priorities.
- Mr. Fuller has presented at LightFair International the following times:
 - A Holistic Approach to Campus Lighting Upgrades (2015)
 - Moneyball for Lighting (2016)

The Evari Team

- Please see Appendix A for reference projects and contacts.

Relevant Projects

While the first round of the RSLPP is the most relevant project to discuss, it's multi-municipality approach is so unique we will discuss our involvement in that section below. We believe that the most relevant projects are those that show our breadth of skills, expertise and experience as a lighting expert. To that end we present relevant projects by the skill set categories below.

- **Relevant Lighting Design Projects**
 - Charter Homes and Neighborhoods – KLS was hired by Charter to design lighting for roundabouts (traffic circles) in a new Mechanicsburg, PA mixed use commercial and residential development. KLS designed the roundabouts to state required standards and provided consultation on transitional area lighting leading into these roundabouts. These designs are reviewed by PADOT to verify they meet their requirements and standards. KLS collaborated with a traffic design firm and utilized both AutoCAD and AGI32 software programs. This project shows KLS ability to understand and design to a variety of roadway standards.
 - CVS – KLS was hired by Needham Electric to provide site lighting layouts and photometric analysis for CVS' national LED upgrade program. In just 4 weeks, KLS delivered 79 photometric analysis variations for 41 sites. This shows KLS photometric analysis capability and capacity to produce a large quantity of deliverables in a short timeframe.
- **Strategic Procurement™**
 - Penn State University
 - In support of Penn State's multi-year \$25M lighting upgrade program, KLS proactively proposed to a Strategic Procurement™ approach that created manufacturer direct strategic partnerships and identified the best product solutions in support of all interior and exterior lighting upgrade projects.
 - As part of the above efforts, KLS led a strategic procurement round focused on LED lighting products. In this specific effort, KLS evaluated over 190 unique manufacturer LED exterior fixture types using Total Cost of Ownership (TCO) and other performance criteria to identify the best solutions to meet Penn State's exterior lighting needs. These lighting solutions have been employed on various Penn State projects reducing up-front procurement costs and long-term operating costs, while meeting all performance requirements.
 - This in-depth review of many manufacturer LED solutions for the most common exterior lighting applications developed a knowledge-base that can be accessed for other clients and projects. One of greatest insights from this effort is that even when a specific application is defined, manufacturers supply LED solutions

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- **Lighting Certification**
 - Mr. Fuller is Lighting Certified (LC) by the National Council for the Qualification of Lighting Professionals (NCQLP). This is the only recognized professional lighting certification for North America.
- **Lighting Analysis**
 - Mr. Fuller is proficient with the industry-leading photometric analysis software AGI32 and AutoCAD
 - KLS has developed industry leading analysis tools for evaluating lighting technology solutions (referenced in later sections of this proposal).
- **Lighting Standards**
 - As a long-term member of the Illumination Engineering Society (IES), we stay abreast of all IES standards which address all lighting applications, techniques and user types. Specifically, for roadway lighting we are familiar with the latest version of IES RP-8 (Recommended Practices for Roadway Lighting) and all the supporting IES Design Guides (DG). We understand that RP-8, last published in 2014, will be updated prior to the end of this year and it will be an expanded version integrating other previously separate DGs. We will reference the latest version of these standards for RSLPP.
 - Roadway lighting is also impacted by PADOT Design Guide 2 and by AASHTO (American Association of State Highway and Transportation Officials) Design Guides. KLS is familiar with these standards and has applied them to lighting designs on state roadways.
- **Lighting Knowledge and Expertise**
 - Mr. Fuller and KLS are committed to understanding lighting technology, its applications and the lighting industry.
 - As an LC, I am required to achieve 30 credit hours of training every 2 years.
 - To support my training requirements Mr. Fuller attends LightFair International, the IES Street and Area Lighting Conference (SALC) and many smaller training opportunities as they arise as well as online courses. The benefits of active participation in the lighting design community delivers value to our customers. For example, at this years IES SALC conference, I met with over 30 manufacturers to understand improvements to their products that directly impacts.
- **Communication Abilities**

vary widely on cost and performance measures. KLS understands how to evaluate LED solutions with a standardized comparison model that can deliver the best results for a given customer's needs.

- For a professional reference, please contact Ben Hoffman, Penn State, Strategic Procurement Manager @ 814.867.4718 or bh14@psu.edu

- **Lighting Standardization and Bid Management**
 - University of Pennsylvania
 - KLS was engaged by the University of Pennsylvania to create lighting standards for use across the entire campus. This effort focused on the most common lighting applications and creating a decision-making process that will navigate designers and other professionals toward lighting solutions that best meet the university's needs. When identifying preferred LED solutions, KLS defined the performance metrics that needed to be achieved to meet energy codes, TCO goals, IES lighting performance illumination and uniformity standards as well as other criteria.
 - KLS was then engaged by the University of Pennsylvania to manage the bidding process for 32 buildings for lighting upgrades. KLS used previously developed facility audit data and created an upgrade map that offered basic upgrades as well as many value-added upgrade options.
 - For a professional reference, please contact Margo Pietras, University of Penn, Project Manager @ 215.898.3089 or mpietras@upenn.edu.
- **Large Scale Project Development and Management**
 - Penn State University
 - KLS competed nationally against other firms to lead the design efforts for Penn State's multi-year lighting upgrade program with an estimated budget of \$25M. KLS was the successful winner of that competition and over five years has provided project design and development services for over 5M square feet of building and adjoining spaces. This program has upgraded over 40,000 fixtures.
 - KLS provided the following services associated with the project development process:
 - Program Management
 - Investment Grade Audits
 - Solution Design and Analysis
 - Trial Installation Management
 - Project Financial Analysis
 - Strategic Procurement™ Services (see above)
 - Bid Development and Management
 - Project Management
 - KLS provided all services related to this project except for the actual installation of fixtures. We were the project manager to multiple installation contractors and among other tasks, tracked all requested and approved changes on this project.
 - For a professional reference, please contact Sam Bertolino, Penn State, Design Services Manager @ 814.853.2176 or sb108@psu.edu
- **GIS Auditing & Mapping**
 - Evari Reference Projects and contacts in Appendix A.

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References

Mr. Fuller and KLS

As mentioned above, due to the truly unique nature of RSLPP we believe the references most relevant are those from the 1st round RSLPP municipalities. In addition to KLS role as the program technical advisor, we also were hired by 16 municipalities as their Owner's Agent. All the municipalities on the Municipal Steering Committee hired KLS as an Owner's Agent. We are very proud that 100% of the municipalities we were directly hired by were willing to provide KLS with very positive recommendation letters for this and future projects. These municipalities are the peers of the future RSLPP participants and have a unique insight into what was required for success with the program and their individual projects and the value added by KLS. These recommendation letters are provided in Appendix A.

Evari GIS Consulting

Reference Projects and Contacts are provided in Appendix A.

Design Capabilities

The following skills are required to deliver quality lighting designs. For each skill we will highlight KLS capabilities and experience, specifically as they relate to our role in the first round of the RSLPP.

- **Understand Customer Needs and Priorities**
 - KLS recognizes that understanding needs and priorities is where all quality solutions start. In Round I, we recognized that the project ESCO was not sufficiently soliciting this information from municipalities. For those municipalities, where we were hired as an Owner's Agent, we proactively solicited this information and communicated it back to the project ESCO. With this knowledge we then held the project ESCO accountable for delivering solutions that met those needs and priorities.
- **Understand Lighting Applications and Relevant Standards/Codes**
 - Many of the identified needs by municipalities in Round I, where focused on critical areas like intersections with high pedestrian conflict and high crime or commercial areas needing more illumination. KLS made sure to clearly understand these areas and either proactively designed solutions or specified to the project ESCO the type of solution that would be expected.
 - Another aspect of understanding a lighting application is knowing which standards are relevant. Not all lighting designs need to meet standards (for upgrades meeting or exceeding existing is often the goal). KLS has communicated elsewhere in this proposal that we clearly understand and keep updated on all standards associated with roadways and area lighting from the IES, PADOT or AASHTO. One aspect we have not commented on so far, but now will, is needing a firm understanding of energy codes. While energy codes are commonly used to define efficiency/performance requirements for interior lighting designs, for the first time that latest codes are now expanding their reach to exterior lighting applications. ASHRAE 90.1-2016 was recently adopted by the City of Philadelphia and does indicate some new control requirements for exterior lighting. If chosen, KLS will educate the program on any possible implications to project designs.
- **Identifying and Evaluating Technology and Product Solutions**
 - As mentioned elsewhere in this proposal, KLS stays updated on the latest lighting technologies and new products. A greater challenge than identifying options is evaluating those options to determine which are the best performing and will best meet the lighting application and customer needs. The TCO+ analysis we explained in another proposal section is the general approach KLS uses to determine preferred solutions. For the 1st round of the RSLPP, KLS was responsible for creating specifications that expanded upon that provided by the DOE IESLSC Model Specification. These updated

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specifications were then used as a minimum standard upon which to evaluate ESCO proposed solutions.

- **Lighting Application Layout, Design & Analysis**
 - o Once preferred product solutions are defined, KLS uses tools like AGI32 to layout lighting fixtures and analyze the photometric performance of this preliminary design. With our level of experience, our initial layouts typically generate anticipated results, but there is always some tweaking and repetition in this process to generate a final design.
 - o For the 1st Round of the RSLPP we knew it was very important that prospective ESCOs present RFP product solutions that could be fairly compared against other submittals. For this reason, KLS recommended and delivered photometric templates that ESCOs were required to use in their submitted photometric analysis. To create these templates and minimum product specifications, KLS had to run our own photometric analysis to create the appropriate templates for typical applications. These templates could be used again in Round II for a variety of procurement and design needs.
 - o During the project, KLS also conducted our own independent photometric analysis for specific municipality needs.
 - o Finally, an example of our understanding of lighting technology as applied to roadway applications and the use of photometric analysis, was seen in our identification of bad designs for intersections by the project ESCO in Round I. KLS initially identified specific intersection applications (single fixture angled toward the center of an intersection) where the project ESCO was specifying distribution types that were not optimal for an intersection. It was with use of photometric analysis that KLS proved that different distribution types would perform better. The project ESCO made the attempt to identify many of these intersections, but due to lack of audit data about arm angles/direction they were unable to identify all the poorly designed intersections. For all the municipalities where KLS was acting as an owner's agent we manually reviewed all intersections identifying hundreds of locations requiring re-design. Rest assured, if KLS is engaged as the DSP we will capture all the right audit information to allow for these applications to be correctly designed.

Experience with Multi-Customer Programs

As mentioned previously there are very few programs like RSLPP, where all participating municipalities are moving through the initial phases on a common timeline. While referenced elsewhere, this section will fully explain KLS' roles with the first round of the RSLPP.

- KLS was selected to play two roles on this project. First, in the fall of 2015, they were selected by the DVRPC and a municipal steering committee to be the technical advisor to the RSLPP. That role has expanded to an advisor on all aspects of the program. Starting at the end of 2015, KLS was also hired directly by 16 of the 37 municipalities to act as an "Owner's Advocate" design professional. Both of KLS' roles will be further defined below.
- As an advisor to the entire RSLPP, KLS has provided the following services:
 - o Our initial role was to evaluate a draft RFP to be used in identifying a single ESCO to support project implementation. KLS made the following improvements to this draft RFP:
 - Further defined ESCO scope of work for each phase of project development and program commitments.
 - Modification of the DOE's Municipal Solid-State Street Lighting Consortium's Model Specification for LED Roadway Luminaires and creation of a standardized solution submittal allowing for fair comparisons across ESCO proposals.

- Created a standardized product and pricing submittal worksheet to allow for fair comparisons across ESCO proposals. This also became the basis for cost accountability post-award.
- o KLS then supported the RSLPP Municipal Steering Committee with the selection of an ESCO with the following services:
 - Reviewed of all product & pricing submittals.
 - Developed a technical report assessing all RFP submittals to the Municipal Steering Committee.
 - Support of ESCO interviews.
 - Development of additional ESCO program commitments not included in the RFP prior to final ESCO award.
- o KLS also provided the following additional program advisor services:
 - ESCO solution/design development and procurement oversight.
 - Program support to project financing efforts.
 - Development of pilot installation guidelines for (4) county-based trial installations and 40+ municipal based trial installations.
- As an "Owner's Agent or Advocate" design professional to 16 municipalities, KLS has provided the following services:
 - o Defining the unique municipality needs and communication of those needs to the ESCO for use in final solution development.
 - o Ensuring all program commitments were delivered by the ESCO at the municipality level.
 - o Evaluation of all ESCO design solutions ensuring the unique needs of each municipality were met.
 - o Evaluation of all proposals submitted to the municipality from the ESCO.
 - o Support of all council meetings. KLS presented at over 30 council meetings advising on ESCO proposals and available municipality options.
 - o Coordination of municipality pilot installations.
 - o Development of municipality-specific "typical applications" and review of all ESCO submitted "typical application" solution photometrics.
 - o Review of all project financing proposals and advisement on alternate financing structures.

We do encourage the selection committee to evaluate closely other respondent experience of working with multiple municipality programs. KLS makes a point of being aware of other roadway design consultation opportunities and is familiar with the specific requirements of those other programs. Most of those opportunities do not require as much from the DSP as the RSLPP. For example, other programs impacting multiple municipalities only require the designer to develop minimum performance specifications which are then used in a traditional bid to distributors for products and pricing that meet those minimum specifications. Furthermore, in those programs often a multitude of solutions are offered to each municipality leaving them to make their own decision. This is a stark contrast to the RSLPP program that looks for the DSP to help facilitate a robust procurement process that will solicit many more solutions and an evaluation process that will not pass along solutions meeting minimum standards, but rather a process that identifies the best solutions. We also see that many other multi-municipality upgrade programs don't have as many participating communities and they are not following as clear a common timeline.

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Proposal Narrative

The purpose of this section is to communicate KLS' understanding of DSP responsibilities and explain our approach to the primary requirements. We understand all the RFP requirements and agree to be accountable for those requirements. If any RFP requirements are not mentioned in our narrative it is not an act of omission, but rather to be concise.

Program Services (across all phases)

KLS will be ready to start on this project immediately upon award. KLS recognizes that in addition to the direct delivery of services to participating municipalities, we will need to communicate and collaborate effectively with the DVRPC, the retained legal advisor and the Municipal Steering, hereafter referred to as the Program Team.

Program Kick-Off with Program Team

Due to the very tight timeline we would request that we schedule a program kick-off meeting in the first week of November with the Program Team. In this meeting we would discuss, at least, the following topics:

- Overall program goals, schedule and timeline
- Plan for contract development
- Review of KLS Strategic Procurement™ approach
- Plan for financing partner engagement

Program Kick-Off with Municipalities

Due to the very tight timeline we would request that we schedule a program kick-off meeting in the second week of November with the Program Team and all participating municipalities. In this meeting we would discuss, at least, the following topics:

- Overall program goals, schedule and timeline
- Description of all program phases
- Immediate next steps

Master Program Tracking

In Round I, we struggled to get consistent status updates from the ESCO. KLS proposes the development of a Master Status Tracking worksheet that will cover all the key benchmark activities for all four phases of this project. KLS is willing to develop a draft version of this worksheet and collaborate with the Program Team to create a final version. KLS would update continuously and keep the most up-to-date version in an on-line accessible location.

On-Going Consultation and Collaboration

KLS anticipates a considerable amount of collaboration with the Program Team on contract development, financing plans, procurement plans, reporting template development and much more as defined in the RFP. We have always enjoyed such partnering with the DVRPC, MSC and other program advisors.

Feasibility Phase

The primary goal of this phase is to use readily available information supplemented with municipality expressed needs and, readily available, additional information to define the costs and savings opportunity associated with a lighting system upgrade. The following efforts defines KLS approach to this phase.

Kickoff Efforts

The following defines Feasibility Phase Kick-off efforts to be led by KLS:

- **Program Kick-Off Meeting**
 - As defined in the RFP, KLS will help develop the agenda and lead this Kick-Off meeting for the program. KLS would recommend this meeting be scheduled for mid-November, immediately following program kick-off efforts.
- **Individual Municipality Kick-Off Meetings**

Data Collection

KLS will work with the DVRPC and/or directly with municipalities to obtain PECO bills and inventory data as well as any supplementary information the municipality can provide. KLS would recommend that we use an easily accessible cloud-based document management system (e.g. dropbox, google drive) for all data utilized throughout the project. The Program Team would have access to all municipalities and each municipality would identify who would have access to their specific project folders.

Upgrade Solution Mapping & Analysis

The feasibility phase is data driven with upgrade solutions based on KLS lighting expertise and standardized analysis. The following defines the process KLS will use to define a 1-for-1 upgrade plan or map for every existing fixture type represented in the program.

- KLS will use two primary sources of knowledge to define the best possible upgrade solutions for any existing fixture type:
 - KLS will update previously used photometric analysis for 5 or more typical applications, primarily defined by road type. The photometric analysis will match the performance of an existing fixture type and technology with that of a new fixture using LED technology. For example, when keeping all application details the same (e.g. road width, pole spacing, fixture mounting height, etc.) we could identify LED fixtures that perform equal or better than existing older technology fixtures. In all cases these typical applications were designed to meet IES RP-8 roadway lighting standards.
 - A less technical, but equally relevant approach is utilizing the general knowledge of what upgrades have worked well on other KLS projects and those we are familiar with. This can be used as a sanity check to the previous analysis driven approach discussed above.
- With the above defined upgrade plan or map, KLS will then complete an analysis comparing the existing fixture inventory to the upgrade solutions.
- The above analysis would be conducted for a baseline solution (e.g. cobrahead upgrades with photocell control). We would also show alternate options that could be added to the baseline solution, including manual fixture controls, networked controls, or other commonly used options.
- KLS would provide a limited opportunity for municipalities to provide additional information further defining the PECO inventory. For example, if a municipality would be able to quickly provide information completely specifying fixtures that are on the streetlight bill and not cobrahead types or on a metered account, KLS would include that information in the analysis.
- For purposes of efficiency and standardization of analysis, KLS will use its own analysis tool which is specifically designed for large quantities of fixtures. Unlike a calculator format, the KLS analysis tool is structured in more of a database format. This same tool will "expand" to include all future design options and analysis throughout all phases of this project.

Preliminary Buy-Back Assessment

For those municipalities that would need to buy-back fixtures from PECO, requesting a quotation would be appropriate at this time. While a final quote would be requested closer to the time of purchase the depreciated inventory value will not change significantly.

Feasibility Study Development, Presentation and Revisions

The feasibility study will be the primary tool for municipalities to decide whether to proceed to the next phase of the program. This needs to be a comprehensive but easy to understand report. The feasibility study will have the following primary components:

- Project Assumptions (\$/kWh, tap fees, annual operating hours, contingency %, etc.)
- Baseline inventory (quantity by fixture style/wattage)
- Upgrade Map
- Proposed Lighting System
- Upgrade Options
- Payback Analysis (Baseline + Options)
- Cash Flow Analysis
- Defining Next Steps in the Project Development Process

KLS will meet with all municipalities over an approximate 3-week period to present these feasibility studies, solicit feedback and make any changes necessary.

Municipality Decision to Proceed

While the feasibility phase is at no cost to the participating municipalities, the next phase for project development requires a significant investment in audit, analysis and design services that a municipality must be willing to pay for even if they do not approve a final project for construction. As this is the case, each municipality is expected to need council approval to move to the Project Development Phase. KLS would present the feasibility study findings to each municipality council interested in moving to the next phase. Mr. Fuller presented at 40+ council meetings of varying types (sub-committees, council work sessions, voting meetings, etc.) during Round 1. We are comfortable with this process and effective communicators to audiences that may not be otherwise informed on the topic.

Project Development Phase

In this section, we will explain, in a closely approximate chronological order, the KLS approach to all aspects of project development.

Phase Kick-Off

Since most municipalities will have had extensive interaction with KLS at their locations reviewing feasibility plans and at council meetings gaining approval to move to the project development phase, we would recommend a program-wide webinar to kick off this phase of the program. In this webinar KLS and the Program Team could review all aspects of this phase including but not limited to the goals, approach, activities and timeline. Any municipal specific discussions required could be handled by KLS as needed after the webinar.

Education & Outreach Support

KLS would recommend in this phase (or possibly earlier) conducting a series of educational webinars. KLS created and delivered such webinars in Round 1, with good feedback from attendees, and would like to repeat/expand the topics to include the following:

- Potential Health Implications Associated with Blue Light
 - The science behind the concern
 - A true evaluation of blue light impacts as pertains to roadway and area lighting
 - Design options to consider if Blue Light is a concern
- Lighting Control Technology Overview
 - In addition to an overview of the range of control options available, this would be an opportunity to discuss any new published PECO tariffs that may impact municipality projects. We know that PECO has a proposed tariff that could create a positive incentive to upgrade from simple controls to more sophisticated network control systems. We understand that PECO is supporting a process to qualify control manufacturers that meet their minimum requirements. We also are aware the PECO is considering a special tariff rider that may leverage their existing AMI network. This rider if approved would create some unique and very cost-effective opportunities for municipalities to upgrade to network lighting controls.
- Key Lighting Design Considerations
 - Understanding standards and codes

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- o With a defined TCO or LCC evaluation metric, fair comparisons will be made across many submitted manufacturer solutions and ultimately the best overall solution meeting the programs needs will be chosen.
- Strategic Procurement™ for Distribution Partner Services
 - o Since most of the top lighting manufacturers will not sell direct to customers and insist on using distributor partners, those channel partners will be included in our procurement efforts. KLS then collaborate with the Program Team to develop and manage an RFQ or RFP for the selection of a qualified local/regional distribution partner for use in this project. In this RFQ a few key service requirements are defined (e.g. staging, delivery) and the distributors will quote a markup % to the manufacturer costs negotiated above. Competition for this business keeps the markup lower than typically found in the non-transparent spec-bid-buy process.
 - o For this specific procurement effort, KLS would recommend that distributors provide markups by county identifying the corresponding volume for each. While it would be a goal to have a single distributor for the program, it may be desirable to have a few distributors geographically spread out to increase the quality of staging and delivery.
- Strategic Procurement™ for Installation Services
 - o Finally, KLS will collaborate with the Program Team to develop and manage an RFQ or RFP to procure installation services. The installation requirements will be clearly defined, and "fully loaded" unit install prices will be required for all unique fixture types.
 - o We also will look in other anticipated install "adder" unit costs (i.e. re-wire fixture with bad wires, etc.) to avoid high charge order costs with unforeseen conditions during construction.
 - o Installers will be able to reference the construction contract developed by the Program Team, which defines important processes and terms, such as maximum change order markups, etc.
 - o For this specific procurement effort, KLS would recommend that installers provide pricing by county (as some contractors have geographical preferences or limitations). We would also inquire about any contractor's ability to handle the volume of 2 or more counties within the program time constraints.
- One common misperception of this procurement process is that it is a "direct buy" model. To the contrary this is a model that pre-qualifies and pre-negotiates the above preferred product solutions and distributor services and integrates into them into the construction RFP. This is a model that is used with national retail accounts like Best Buy, Target, etc. The installer RFP will explain that they will be purchasing products already selected with pricing already negotiated and they will purchase through a distributor already selected. Having the contractor purchasing the materials keeps them responsible for not only the installation of those products but also any warranty claims in the first year.
- It should be noted that KLS has a strong track record in providing strategic procurement services that generate project and operating cost savings that are many times greater (typically 10-20 times, or more) than the fees we charge. When evaluating the strategic procurement fees in the administrative proposal, please keep in mind that the savings generated from this approach will not only pay for those specific fees but also cover a significant portion of the other KLS fees for the program. Other RFP respondents may take a more traditional approach to procurement (e.g. 3-line spec and bid) but they will not generate the initial and long-term value of the KLS Strategic Procurement™ approach.

Financing

KLS will work with the Program Team to select a financial partner(s) and establish the process for financing. Based on a review of Round 1, KLS would support the following general process improvements as it pertains to financing:

- As early as possible identify the financing process and required documentation, educate key municipality financing directors on that process and establish initial rates with contingencies that could be used for project analysis.
- Update current market rates just prior to completion of final IGA reports.
- Consider a staggered financing timeline that matches a staggered construction schedule. Savings by avoiding capitalized interest during a "waiting to start" period would far outweigh the impact of rate fluctuations.

GIS Mapping

- Choosing a lighting performance goal
- Lighting at intersections
- Glare and Source Brightness
- Dark Sky Considerations

KLS would also support any community outreach associated with these topics as requested by the program or individual municipalities.

Audit

The field auditing effort is the single biggest activity associated with this phase of the program. While KLS will provide oversight of this effort as part of the overall design effort, we will rely on our partner, Evri GIS Consulting, to complete this very important task. Here is an overview of the Evri auditing process.

- The Evri team will first take the PECO inventory data and scrub the address information (commonly referred to as geo-coding) to make it mappable with GIS locations.
- Once in the field, the Evri auditors will conduct the following activities:
 - o Auditors will match fixtures identified in the field with the geo-coded fixtures from the PECO inventory.
 - o Auditors will then collect attributes about each fixture and its application. For space purposes we will confirm that all the identified attributes in the RFP will be captured with the following exceptions: fixture manufacturer/model # and nominal line voltage. The former will be obtained from municipalities, as available, for non-cobrahead fixtures. Municipalities will also be asked if they are aware of any metered fixtures that are operating off 480V (less common) building circuits. Since all lighting products used in this program will be able to handle 120V and 277V, identification of 480V applications is the only useful information. KLS and Evri have and will define a few additional attributes to capture that will aid the design process.
- Once the audit is complete audit data will be available in two key formats. First, the raw data will be made available in worksheet format for KLS to use with required analysis and upgrade recommendations. Second, audit data will be represented in GIS maps viewable by the Program Team and municipalities via a web-based portal.
- The Evri team estimates that auditing 15,000 fixtures would take approximately 81 calendar days or less than 3 months. While KLS will start utilizing audit data once a given community is completed, this generally creates a good window to conduct KLS Strategic Procurement™ efforts, Financing preparation and Trial Installations.

KLS Strategic Procurement™

KLS has a great deal of experience and success implementing their proprietary Strategic Procurement™ approach. KLS can provide examples of where this solution has been implemented saving customers significant project costs and delivering the best performing long-term solutions. How the KLS Strategic Procurement™ process works is summarized below:

- Strategic Procurement™ for Lighting Products/Materials
 - o KLS will start by defining minimum performance standards and specifications for all products utilized in the program. A starting point for defining these minimum requirements will be the photometric analysis and resulting generic specifications used to develop the feasibility phase upgrade map.
 - o KLS will then collaborate with the Program Team to develop and manage an RFQ or RFP that invites qualified manufacturers to present all solutions that meet the programs' defined performance requirements.
 - o KLS will use a Total Cost of Ownership (TCO) or Life Cycle Cost (LCC) evaluation methodology allowing superior solutions to not be dismissed as they could be in "low price" only procurement models.
 - o For each unique product solution, we typically evaluate 5-10 manufacturers solutions along with distributor net pricing. KLS has the direct industry relationships to solicit participation from the top manufacturers with the best solutions.

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The Evri team will create unique GIS maps to support the feasibility phase (only using geo-coded utility address information), the project development phase and the construction phase. Municipalities will have unique logins to view all the map versions developed. The Program Team will have global logins to view all municipality.

All unique fixture types will be labeled with any easy to understand legend. It is our intent, unlike Round 1, to include all metered fixtures on the audit map with unique labels identifying them as such. Also, different from Round 1, Evri can overlay road classifications on the GIS map. This will be a very useful tool when evaluating lighting designs and working to achieve standard design strategies by road type.

Trial Installations/Pilots

KLS will support trial installations for this round of the RSLPP, but also recognizes we now have a considerable installed base of all fixture types. KLS also recognizes that most municipalities are willing to pay for trial installations to meet their specific needs. KLS would require manufacturers selected in the Strategic Procurement™ to provide fixtures on a "try before you buy" basis allowing for product returns within 90 days. This would limit municipalities to only providing installation costs which they may be able to do in-house or at a low cost. KLS will consult with each municipality to determine their interest in trial installations.

Photometric Analysis

At the beginning of this phase each municipality will have to define their overall illumination goals. Generally, they can look to meet or slightly exceed the existing lighting system performance (this is typically the most popular choice), increase general light levels across the entire municipality or for select areas, decrease general light levels across the entire municipality or for select areas (this creates liability risks), or design to an industry standard like IES RP-8. The nature of the RSLPP program being focused on 1-for-1 replacements does not typically warrant designing to the RP-8 standard. While the artificial (or model) applications used early in our process to create standard upgrade solutions were developed to meet RP-8 standards, rarely are they replicated with the actual lighting systems found in municipalities. We found in Round 1 that municipalities rarely considered the specific photometrics generated for their municipalities, but rather were interested in designs that considered what they currently had in place, what were equal performing upgrades and standardizing fixture types by roadway type or volume. With this experience, KLS would suggest we spend more time reviewing the artificial (or model) applications used in the feasibility phase for all municipalities and possibly expanding the number of those applications. Once a municipality sees equal or better performance for the typical application our experience is that there is no additional value coming to same result but viewed on a unique roadway in their municipality. We do highly recommend separate photometric analysis for sensitive applications like dangerous pedestrian intersections. Also, we do highly recommend designing new fixture installations to RP-8 standards, supported with photometric analysis, as new installs provide the opportunity to "get it right." KLS conducted such analysis and design for several applications in Round 1.

Preliminary Design & Standardization

With accurate existing fixture information from the audit, an understanding of the municipality unique needs and a full selection of upgrade solutions, KLS can create preliminary designs for municipality review. We would recommend that the KLS conduct a work session with each municipality to review the preliminary design and make appropriate adjustments. The preliminary design would be represented with a GIS map and all participants in the work session would review together. With road type overlays on the GIS map a key activity would be to utilize consistent or standardized fixture types on similar roadway types. This would also be an opportunity to review the map for areas with missed fixtures or fixtures not owned by the municipality (e.g. HOA owned fixtures). We would not recommend that this work session involve a review of the corresponding financial analysis associated with the design as there is plenty of good work to be done on the design alone.

Final Design & BOM Review

Once the preliminary design has been reviewed and updates made, new GIS maps can be created to represent a final design. Of course, the underlying data would become the basis for the financial analysis of the final design. The same analysis approach used for the feasibility study would be replicated for the final design and data. Of course, unlike the feasibility study, more upgrade solutions will be represented as more unique fixture types will have been identified by the audit.

Once a final design has been approved, KLS will conduct a final review of the associated bills of material. Unlike the project ESCO approach in Round 1, accurate material part #'s will be recorded in the master analysis worksheet from the very beginning. Also, unlike Round 1, KLS will do a final BOM review prior to submitting the final report to the council for approval. With this approach, once council approves the project a municipality can move directly to the pre-construction phase.

PECO Buyback Update

A few weeks before the final IGA reports are generated, updated buyback quotes should be obtained from PECO for those municipalities needing to take this action.

Investment Grade Audit Report Development, Presentation and Revisions

KLS would recommend the report template for feasibility study and the IGA report be as close to identical as possible. This allows for municipalities to review a familiar format. While the IGA report will have many more existing fixture types defined with new upgrade solutions the report format should be the same.

KLS will meet with all municipalities over an approximate 3-week period to present the IGA reports, solicit feedback and make any changes necessary.

Project Approval Support

For the project to move forward, each municipality council will need to review and approve the project. KLS would present the IGA report to each municipality council interested in moving to the next phase.

We recommend that prior to board consideration of the IGA report, construction contracts developed by the Program Team be reviewed and approved by municipal solicitors. The same pre-approval process should also be followed on the financing side with municipality financing directors. With all these pre-approvals in place, once the council approves the project itself, we can move quickly to the construction phase.

Construction (Project Management) Phase

The keys to success during the construction phase are keeping the installer on track with an established construction schedule, tracking progress of installation and communicating to all parties, managing and resolving issues quickly as they arise and timely documentation of all issues pertaining to construction. In this section, we will quickly review an overview of how KLS sees the construction process and specific unique approaches we will take to ensure a quality project implementation. KLS has a great deal of experience managing large multi-month/year complex lighting upgrade projects and uses proven project management tools and processes. Most of the approaches discussed below will result in a more efficient and comprehensive project management process than that experienced with the Round 1 ESCO. The following is a list of key construction-related activities that will be conducted and/or managed by KLS:

Master Scheduling

- As municipalities approve projects for construction, they will be added to a master program schedule that will be used for material ordering/management and installation schedules.
- The master schedule would stagger the construction start dates based on approval timing and other considerations mutually agreeable to the program (DVRPC), contractor and municipality.

Material Management

- Based on the master schedule discussed above, the distributor will order all project materials for a given municipality at the same time.
- The distributor will stage a municipality's material order and work with the contractor to determine a mutually agreeable staging and delivery plan.
- The distributor will need to provide KLS timely updates on materials on-hand and expected delivery dates for materials on order. KLS will track this information and make available to all parties.

- If a COP is approved the contractor will be responsible for taking any actions required to satisfy the change order scope of work, including but not limited to ordering materials, scheduling installation, etc.
- An example of the Master Project Change Tracking Worksheet can be seen in Appendix B. It is representative and too small to review. KLS could provide samples of this worksheet at an in-person meeting.

Project Management Updates

- KLS would recommend that electronic updates summarizing installation progress and RFI/COPs be communicated every two weeks to the municipality. Weekly updates are possible, but often viewed by customers as too frequent and too incremental in nature.

Project Management Meetings

- At a minimum, KLS will propose monthly in-person project status meetings with KLS, the contractor and key municipality staff.
- With a robust reporting and management process defined above, meetings should be straight-forward without much new information, not previously communicated. Depending on how installation is progressing, it may be allowable for this meeting to be held via conference call if all parties agree.
- In-person meetings would allow for after-meeting field visits to be conducted if required.

Punch List & Warranty Repair

- At the time of substantial completion on the project, KLS will collaborate with both the contractor and municipality to identify punch list items and to document into an electronic on-line punch list worksheet.
- This punch list will be a living document with the ability to update the status all the way through completion.
- The punch list will be for approved scope of work that has not been completed or not completed satisfactorily. This is different than upgrades completed and then requiring a warranty repair.
- A separate Warranty Repair on-line worksheet will be utilized to track necessary warranty repairs all the way from identification through completion.

Contractor Payment Management

- KLS will work with the Program Team to define project payment terms and required documentation terms in the construction contract. KLS would recommend a minimum 5% retainage requirement.
- Contractors will be required to use standard AIA payment application forms and allowed to submit monthly for material reimbursement (upon receipt at distributor), installation progress and retainage (upon project close-out).

PECO Bill Updates

- While KLS is comfortable managing monthly PECO bill updates based on installation progress we would like to explore the concept of 2-Step update with PECO. In this 2-Step approach KLS and the Program Team would ask PECO if they would be willing to accept at the beginning of installation (or possibly at the mid-point for longer duration projects) the anticipated final upgraded inventory (quantity by fixture type/wattage) based on the construction plan or final BOM. The second update would be immediately following project completion and include adjustments to the original construction plan submitted with the first update. This approach would closely align utility savings with the installation schedule.

Rebate Management

- KLS will submit all required documentation to rebate management firms to obtain maximum rebates from PECO and PJM. For PJM rebates multiple broker firms could be considered to process rebates and KLS would support a comprehensive review and selection process to choose a broker firm.

Controls Commissioning

- On future manual or pre-programmed controls would be set or verified by the contractor at time of fixture upgrade/installation.

Pre-Construction Meeting

- Based on the master construction schedule, KLS would schedule, manage and lead an in-person meeting with municipality staff and the contractor.
- Project logistics would be reviewed and agreed upon including, but not limited to:
 - Project Start Date and Schedule
 - Preferred Order of Installation (e.g. geographical, fixture type or other priorities)
 - Material Staging (if requested or needed)
 - Safety Requirements (contractor and municipality)
 - Special Considerations (e.g. events impacting installation)
 - Pre-Approved Field Changes
 - It is in the best interest for all parties, to pre-approve field changes that allow the contractor to make low-cost changes at the time of fixture installation. In Round 1, the most common change required was to "re-wire" the connection from the fixture to the PECO tap location.
 - A list of pre-approved field changes will define pre-negotiated price for any pre-approved field change, daily quantity limits per install team and communication procedures for both pre-approved changes and changes needing approval.

Contractor Updates

- KLS will define a standard reporting template (spreadsheet) that contractors will need to update within 1-2 business days after the end of each business week (e.g. EOD Monday).
- KLS will explore with the contractor(s) their ability to use technology-enabled tools to assist with installation updates. KLS has included in our construction phase fees a field tool (software/app, not hardware) that can be used to update installation progress real-time. A contractor not able to effectively use such a tool would need to update the above described spreadsheet. KLS will integrate real-time updates with spreadsheet updates into a common format for all to review.

Change Order Management

- KLS will collaborate with the Program Team to clearly define the process for project changes in the construction contract.
- The standard process will include the following required steps:
 - Request for Information (RFI)
 - Contractor will identify an issue requiring resolution and communicate that issue with a standard process and format. For this project and the nature of installation we would typically require an e-mail to KLS from the contractor identifying the municipality name and RFI in the subject line and the details of the issue in the email message.
 - Upon receiving an RFI, KLS will acknowledge receipt of the RFI, assign an RFI number (a combination of municipality ID, date and sequence #) and record the RFI details in a master KLS Project Change Tracking worksheet.
 - RFI Response (sometimes called Bulletin)
 - KLS will work directly with the municipality to address contractor identified issues and provide a response. Typical responses would include a Request for Change Order Proposal, Remove from Project Scope, No Action, etc.
 - Any RFI response will be sent directly to contractor via email (using the same original RFI thread) and recorded in the master KLS Project Change Tracking worksheet.
 - Change Order Proposal (COP)
 - If requested, the contractor will provide a COP form with a defined scope of work and pricing for KLS and the municipality to review. The COP form must be attached to an email (using the same original RFI thread). The COP should allow for an approval signature to document agreement.
 - KLS will review with the municipality to approve, modify or not approve updating the COP form accordingly and record in the master KLS Project Change Tracking worksheet.
 - Any COP response will be sent directly to the contractor via email (using the same original RFI thread) with the attached updated COP form.

- For networked controls, KLS will insure that the contractor completes and documents field installations of gateways and nodes as part of their defined scope of work. KLS will also work directly with the controls manufacturer for the set-up, programming, training and commissioning of the networked system.

As-Built Management

- When final completion is achieved, As-Built versions of the GIS maps will be created, As-Built line by lines will be created and Savings Analysis will be updated.

Project Close-Out

- KLS will work with the Program Team to define a project close-out process and document required terms in the construction contract.
- A Project Completion form will be signed by the contractor and municipality once all approved scopes of work are completed including punch list items. This Project Completion form will be the basis for the start of any product and labor warranties.

Post-Construction (O&M) Phase

KLS is committed to providing all the RFP requirements for Post-Construction Operation and Maintenance Services. Specifically, we will provide the following services:

Operations and Maintenance Plan & Manual

- KLS will conduct a webinar for all participants that reviews the most effective strategies for operating and maintaining their upgraded lighting system. Topics covered in this webinar will include, but not be limited to, the following:
 - How to maintain and clean lighting fixtures
 - How to utilize manufacturer warranties
 - How to negotiate appropriate 3rd-party maintenance contracts
 - How to update existing ordinances to ensure standardization with their newly upgraded lighting system
- KLS will work with the Program Team to develop an O&M Manual for each municipality, complementing the webinar content, that defines the most effective strategies for operating and maintaining their upgraded lighting system
 - This report will include appendices that include specific project information for a municipality including, but not limited to, product specification sheets, component lists, warranties, etc.

Operations and Maintenance Savings Report

- KLS will work with the Program Team to develop a standard O&M Savings Report that documents the savings achieved by the lighting upgrade project. This report will compare the forecasted energy savings from the IGA proposal plus any changes in scope to the actual utility bill savings. A similar comparison will be made for maintenance savings but will require each municipality to provide post-construction maintenance cost information.

Lighting Ordinances

- KLS is willing to advise municipalities on how to update existing ordinances to ensure standardization with their newly upgraded lighting system.
- Most existing municipal lighting ordinances are relatively incomplete, inconsistent and redundant in nature. Since all ordinances are different, for KLS to do a robust update of their lighting ordinances a separate evaluation and proposal for this work would be required. Our fees represent a typical range of costs for such work depending on the agreed to scope of services.

Detailed Project Schedule

Timeline by Project Phase

KLS is generally supportive of the timeline goals defined by the RFP. We believe an 18-24 month total program timeline is achievable. The only significant change we see is that the feasibility phase may need to be extended to allow for initial kick-off activities at the front end and on the back end to plan for the council approval process. We believe any time added to the feasibility phase can be saved in the construction phase.

Below is what KLS believes is an achievable schedule for each project phase.

Phase	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
Program Kick-Off & Development Efforts												
Feasibility Phase												
Project Development Phase												
Construction Phase												
Post-Construction Phase												
Program Level Collaboration												

Upon request or award of DSP contract, KLS will provide a more detailed timeline showing all tasks in each phase. A final program timeline would be developed in collaboration with the RSLPP Program Team.

Conclusion

KLS appreciates the opportunity to submit a response for the RSLPP Design Services Professional RFP. Please do not hesitate to contact us with questions about this proposal or other value added services KLS can provide.

Sincerely,
Mike
 Michael S. Fuller
 President
 Keystone Lighting Solutions, LLC

Appendix A: Recommendations, Resumes and Reference Projects/Contacts

KLS Owner's Agent Municipalities

Municipality	Date	Services Provided	# of Rubens	Project Cost	Contact Name	Contact Address	Contact Phone	Contact Email
Berks County	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	3,333	\$1,862,743	Bill Conway, Director of Administration	2405 Ritten Road, Leesport, PA 19359	717.683.3620	billconway@berks.net
Bucks County	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	24	\$19,392	Rich Demaree, Public Works Director	4613 Highland Circle, Buckingham, PA 18812	215.754.8336	rdemaree@bucks.net
Columbia County	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	40	\$14,449	John Newkings, Borough Manager	800 Mt. Carlo Blvd, Gettysburg, PA 17329	610.381.2506	johnnewkings@colco.net
East Berks Township	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	420	\$24,670	David Horak, Public Works Director	2551 Bartholomew Street, East Norriton, PA 19328	610.275.2834	dhorak@eastberks.net
Borough of Farmers Square	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	452	\$43,743	Paula Beltrami, Public Works Director	227 Westfield Rd., Leesport Square, PA 19348	610.444.6279 ext 125	pbeltrami@farmersquare.net
Borough of Leesport	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	61	\$24,672	Chris Farney, Borough Manager	21 East Baltimore Avenue, Leesport, PA 19359	610.613.7306	cfarney@leesport.net
East Berks Township	2018 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	4,423	\$1,364,612	Stephanie Teal, Public Township Manager	3 Municipal Way, Longport, PA 19347	215.375.3308 ext. 1142	stept@eastberks.net
New Britain Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	170	\$14,622	Elaine Bradley, Township Manager	727 Park Avenue, Chester, PA 19380	215.878.1831	elaineb@newbrt.net
New Hope Borough	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	271	\$14,331	Carrie Thomas, Borough Manager	123 Hope Street, New Hope, PA 19388	215.843.1340	carriet@newhope.net
Newton Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	181	\$4,085	Chris Goring, Borough Manager	38 W. State Street, Newton, PA 18940	610.890.1512	cgoring@newton.net
Newton Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	628	\$17,914	Steve Hantz, Township Manager	229 Bishop Wallace Road, Newton Square, PA 18971	610.858.2358	shantz@newton.net
Pottsville Borough	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	1,189	\$67,434	E. Sean Smith, Borough Manager	351 Bridge Street, Pottsville, PA 19362	610.873.6273	esmith@pottsville.net
Schuylkill County	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	78	\$14,244	Aimee Taylor, Public Works Director	1401 Main Street, Pottsville, PA 19362	610.897.7442	ataylor@schuylkill.net
Springfield Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	1,133	\$13,372	Don Schickel, Public Works Director	2000 Main Street, Springfield, PA 19382	215.416.1714	dschickel@springfield.net
Thamesville Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	200	\$24,888	Rich Ford, Borough Manager	814 Route 1, PA 19384	717.328.7822	rford@thamesville.net
Upper Merion Township	2016 thru present	See proposal for an explanation of standard services provided as both a program technical advisor and as the "owner's advocate" design professional.	8,323	\$43,323	Jeffrey Smith, Public Works Administrator	871 Lark Road, Ardmore, PA 19380	215.641.1520	jsmith@uppermerion.net
Total			16,749	\$6,449,481				

KLS Letters of Recommendations
(from RSLPP Round 1 Participants)



TOWNSHIP OF MIDDLETOWN

October 9, 2018

Mr. Barry Seymour, Executive Director
Delaware Valley Regional Planning Commission
190 N. Independence Mall W, Floor 8
Philadelphia, PA 19106

Dear Barry,

I am writing to provide my support for the candidacy of Mike Fuller and Keystone Lighting Solutions as the Design Services Professional for the second round of the Regional Streetlight Procurement Program (RSLPP). As you may recall, Middletown Township was a participant in the first round of this program, and I served as a member of the municipal steering committee. Throughout the process, Mike provided outstanding technical knowledge, expertise and guidance to the committee. His patience and commitment to the program were valuable assets to the committee through every stage of the process. One of Mike's most impressive strengths was his ability to take highly technical concepts and distill them down to understandable pieces for generalists. I believe his involvement in phase one of the RSLPP was directly related to the overall success of the program.

While Mike's work with the steering committee was critical to the program as a whole, his assistance also benefited the many individual municipalities that chose to use his services. I had the opportunity to work directly with Mike as he advised Middletown Township at each phase of the project. I was most impressed with his ability to transition from overall program advisor to advocate for our municipality. He worked directly with my staff analyzing our options during design, and he assisted us as we made important decisions about implementation along the way. I frankly couldn't have imagined going through the project without his guidance.

Mike's comprehensive understanding of the upgrade process was invaluable to us. Mike essentially served as an advisor, an advocate and an educator for everyone involved in the RSLPP. His efforts were a significant part of the program's success, and I strongly believe his involvement in the second round would have a very positive effect on its outcome.

It is my pleasure to offer my support to Mike's candidacy. Thank you for your consideration of my recommendation.

Sincerely,


Stephanie Teal Kuhl
Township Manager

3 Municipal Way | Langhorne, Pennsylvania 19047-3424 | P: 215.750.3670 | F: 215.750.3501 | www.middletowntownship.org

TOWNSHIP OF NEWTOWN
DELAWARE COUNTY



220 BISHOP HOLLOW ROAD
NEWTOWN, PA 17058
PHONE: (610) 358-4762 FAX: (610) 358-8722
WWW.NEWTOWNTOWNSHIP.ORG

October 9, 2018

To Whom It May Concern,

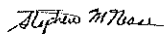
Based on the positive experience that Newtown Township has had, I would like to recommend to you *Keystone Lighting Solutions*, and specifically to compliment the work that Michael Fuller, President of that company has done.

The Delaware Valley Regional Planning Commission (DVRPC) coordinated a Regional Streetlight Procurement Program (RSLPP) which spanned the past few years, and Newtown Township was fortunate to participate in it. We have been extremely pleased with the results of the installation and quality of street lighting of the new LED lights, as well as the energy savings which they will be bringing. The process was a lot of work, but we were fortunate that *Keystone Lighting Solutions* had been a program advisor to the DVRPC throughout the process, and that Newtown Township had individually retained them as our own "owner's agent" specifically advocating for us during the various stages of the project.

Mike Fuller and *Keystone Lighting Solutions* exhibited clear technical knowledge and lighting design expertise. These skills were displayed numerous times during the project. They showed an understanding of the upgrade process that was comprehensive, were able to communicate the process as well as the science, and advised us on how to get the message out to our residents and specifically to our elected officials. Mike attended a Board of Supervisors meeting at a critical decision-making point and was able to assist them in making their decision to proceed. He also worked directly on our behalf with the vendors who performed the installation work to ensure that Newtown Township's interests were protected and the program was executed as it was supposed to be.

We are pleased to recommend Mike Fuller and *Keystone Lighting Solutions*. We received excellent value for our investment in their services and are glad they were a partner with the DVRPC during the project and that we made the decision to utilize their services as our owner's agent. We would use them again ourselves and would recommend them for any role leading the development of a lighting upgrade project or program.

Sincerely,



Stephen M. Nease
Township Manager

Upper
Dublin

801 LOCH ALSH AVENUE
FORT WASHINGTON, PA 19034-1697
Phone: (215) 643-1609
Fax: (215) 542-0797
www.upperdublin.net



October 9, 2018

IRA S. TACKEL
President

RONALD P. FELDMAN
Vice President

REBECCA A. GUSHUE

LIZ FERRY

ROBERT H. MCGUCKIN

GARY V. SCARFELLO

MEREDITH L. FERLEGER

PAUL A. LEONARD
Township Manager

GILBERT P. HIGH, JR.
Solicitor

To Whom it May Concern,

Upper Dublin Township had the opportunity to work with *Keystone Lighting Solutions* (KLS), and specifically Mike Fuller, as part of the Delaware Valley Regional Planning Commission's (DVRPC) Regional Streetlight Procurement Program (RSLPP) from 2016 through 2018. KLS acted as the program's technical advisor. In addition to seeing KLS' capabilities in the program role, we directly hired KLS to act as Upper Dublin's agent.

As our agent, KLS took the time to understand our specific needs and advocated for project solutions to meet our needs. On multiple occasions KLS identified inaccuracies and failure to meet program or Upper Dublin requirements and priorities in project proposals and other deliverables provided by the project ESCO. KLS reviewed all project materials, attended meetings and assisted with any required documentation and communication with the project ESCO. It is clear from our interaction with KLS that they have a high level of expertise with lighting technology and design.

In conclusion, Upper Dublin recognizes KLS' strong technical and design expertise, project development and management knowledge and communication skills. They provided great assistance with program-level requirements, process, and the specific details associated with the final technical solutions implemented. I, as Upper Dublin Township Manager, highly recommend KLS for any program, project or role associated with leading the development and implementation of lighting system upgrades.

Feel free to contact me as a reference for KLS.

Very truly yours,



Paul A. Leonard, Township Manager



JOSEPH D'GRILAKO
MAYOR

2400 BYBERRY ROAD
BENSLEM, PA 19020

BUSINESS: (215) 633-3600
FAX: (215) 633-3609
www.benslem.pa.gov

October 9, 2018

To Whom It May Concern,

From 2016 through 2018, we have had the opportunity to work with Keystone Lighting Solutions (KLS), and specifically Mike Fuller, as part of the Delaware Valley Regional Planning Commission (DVRPC) Regional Streetlight Procurement Program (RSLPP) from 2016 through 2018. In addition to seeing KLS' capabilities in the program technical advisor role, we also hired KLS directly to act as our design professional or owner's agent.

As our owner's agent, KLS clearly understood our unique and specific needs. With this knowledge they were able to strongly advocate for project solutions that met those needs. At the program level they clearly understood the process and deliverable requirements put on the selected ESCO. There were multiple occasions when project proposals or other deliverables were provided by the ESCO and KLS would identify municipality needs or priorities that were not addressed, technical inaccuracies or failure to meet program requirements. KLS reviewed all project materials, attended all meetings and assisted with any required documentation or communication with the project ESCO.

KLS showed us that they have a high level of expertise with lighting technology and design. They were instrumental in defining our trial installs, evaluating and advising on our extensive network control system, defining typical applications for photometric analysis, identifying the need for different distribution types than that recommended by the ESCO. These are just a few examples of KLS expertise in these areas and value-add to the project.

KLS communication was always timely, clear and delivered showing their knowledge of all aspects of the project process and solutions. KLS not only communicated with our key municipality staff members on a regular basis, with the ESCO (on our behalf) but also with our Mayor and Council. We had great confidence in KLS' ability to communicate with our municipality leaders.

In conclusion, KLS has shown very strong technical and design expertise, great understanding of the project development and management process and excellent communication skills. We would highly recommend KLS for any program or project, of any size, leading the development and implementation of lighting system upgrades.

Sincerely,

John Chaykowski
Finance Manager



The Borough of Phoenixville

351 Bridge Street, 2nd Floor, Phoenixville, PA 19460
Phone: (610) 933-8801

October 4, 2018

To Whom It May Concern,

It is my understanding that you are looking for a design services professional to help Delaware Valley Regional Planning Commission lead the coordination for the round two of the Regional Streetlight Procurement Program. I would like to take this opportunity to recommend Keystone Lighting Solutions (KLS) as the design services professional firm to lead the upgrade process in coordination with DVRPC for the round 2 of the Regional Street Light Procurement Program (RSLPP).

KLS and Mike Fuller have worked with the Borough over the last few years through the first round of the RSLPP. Mike through his expertise of lighting design and lighting system technical knowledge, has played a key role in the Borough's understanding of the whole Regional Street Light Procurement Program. KLS was the Borough's advocate as a program advisor and owner's agent for the overall process. Mike helped keep the Borough's line of communication with DVRPC and Johnson Controls Inc. streamlined and open. KLS kept the Borough's best interest in mind while guiding the Borough through each step of this process.

I believe Mike Fuller is the person who can make a difference with the round two RSLPP. Please feel free to contact me should you have questions or want to discuss Keystone Light Solutions further. I can be reached at 610-933-8801 or via email at ejkrack@phoenixville.org

Sincerely,

E. Jean Krack
Borough Manager



October 9, 2018

Re: Endorsement of Professional Services / Keystone Lighting Solutions, LLC

To Whom it May Concern:

The purpose of this letter is to provide my strongest recommendation for Keystone Lighting Solutions, LLC, and more specifically Michael Fuller.

For the past fourteen years, I have been the Manager of Towamencin Township, a full service municipality with a population of 19,000 in eastern Pennsylvania where I have had the opportunity to supervise and observe many individuals in the performance of their duties, as well as work with varying professional consultants.

Having worked directly with Mike Fuller over the past three years navigating DVRPC's Regional Street Lighting Procurement Program, he has earned my trust and respect. While Keystone was the program advisor for the overall project, Towamencin also separately engaged the firm as our owner's agent. The technical aspects of this project were complex, especially for those of us not learned in the lighting industry, and particularly challenging to communicate the issues (technical and financial) in public meetings with elected officials and taxpayers. Mr. Fuller presented all issues in an understandable fashion so that the Township was confidently able to make decisions.

Mike Fuller has the technical skill and personal qualities desired in a superior organizations. His integrity is unquestionable. I would want him on my team every time, every day.

If you have any questions or concerns, or would like to meet with me to confirm my confidence with Keystone Lighting Solutions, please contact me at either (215) 368-7602 or rford@towamencin.org.

Most sincerely,

Robert A. Ford
Township Manager



The Township of Springfield

MONTGOMERY COUNTY, PENNSYLVANIA

Township Bldg., 1510 Paper Mill Rd., Wyndmoor, PA 19038

website: www.springfieldmontco.org Phone: 215-836-7600
Fax: 215-836-7180

COMMISSIONERS

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Brian M. Standish
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Edgar L. Graham
Michael R. Harnock

Jonathan E. Cobb

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Donald E. Rieger, Jr.
Executive Manager

James J. Gentry
Solicitor

Bruce S. Evans
Inspector of the Collector

Michael E. East
Engineer

October 8, 2018

RE: Reference Letter for Keystone Lighting Solutions and Michael Fuller

To Whom It May Concern,

I have had the pleasure of a working relationship with Keystone Lighting Solutions and, more directly, with Michael Fuller over the past few years. As I was part of the Program's Steering Committee for the first RSLPP program, I dealt with Mike as part of the committee. He also represented Springfield Township for the Design / IGA phase.

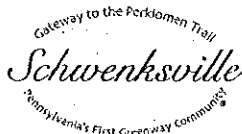
As a program advisor to the whole program, I felt he had an outstanding technical knowledge of what was needed and his reviews and guidance led to the big success of the regional program. Throughout this time, he showed his comprehensive understanding of the upgrade process, including the analysis, design, construction, and project management phases. He worked through the various issues that arose which, dealing with the many different and sometimes unique municipalities, he had to be thoroughly versed in all aspects.

I was very satisfied with his understanding of the needs of Springfield Township as he acted as our "Owner's Agent", guiding our Board of Commissioners through the initial process and IGA phases. His presentations communicated all elements of the program, as he educated those in attendance of the value of the replacement program and was able to field all questions asked showing an expertise in this subject.

Overall, I found KLS and, more specifically the capabilities and performance of Michael Fuller, to be first class and I would recommend his services for the next regional program or any other similar projects. I would also use his services again for Springfield Township if the need for this type of service is required.

Very truly yours,

Donald G. Siranni, Jr.
Director of Public Works



October 10, 2018

To Whom It May Concern,

Schwenksville Borough participated in the Delaware Valley Regional Planning Commission (DVRPC) Regional Streetlight Procurement Program (RSLPP) from 2016 through 2018 and had the opportunity to work with Keystone Lighting Solutions (KLS), and specifically Mike Fuller. Mike was hired by the program as a technical advisor and we also hired Mike directly to act as our owner advocate for all phases of the project.

Schwenksville is a very small Borough with only two administrative employees. We never would have made it through the process without Mike's assistance. Mike helped us understand the program process and made sure our needs were reflected in the final lighting system provided by Johnson Controls. At each step through this long process we depended on Mike to assist us and advocate for our specific needs and priorities. Mike tailored his assistance to the unique needs of a small Borough and was able to seamlessly move back and forth between his larger clients and us, using common sense and reason.

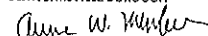
Mike was very responsive to our needs and limitations. He did an excellent job communicating with me, the Borough Secretary and our council members. Mike also assisted with all communication with the program and Johnson Controls during all phases of the project. Our meetings both in person and via the phone or web were always scheduled for our convenience and he was always well prepared and organized.

In addition to helping us manage this process and communicating, it is clear that Mike has great lighting design capabilities and technical knowledge. In the end we feel that the solution implemented was strongly influenced by Mike's knowledge and advice. This was particularly helpful because lighting was never previously a priority for the Borough and evolved over time.

I highly recommend KLS for any lighting-related program or project. We believe that he has the skills to help any group develop and implement a high-quality lighting upgrade project.

Sincerely,

SCHWENKSVILLE BOROUGH


Anne W. Klepfer
Borough Manager

Borough of Schwenksville
Incorporated in 1903

140 Main Street, Schwenksville, PA 19473 • 610-287-7442 • Fax 610-287-8098
www.schwenksville-pa.org

October 9, 2018

PO Box 416
Newtown, PA 18940

To Whom It May Concern,

I am writing this letter to recommend Keystone Lighting Solutions and, specifically, Mr. Mike Fuller for all things related to lighting in the second round of DVRPC's RSLPP program. I served on Newtown Borough Council from 2014-2018 and one of my responsibilities was Streets and Roads which included our street lights. Newtown is a small Borough located in Bucks County, PA. We have a Police Department and two Borough employees - a Secretary and a Treasurer. We do not have a Public Works department and everything (snow, landscaping, etc.) is done via outside contractors.

Newtown Borough participated in the Delaware Valley Regional Planning Commission (DVRPC) Regional Streetlight Procurement Program (RSLPP) from 2016 through 2018 and had the opportunity to work with Keystone Lighting Solutions (KLS), and specifically Mike Fuller. Mike was hired by the program as a technical advisor and we also hired Mike directly to act as our owner advocate.

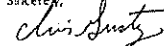
Again, we are a small Borough with a volunteer Borough Council made up of residents giving their time to the community. One of my responsibilities was looking to improve our lighting and the associated costs. I was the liaison for the DVRPC project and hiring Mike as our consultant was invaluable. Mike helped us understand the program process and made sure our needs were reflected in the final lighting system provided by Johnson Controls. There were very few steps through this long process that we did not look for Mike to assist us and advocate for our specific needs and priorities. He provided the knowledge base and expertise we needed to make educated decisions and the cost was very reasonable/manageable due to his overall program involvement.

Mike did an excellent job communicating with me, the Borough's staff, and our Council members. He also assisted with all communication with the program and Johnson Controls during all phases of the project and represented the interests of Borough.

In addition to helping us manage this process and communicating, it is clear that Mike has great lighting design capabilities and technical knowledge. In the end we feel that the solution implemented was strongly influenced by Mike's knowledge and advice.

I highly recommend Mike and KLS for any lighting-related program or project. We believe that he has the skills to help any group develop and implement a high-quality lighting upgrade project. Feel free to contact me at 856-936-0562 if you have any questions or require additional information.

Sincerely,


Chris Gusty
Past Vice President
Newtown Borough Council



Eileen M. Bradley
Township Manager

TOWNSHIP OF NEW BRITAIN
Bucks County, Pennsylvania
Founded: 1723

BOARD OF SUPERVISORS

Helen B. Haun
William B. Jones, III
A. James Scanzillo
Gregory T. Hood
Cynthia M. Jones

October 11, 2018

To Whom It May Concern,

We have had the opportunity to work with Keystone Lighting Solutions (KLS), and specifically Mike Fuller, as part of the Delaware Valley Regional Planning Commission (DVRPC) Regional Streetlight Procurement Program (RSLPP) from 2016 through 2018. KLS was the program's technical advisor. In addition to seeing KLS' capabilities in the program role, we also hired KLS directly to act as our municipalities Owner's Agent or Advocate.

As our owner's agent, KLS took the time to understand our specific needs and strongly advocate for project solutions that met those needs. There were multiple occasions when project proposals or other deliverables were provided by the project ESCO and KLS would identify inaccuracies, failure to meet program requirements or municipality needs or priorities not addressed. KLS would review all project materials, attend meetings and assist with any required documentation or communication with the project ESCO.

For this program, we needed to buyback our lighting fixtures and arms from PECO. The project ESCO was going to handle this transaction for us, but KLS identified that they were going to charge significant consultant fees on top of PECO's buyback price. KLS engaged with us to understand the process and in the end, we used KLS support to complete this transaction, at no additional cost from KLS, without the project ESCO saving the township over \$42,000.

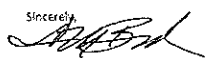
It is clear from our interaction with KLS that they have a high level of expertise with lighting technology and design. We installed new lights at critical intersections and redesigned other roadways as part of our project. KLS helped define our needs, communicated them to the project ESCO and verified the solutions proposed. KLS also helped us define the most useful trial installations and photometric analysis for this project.

KLS communication was always timely, clear and delivered showing their knowledge of all aspects of the project process and solutions. KLS communicated with me and our key municipality staff members on a regular basis. His communication was always clear, insightful and timely.

In conclusion, we recognize KLS' strong technical and design expertise, project development and management knowledge and communication skills. We would highly recommend KLS for any program, project or role associated with leading the development and implementation of lighting system upgrades.

Feel free to contact us as a reference for KLS.

Sincerely,


Eileen M. Bradley
Manager
New Britain Township

Mailing Address: 207 Park Avenue, Chalfont, PA 18914
215-822-1391 / Fax: 215-822-6051 / www.newbritaintownship.org



NEW HOPE BOROUGH

123 New Street
New Hope, PA 18938

215-662-3347
215-662-8022 (Fax)

www.NewHopeBorough.org

Laurence D. Keller
Mayor

Alison G. Kingsley
Council President

Connie Gering
Council Vice President

E.J. Lee
Borough Manager

October 11, 2018

Re: Mike Fuller

To Whom It May Concern:

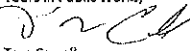
The Borough of New Hope has been working with Mike Fuller for the past few years in regard to our L.E.D. Street Light and Exterior Lighting Project.

Mike has proven to be a wealth of knowledge as far as the lighting industry is concerned.

It has been my experience, whenever the Borough had an issue or concern related to our lighting project, Mike has been prompt and thorough in his response.

He has exceptional organizational skills and has been a pleasure to work with.

Yours In Public Works,


Tom Carroll
Public Works Director
New Hope Borough



Borough of Lansdowne

12 East Baltimore Avenue
Lansdowne, PA 19050
(610) 623-7300
Fax: (610) 623-5533
www.lansdowneborough.com

Anthony Carriguzano
Mayor
Craig Totoro
Borough Manager

October 9th 2018

To Whom it May Concern:

I am writing this letter to strongly recommend Keystone Lighting Solutions and its President Mr. Mike Fuller in their capacity as consultants for lighting projects specifically municipal street lighting projects. I am qualified to make this recommendation after having worked closely with KLS for more than two years on a substantial project wherein KLS served as *program advisor*. KLS performed a substantial majority of work on the project including the development of an RFP, negotiation of contract terms, design and construction, project evaluation and much more. The level of detail involved in this process cannot be understated and KLS's experience and knowledge was proven valuable again and again throughout the project and often above and beyond the expected scope of work.

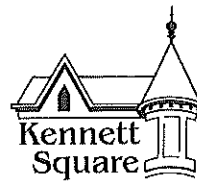
As a member of the Municipal Steering Committee for the Regional Street Light Procurement Project ("RSLPP"), I worked directly with Mr. Fuller often over the course of the two-year project and often on a one-to-three-times-a-week basis. The success of this project was largely attributable to Mr. Fuller's expertise, sound judgement and measured professional responses to a wide range of issues both expected and unexpected. Mr. Fuller's experience in the lighting industry, technical knowledge-base of KLS, and experience with large and complex projects enabled the RSLPP to foresee a range of risks and navigate this large project as a high value one for all 25 municipal clients. In doing so the RSLPP maximized financial value for the municipalities and realized a high-quality product/service. It is obvious that Mr. Fuller fully comprehends the lighting industry, technical aspects of lighting systems including energy/power usage, and importantly the nuances of counting street lights.

Furthermore, Lansdowne Borough engaged directly with KLS and Mr. Fuller to provide technical support, education, and organizational services as the *owner's agent* within the same RSLPP/overall project. His professional manner and experience played a valuable part in his ability to advocate for and protect the interests of Lansdowne as the project moved through its stages to construction and post construction. Mr. Fuller's unique capability to communicate technical information and manage the transfer of knowledge to a diverse audience proved invaluable at the local level particularly in discussion with local elected officials.

Therefore, I am pleased to restate my recommendation of KLS and Mr. Fuller for any lighting project relevant to the work described herein. Any questions or clarifications of this letter may be directed to me at (215) 582-6501.

Sincerely,

Craig Totoro
Borough Manager
Lansdowne Borough



Borough of Kennett Square

October 8, 2018

To whom it may concern,

I am writing this letter as a recommendation for KLS Lighting System and Michael Fuller in particular.

The Borough of Kennett Square contracted with KLS a few years ago to have them guide us through the RSLPP, a street light replacement program run by the DVRPC in which the Borough was a participant.

KLS was our program advisor and acted as the owners' agent on this project for the Borough.

I would like to recommend KLS and Mike Fuller and highly respect their knowledge of the whole process and acknowledge their expertise with the lighting design. I must candidly admit that I am not a lighting expert and with all the pitfalls that we ran into with this whole process, the Borough would have been lost and I am certain we would not have had the favorable final result without Mike's guidance and expertise throughout the whole convoluted process. There were many hurdles thrown up throughout the process and Mike was ready and available and willing to help me and to get me through the process with favorable results for the Borough.

I would recommend KLS and Mike Fuller without hesitation as a lighting advisor, owners' agent or any other role leading the development of a lighting upgrade program like RSLPP. I truly believe that without their help, the RSLPP program would have been a dismal failure for the Borough, but as it is, it turned out to be a positive addition to the Borough.

Please feel free to contact me if you would like any further information or wish to discuss KLS and Mike Fuller in greater detail.

Thank you.

Randy

Randy Behmke
Director of Public Works
Borough of Kennett Square
120 Marshall St.
Kennett Square, PA 19348
610-444-6020 ext 105
rbehmke@kennettsq.org

120 Marshall Street • Kennett Square, Pennsylvania 19348 • 610/444-6020



BOROUGH OF COLLINGDALE

Delaware County, Pennsylvania

MUNICIPAL BUILDING
800 MAC DADD BOULEVARD
COLLINGDALE, PA 19023-4954
610-585-5250 FAX: 610-585-9045

October 10, 2018

To Whom it May Concern,

From 2016 through 2018 we had the opportunity to work with Mike Fuller and his firm Keystone Lighting Solutions (KLS), as part of the Delaware Valley Regional Planning Commission (DVRPC) Regional Streetlight Procurement Program (RSLPP). Mike was hired by the program as a technical advisor and we also hired Mike directly to act as our owner advocate for all phases of the project.

The project was complex and had many phases. Mike helped us understand the program process. He also took the time to understand our specific needs and made sure the project's ESCO delivered solutions meeting those needs. There were very few steps through this long process that we did not look for Mike to assist us and advocate for our specific needs and priorities.

Mike assisted with all communication with the program and the project ESCO during all phases of the project. Mike also did an excellent job communicating with me, the Borough's staff and our council members.

We have also come to learn that Mike has great lighting design capabilities and technical knowledge. In the end we feel that the solution implemented was strongly influenced by Mike's expertise and advice.

I highly recommend KLS for any lighting-related program or project. Mike and KLS have all the skills to lead all aspects of the development of a high-quality lighting upgrade project.

Sincerely,

John A. Hewlings
Borough Manager
Borough of Collingdale

BUCKINGHAM TOWNSHIP

P.O. Box 418, Buckingham, Pennsylvania 16912
Phone: (717) 794-8834 • Fax: (717) 794-8837

Website - www.buckinghampa.org



October 9, 2018

Delaware Valley Regional Planning Commission
190 North Independence Mall West
Philadelphia PA 19106-1520

RE: Mike Fuller

To whom it may concern:

Buckingham Township is currently working with Keystone Lighting Solutions. Mike Fuller is our direct contact during round one of the RSLPP program.

We are in the process of finishing round one. Mike and I worked closely together over the last 18 months. He provided his technical knowledge and design expertise to our project.

Mike has been an advisor and educator to me and the Township. Keystone gave a presentation to the Board of Supervisors that was comprehensive and very educational to all of the members.

Mike and I have worked on this project from the start to the finish. We have also retained Keystone for the next three years to help us with our lighting concerns.

I recommend Keystone Lighting Solutions to DVRPC to be Design Services Professional for the round two of RSLPP.

Sincerely,

Nick DeMeno
Public Works Director

Michael S. Fuller, LC

224 Rimney Rd., Centre Hall, PA 16828
814.880.7747
mfuller@fullerlc.com
www.fullerlc.com/Profile/About/About

Professional Objective

Continued openness to new professional opportunities and challenges that build upon a 25-year business career highlighted by strategic and operational innovation, execution excellence and delivering value-added results. Professional interests focus on executive-level Strategic Planning, Sales & Marketing Development and Strategic Account Leadership.

Professional Experience

Keystone Lighting Solutions, LLC President/Owner

Keystone Lighting Solutions (KLS) is a specialized lighting design and consulting firm, which focuses on maximizing the effectiveness and impact of lighting systems. All KLS Services add value with positive financial, environmental and workplace quality impact. Services include:

- **Lighting Standardization** - Identify preferred lighting products and solutions that meet customer needs and applications. Also includes management of communication and support of standards
- **Strategic Supply Chain Solutions** - Utilize a set of value-add practices that significantly reduce lighting acquisition costs at enterprise-wide and individual project levels
- **Turnkey Lighting Upgrade Programs** - Utilize needs assessments, professional grade audits, solution development & proposal, and full-service project management/installation to deliver value for a single facility or portfolio of sites
- **Marketing, Training and Consulting Services** - Customized management services for customers and lighting industry channel partners

National Energy Services, Inc. Vice President, Sales & Marketing

Responsible for marketing and sales development for NES' Lighting business. Key responsibilities for this industry leader include the following cross-functional requirements:

- **Marketing Program Development** - created a new marketing plan, image and collateral including a new website, customer brochures, e-mail marketing campaign, selling presentations, etc.
- **Strategic Account Management** - owned the responsibility for developing relationships with national strategic customer accounts, delivering \$10M+ in booked orders and qualified project proposals
- **Growth Planning** - Initiated a simplified business growth planning model identifying a vision and tactics for achieving growth goals for each of NES' divisions

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Professional Experience (con't)

WESCO Distribution, Inc.

National Sales Manager, Lighting Products & Services

Responsible for the growth of WESCO's \$450M U.S. Lighting business. Key responsibilities for this Fortune 500 Company include the following cross-functional requirements:

- **Strategic Sales Development** - co-developing LEAN Customer Value Creation approach focused on the standardization of sales processes and tools for use in leveraging all WESCO products and services in target vertical market segments (not limited to lighting)
- **Strategic Planning** - worked with WESCO senior management and key supplier partners to create Sales & Margin Growth plans for Lighting Products & Services
- **Marketing Program Development** - created WESCO's "Leadership in Lighting" program for the purpose of educating our national sales force and equipping that group with effective marketing materials
- **Sales Promotion Development** - innovated with the creation of new sales generating efforts including direct mail, pre-packaged scalable sales promotions
- **Strategic Account Management** - provided sales leadership with Lighting Projects to both our field sales and national account managers with key strategic customers
- **Sales Specialist Team** - created and managed a team of Lighting Specialists spread across the U.S., which targeted high growth lighting markets, customers and applications generating \$6M in Revenues for 2006

District Manager, Central PA

Managed five WESCO branches serving the Central PA market. Key responsibilities included:

- **Income Statement Ownership** - consistently lead \$30M District to be a top performer in sales growth & profitability within WESCO's Northeast Region
- **District Coordination** - Initiated consolidation of sales management, inventory and purchasing functions from local branches to district level
- **Talent Management** - further developed management and selling skills of three experienced branch managers
- **Sales Management** - actively participated in customer relationship development and management of strategic sales opportunities
- **Operations Management** - oversight of all inventory, purchasing, IT, facilities, transportation and customer service functions in district

Whitehill Lighting & Supplies, Inc. Manager, Sales & Operations

Managed all Sales & Operations for a one-branch family owned electrical wholesale company. Key accomplishments include:

- 50% Sales Growth and Operational productivity gain over a 7-year period
- Developed nationally recognized Energy Consulting Service
- Managed the sale of company to WESCO Distribution, Inc. at industry-best price multiplier

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Professional Experience (con't)

Strategic Planning Associates Consultant

Provided Strategic Management Consulting services to Fortune 100 customers. Project highlights include:

- Assisted premier sportswear manufacturer improve inventory management processes and developed statistical model for forecasting profitability based on color, size and additional alterations
- Conducted industry benchmarking study for major U.S. telecommunications provider (earned Outstanding Team award)
- Streamlined Customer Service Phone System for major Canadian cell service provider

Education

Carnegie Mellon University Industrial Management & Economics, B.S.

Pittsburgh, PA
1986-1990

- Graduated in May of 1990 with a double major and a combined G.P.A. of 3.94
- Head Resident - provided leadership to a staff of 8 Resident Assistants and developed campus-wide social awareness programs
- Resident Assistant - supported/enforced policies and services of university's Residence Life Office
- Professional Internships with HCR Corporation (Dayton, OH) and J.P. Morgan (New York City)
- Academic Recognition - Student of the Year (selected by Senior class peers), Claymore Clan Leadership Award, Dean's List (all semesters) and Beta Gamma Sigma (local chapter President)

State College Area High School General Studies, Diploma

State College, PA
1983-1986

Skills & Interests

- Proficiency in AutoCAD, AGI32, all Microsoft Office Applications, Data-Mining, Web-Page Design
- Various Professional Training including Professional Selling Skills, Selling to Type, SPIN Selling
- Community Involvement including Graduation from Leadership Centre County (1997), Academic Tutoring for Teens, CBCC Transportation Committee
- Enjoy Skiing, Squash, Mountain Biking, Woodworking, Digital Photography & Ballroom Dancing

Additional Information

- Personal & Professional References available upon request
- Marketing Portfolio available upon request

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EVARI | GIS Consulting

C. ABOUT US

EVARI | GIS Consulting

Evary GIS Consulting was founded in 2009 with the mission of "bringing value to clients through the high-quality implementation of Geographic Information Systems (GIS) and associated technologies." Evary has completed GIS support for dozens of street and roadway lighting projects and has collected and managed data for approximately 1.1 million street lighting assets since our founding nine years ago. Evary GIS Consulting has vast experience working on projects similar to this opportunity and has a proven track record of adapting custom solutions for each project's unique circumstances and goals. We pride ourselves on bringing a GIS industry-wide perspective to provide custom solutions for large street lighting data management efforts. Evary is a 20-person, certified Small Business Enterprise (SBE micro) with the California Department of General Services and a certified Small Local Business Enterprise (SLBE) with the City of San Diego, among others.

Key Personnel (Resumes are included at the end of this proposal)



Ari Isaac, GISP, Founder and CEO
Role: Principal
16 years of experience
Availability: 20%
ari@evary.com

Tyler Packett, Technology & Innovation Lead
Role: Manages Technical Approach, GIS Administrative Team, and IT Decision-Making
10 years of experience
Availability: 30%
tyler@evary.com



Kevin Veltz, GISP, Operations Lead
Role: Manages Work Product Delivery & Human Resources, Point of Contact for Clients, Manages Operations
9 years of experience
Availability: 20%

Carl Sorenson, GIS Administrator
Role: Designs and Deploys GIS Systems
5 years of experience
Availability: 30%
carl@evary.com



Tim McVey, Project Manager/GIS Analyst
Role: Performs Data QA/QC, Analysis, and Handoff
4 years of experience
Availability: 40%
tm@evary.com

Team of 11 Field Technicians
Role: Collect field GIS data in a safe, efficient, and accurate manner
Availability: available



Josh Edge, Project Manager/GIS Analyst
Role: Performs Data QA/QC, Analysis, and Handoff
4 years of experience
Availability: 30%
josh@evary.com



6

Ari Isaak, GISP



Company Role

Founder and CEO

Project Role / Focus Areas

- Provide Geographic Information System (GIS) expertise
- Assign and delegate GIS roles, providing strategic decision-making regarding team's resources

Education

- B.A. - Marine Conservation Biology, University of Redlands, Johnson Center - 2001

Registration / Certification

- Certified Geographic Information Systems Professional, GISP (#60066425)
- Certificate in GIS, University of California, Riverside (2004)
- Amazon Web Services Business Professional Accreditation (2014)

Professional Membership and Intellectual Property

- Chairmen's Roundtable
- San Diego Chamber of Commerce, Policy Committees
- Inventor for U.S. Serial No: 15/098,660 Geographic Control Management System

Experience Profile

Ari Isaak, GISP, is the Founder and CEO of Evari GIS Consulting, Inc., where he leads a team of 22. Ari is driven to communicate the value of geographic information systems (GIS) and streamline its implementation in order to provide value to clients in a variety of industries. He is a certified Geographic Information Systems Professional with over 15 years of experience in the field of geospatial analysis. Prior to founding Evari GIS Consulting, Ari Isaak served as GIS Coordinator for the Unified Port of San Diego, where his work was featured in ArcUser, a GIS industry magazine that reaches more than 450,000 users of GIS Technology. He has also presented at several industry conferences, won the Esri User Conference Hackathon in 2013 for developing a web and mobile application allowing users to submit and receive notifications about local 311 issues, and has a patent for an Internet of Things (IoT) solution for municipal street and roadway lighting. As a GIS Specialist for Helix Environmental Planning, Isaak became familiar with California's regulatory environment, creating GIS maps to support CEQA/NEPA reporting for a variety of biological and environmental planning efforts. Ari prides himself on being a clear communicator with a solid track record of successfully realizing efficiencies and driving common operating pictures at the enterprise level. He is inspired to support businesses and government agencies to find answers to their geography-based questions through the effective implementation of GIS.

Professional Experience

Evary GIS Consulting, Inc. 2016 - Present

- Founder and CEO

Evary GIS Consulting, Inc. 2009 - 2016

- Owner and GIS Administrator

New School of Architecture And Design 2012

- Part-Time Faculty: Master's Course GIS for Environmental Design

Unified Port of San Diego 2008 - 2011

- GIS Coordinator

Helix Environmental Planning 2005 - 2008

- GIS Specialist

Aerial Information Systems 2002 - 2005

- GIS Analyst

Selected Projects (continued on page 2)

As-Needed Civil Engineering and Consultant Services for Municipal Storm Water Program, City of San Diego Transportation and Storm Water Department, San Diego, CA (2015 - ongoing). Principal. Overseeing team; updating current GIS data of stormwater and drainage system using various resources including engineering drawings and site surveys; providing data collection and compilation services for hydrologic, hydraulic, green infrastructure, and water quality modeling.



I-405 Improvement Project from SR-73 to I-605, Orange County Transportation Authority, California (2016). Provided ongoing support during RFP response process for winning team; developed a GIS application that compiled data from a variety of sources (CAD drawings, GIS data, etc.) which allowed the prime to work through "what if" scenarios and immediately ascertain potential impact on areas based on parcel acquisition, or sewer line, water line, electric line, gas line movement.

Utilities Undergrounding Program Master Plan, City of San Diego Transportation and Stormwater Department, San Diego, CA (2015-Present). Led team in determining optimum overhead electrical line undergrounding priorities; determining engineering and construction costs and cost algorithms, criteria for determining new blocks based on location of primary and secondary circuitry, block prioritization criteria and a detailed QA/QC process. Project includes public outreach, coordination with the utility, and creating a draft and final study.

LED Streetlight Upgrade Program, Pacific Gas & Electric (PG&E), California (2015-Present). Led Evary GIS Consulting (Prime) to provide enterprise GIS services to support initial geocoding, field audit, outreach, and data reconciliation of approximately 390,000 municipal and PG&E-owned street lights; support the installation of 160,000 streetlights across PG&E's 70,000 square mile territory. Support over 50 named users leveraging Enterprise License Agreement (ELA), load balanced within the Amazon Cloud and leverage SQLServer and ArcGIS Server (Enterprise Advanced). Through the end of 2016, the project saved more than 25 million kilowatt hours of energy user per year.

Intelligent Node Deployment, City of San Diego, California (2017-Present). Supporting a \$6,940,000 smart city project to deploy smart sensors on street lighting assets throughout the City of San Diego; Evary GIS Consulting is responsible for selecting optimal smart sensor distribution throughout the city based on a series of factors including pedestrian safety, traffic, parking enforcement, and crime; the smart sensors form an Internet of Things (IoT) solution for monitoring and enforcing public safety and smart traffic solutions.

As-Needed Planning Consultant Services, City of San Diego Planning Department (2015-Present). Supported the creation of the Balboa Avenue Station Area Specific Plan; project supports transit-oriented development around the proposed Balboa Avenue Trolley station. Supported community outreach and participation, multimodal land use analysis, urban design, traffic impact study, visioning strategy, air quality analysis and biological analysis.

Chicago Smart Lighting Project, Chicago Infrastructure Trust, Chicago, IL (2017-Present). Developed scope and leads team to field audit and complete all related data management and IoT integration for 325,000+ street lights over the course of a 219 day period in support of an energy-saving streetlight conversion; Evary is providing enterprise GIS services, including atlas and data reconciliation, field audit services, reporting throughout the audit, integration with Silver Spring Network's adaptive lighting control system, and final data submission for the largest street lighting upgrade project in the nation; Completing field work in high-crime hotspots; Upholding commitment to hiring more than 60% Minority Business Enterprise/Women Business Enterprise (MBE/WBE) staff.

Selected Publications

1. Wiley-Blackwell Press (2010). *Interacting with Geospatial Technologies*. Picture credits p. 235.
2. "GIS Gives Port a Common Operating Picture," ArcUser Article Winter, 2010 p 30-33. Featured in an article written by ESRI, highlighting enterprise GIS deployment at the Port of San Diego.

Selected Conference Proceedings and Presentations

1. "Creating an Enterprise GIS at the Unified Port of San Diego" at 2000 ESRI User Conference: Esri User Conference presentation at the Managing and Expanding an Enterprise GIS Session

Other Relevant Experience

1. Winner of Esri User Conference Hackathon, July 2013. Developed a web and mobile application which allowed users to submit and sign-up to get notified of local 311 issues.
2. Winner Exemplary Systems Award 2014. California Geographic Information Association for San Diego Street Light Project
3. San Diego Chamber of Commerce, Policy Committees. Infrastructure, Housing, & Land Use March 2012-December 2017 Energy & Water December 2017-Present Voting member, providing guidance on the Chamber's official policy.

Tyler Packett



Company Role

Technology and Innovation Lead

Project Role / Focus Areas

- Lead Technical Team on delivery of scope of work
- Identify technical challenges and gaps
- Advise team on best-management practices for utilization of GIS and related technologies

Education

- M.S. - Homeland Security, GIS Focused, San Diego State University - 2014
- B.A. - Geography, GIS and Decision Support, University of Hawaii - 2011

Registration / Certification

- Certified ArcGIS Desktop Professional 10.3 (2015)
- Emergency Medical Services Leadership Recognition (2012)
- Geospatial-Intelligence Agency Graduate Scholarship Award

Professional Membership

- All Hazards Disaster Expert Group
- Haiti MPHISE (Medical and Public Health Information Sharing Environment): Contributor: Geospatial analysis and mobile application development.
- Resilience System: System Administration & GIS support.
- Global Disaster Forum: Website Developer and content manager

Experience Profile

Tyler Packett, is Evary GIS Consulting, Inc. (Evary)'s Technology and Innovation Lead. He provides guidance to Evary's internal IT team comprising of one GIS Administrator, 3 GIS Analysts, and 2 Project Managers. Tyler has 10+ years of experience working with ESRI ArcGIS and associated extensions, and 4+ years of experience in the administration of City Enterprise-level GIS environments. He is highly skilled at providing visual representations of spatial and non-spatial data in order to allow for clearer communication, stronger visual engagement, increased understanding, and faster/better decision making. Experienced in development and support of data visualization techniques, tools, and analytics using JAVA, JavaScript, SQL and Python Scripting. Tyler is a problem solver with proven experience working within tight deadlines. Some recent recognitions and awards that Tyler has earned include an Emergency Medical Services Leadership Recognition (for creating a series of Skilled Nursing Facilities maps/datasets critical for disaster preparedness), and the GeoSpatial Intelligence Agency Graduate Scholarship Award for work done using advanced GIS and remote sensing techniques to determine the vulnerability of Hawaii communities road infrastructure. Tyler is proud to have employed GIS technology in order to contribute to resilience and disaster relief systems. As an active member of the All Hazards Disaster Expert Group, he focused on developing effective, agile responses leveraging government, NGO, and business sectors. He is inspired to empower businesses and governmental agencies to arrive at better decisions through the effective implementation of GIS, data visualization, and analysis.

Professional Experience

Evary GIS Consulting, Inc. 2018 - Present

- Technology and Innovation Lead

City of San Diego via Quartic Solutions LLC 2014 - 2018

- Enterprise GIS Administration

Resilience System - Health Initiative Foundation Inc. 2009 - 2015

- Digital Communications, GIS Visualization and Web/Mobile Mapping Development

County of San Diego Health & Human Services 2013 - 2014

- Emergency Medical Services
- Spatial Epidemiology Analyst - Graduate Intern

HALO Counter-Terrorism Summit 2012

- Technical Support

College of Business and Economics, University of Hawaii, Hilo 2008 - 2012

- Computer Technical Support and Software Training

Homeland Infrastructure Foundation 2010

- Working Group Support



2018 - Present Innovation and Technology Lead. Reporting to the Chief Executive Officer (CEO), the Technology Lead is responsible for all technology solutions and innovation efforts. He is a member of Evary's Leadership Team, alongside the Financials Lead, Business Development Lead and Operations Lead. The Technology Lead is responsible for proactively scaling Evary GIS Consulting's software and hardware resources to meet the current and future demands of the business and its clients. The Technology Lead is responsible for managing a comprehensive array of services and programs. The Technology Lead reviews on an ongoing basis the services being offered and works to develop new programs/initiatives as needs emerge. The Technology Lead directly manages the Evary Technical Team.

2014 - 2018 Enterprise GIS Administration and Development Quartic Solutions LLC. Maintained Enterprise GIS support and administration for cities in California. Managed the GIS systems for the City of San Diego as well as administered their ArcGIS Online portal and user licensing for the City GIS staff. Developed custom GIS applications for clients and provided expertise on the integration of GIS in city projects.

2009 - 2018 Digital Communications, Visualization and Web/Mobile Mapping Development Resilience System - Health Initiative Foundation Inc (HIFI) Focusing upon emerging technology for civil society involvement in disaster risk reduction and disaster response, developing open source mapping platform using Openlayers and Drupal CMS. Backend architecture development for forms and questionnaires and their integration into mobile and desktop mapping applications.

2013 - 2014 Graduate Intern Spatial Epidemiology Analyst County of San Diego Health & Human Services - Emergency Medical Services Develop mapping products using ESRI ArcGIS (10.1) to meet the needs of San Diego County HHS-EHS and other end users in San Diego County. Skills used include: Creating, formatting and geocoding of data sets; SQL query creation and Python scripting - Troubleshooting of issues and evaluate solutions as needed; Documentation of solutions through step-by-step instructions and screenshots so work can be replicated by others; Meet and communicate directly with clients - Participate in weekly staff meetings; Self manage to meet deadlines.

2011 Transportation Infrastructure Vulnerability Analysis Produced unique disaster planning road network and resources for the County of Hawaii / UH/H Geography Dept. Used sophisticated GIS products including ESRI ArcMap Network Analyst, County of Hawaii's road network, road data from Openstreetmap; Developed and provided product able to provide on-the-fly analysis of best option traffic route during catastrophic failure in one/many of 400+ bridges located on the Island of Hawaii's road system.

2010 HIFIELD Support Homeland Infrastructure Foundation-Level Data Working Group conference technical support: Provided internet access support for new user account, profiles and password issues; Provided audio and visual presentation technical support.

2010 SDSU Immersive Visualization Center (Viz Lab) Asia Project Support - Produced Instructional Documentation for software; Produced User Interface design for handheld applications; Code (Objective C) for iPhone mobile GIS product; Support for ad hoc projects between Vietnam and Viz Lab with focus upon climate change.

2010 Disaster Scenario Development and Visualization - Developed, strategized and produced geospatial products for a dirty bomb disaster scenario in New York City. - Produced visualization map product used in DHS grant application involving SDSU, Global Health Initiatives, Inc and others. It has subsequently been used in presentations by NY Hospital Queens, and by Dr. Mike McDonald of Global Health Initiatives, to illustrate disaster scenarios and the location of mobile radiation exposure triage care units.

2009 SDSU Immersive Visualization Center - Disaster scenario development support for Exercise 24 California/Mexico at SDSU Viz Center; Fire mapping; Technical data and information servers, networking, and display support; Website and map development and content management for InRelief.org; H1N1 mapping analysis, information gathering and analysis for InRelief.org; Technical support for US/Mexico Pandemic Awareness Conference.

Selected Conference Proceedings and Presentations

1. ESRI User Conferences: Participant
2. Technical support for US/Mexico Pandemic Awareness Conference.
3. Homeland Infrastructure Foundation-Level Data Working Group conference technical support:

Kevin M. Voiz

kevin@sdgis.com
<https://www.linkedin.com/in/kvoiz/>
(858) 256-6448

I'm passionate about finding optimal solutions to complex issues. My curiosity, enthusiasm, and background in technology, geographic information science, computer programming, and communications empower me as an effective developer, leader and problem solver.

Skills

GIS, Python, SQL, ArcGIS Enterprise, github, Data Analysis, C#, IIS, MS Access/Excel/Word, Strategy, Communications, Self-Starter, Detail-Oriented, Collaboration, HTML, CSS, JavaScript

Operations Lead – Evari GIS Consulting, Inc., San Diego, CA
(9/2018 – Current)

Manages Evari's day-to-day operations, interacts directly with clients ensuring successful project outcomes, and leads Project Management and GIS Analyst staff. Reports directly to Evari's CEO and collaborates closely with Evari's Technology and Innovation Lead. Combines technical knowledge and management skills to ensure Evari's projects meet or exceed expectations.

Key Responsibilities

- Main point of contact for clients
- Allocates staff to projects based on skills and availability
- Coordinates with Technology Lead in order to support and implement Enterprise GIS systems
- Involved with each step of project life cycle
- ArcGIS Online Administration
- ArcGIS Server Management support

GIS Programmer / Analyst - Quatic Solutions, San Diego, CA
(9/2017 – 9/2018)

Primarily assist municipalities by performing highly complex professional duties in support of enterprise and departmental GIS databases and GIS capabilities. Use a wide range of tools and software, and extensive analysis and adaptation, to meet customer requirements.

Regularly serve as project lead in design, testing, programming, implementation, deployment, and maintenance of large-scale GIS applications, tools, and associated databases. Active in evaluating GIS technologies, solutions, and the development of GIS policies, standards, and procedures.

Key Responsibilities

- Enterprise GIS application development, support, and maintenance
- Involved with each step of project life cycle - change assessment, analysis and design documentation, development, testing, IST, UAT, implementation, deployment, monitoring, reporting, and support
- ArcGIS Online Administration
- ArcGIS Server Manager
- REST services

Lead Tactical Analyst - Deccan International, San Diego, CA
Data Analyst (1/2011), Senior Analyst (7/2012), Lead Strategic Analyst (10/2014 - 8/2016), Lead Tactical Analyst (9/2016 - 8/2017)

Worked creatively with project managers, clients, and engineers to solve critical technical issues and curate and deliver optimal solutions. Transformed data and performed analytics on large databases, and enhanced and developed software to better inform key decision-makers. Continually involved with improving, enhancing, and evolving various software, and regularly relied upon to focus on the most critical, highest-priority projects.

Responsible for training, developing, and leading teams. Supported colleagues by recommending best methods and practices, and regularly created and developed training materials and technical documentation.

GIS Analyst/Research Assistant - UMN Dept. of Agronomy and Plant Genetics, St. Paul, MN
(2/2010 - 8/2010)

Provided mapping and consultation services. Involved with many research projects by creating maps and performing spatial analyses on sampled agriculture with regards to various environmental factors. Produced maps for publications, performed exploratory analysis, and mapped data samples globally to better understand and clearly demonstrate how population genetics are correlated with the environment's bioclimatic variables and geography.

GIS/Planning Intern - City of Huntington Beach, Huntington Beach, CA
(10/2009 - 04/2010)

Assisted Planning/GIS Dept. with numerous city-wide GIS mapping and planning functions. Updated building codes to latest regulations, responsible for addresses and street names, created fire and police maps for routing, and developed the City's Green Map which included bus routes, recycling centers, bike routes, etc.

Evari Reference Projects and Contacts

Multi-Municipality Street Lighting Projects

Cape Light Compact, Cape Cod Massachusetts (subcontractor to Siemens Road and City Mobility) – StreetLight Energy Management Services – October 2013 – January 2014

The StreetLight Energy Management Services project for Cape Cod and Martha's Vineyard, MA was awarded to Siemens Road and City Mobility, Billerica, MA, who subcontracted part of the work to Cape Light Compact, Barnstable, MA and Evari GIS, San Diego, CA. The team worked with participating towns and fire districts in Cape Cod and Martha's Vineyard, MA to implement energy efficient streetlights. They converted 17,000+ municipally owned HPS, mercury vapor and metal halide streetlights to BetaCree LED fixtures. This project saved the participating towns and fire districts more than \$800,000/year in electric bills and maintenance, at no cost to individual municipalities, while meeting or exceeding current lighting levels. LED streetlights use 70% less energy and last longer than the old HPS streetlights.

Evari GIS configured a system for Evari field audit staff to collect data about streetlight infrastructure throughout Cape Cod and Martha's Vineyard, MA. Evari GIS also provided support to Siemens installers to convert the existing 15,588 HPS streetlights. The data gathered is being used as a key component of an Investment Grade Audit (IGA) which guarantees energy and cost savings to the Cape Light Compact. Upfront detailed and accurate inventories of streetlights are vital to identifying guaranteed cost savings as part of the IGA. Evari's team audited 17,431 lights and they collected light type, model, route and pole numbers. The route and pole numbers were join to existing data from Nstar (utility) making this database much more robust. Even with harsh weather conditions, lack of accurate location data and long commutes, this project was completed on-time (January, 2015) and on-budget. The web GIS application Evari created continues to be used by many of the participating municipalities.

The cities included in this project are listed below:

- Hyannis
- Dennis
- Sandwich
- Mashpee
- Wellfleet
- Provincetown
- Chatham
- Martha's Vineyard
- Orleans
- Brewster
- Barnstable
- Falmouth
- Bourne

Consultant - Design Services - DVD Landscape Architects Inc., Costa Mesa, CA
Computer Tech/Head of Marketing (1/2002 - 8/2008, 9/2009 – 05/2010), Consultant (9/09 - 5/10),

Provided design support to architects using AutoCAD. Mapped and maintained project entities, extents, updates, modifications, and layouts. Plot/print, designed irrigation/construction/planting details, and plan specifications. Photoshop, Publisher, internet research and answered phones. Repaired and fixed computers, networks, printers, plotters and scanners. Designed and created comprehensive picture database. Helped design, manage, and maintain company's website. Created quarterly newsletters and project flyers.

Bachelor of Science In Geography, Geographic Information Science (Spring 2009)
San Diego State University

Certificate in Geographic Information Systems (Spring 2009)
SDSU Departments of Geography and Computer Science

Suffolk University Madrid Campus, Madrid, Spain - (Studied abroad Fall 2006 semester)

Tracing the Geographic Origins of Weedy Ipomoea purpurea in the Southeastern United States
Zhou Fang; Ana M. Gonzales; Mary L. Durbin; Kapua K. T. Meyer; Beau H. Miller, Kevin M. Voiz; Michael T. Clegg; Peter L. Morrell
Journal of Heredity 2013; doi: 10.1093/hered/est046

Combined various aspects of computer science with geographic information systems (GIS), remote sensing, cartographic visualization, spatial statistics, and global positioning systems (GPS) in studying and solving geographical problems

- Harwich
- Yarmouth

Reference: Clint Schuckel, Operations Manager at Siemens. clint.schuckel@siemens.com

Western Riverside Association of Governments (WRCOG) Streetlight Acquisition Assistance and Lighting Design Standards for Western Riverside County (#STR-01) RFP – January, 2016 – Current Following a Professional Services Agreement with WRCOG to provide virtual audit services of over 58,000 owned and operated LSI streetlight poles in the WRCOG Subregion, Evari is currently working to provide assistance with the acquisition of Southern California Edison (SCE)-owned streetlights in much of Western Riverside County, and development of a regional lighting design and implementation strategy. Under this contract Evari is providing GIS support to:

- Assist WRCOG and its member jurisdictional staff with all associated schedules and processes for the completion of the SCE purchase and sales agreement, and CPUC code 851 applications and approvals.
- Assist WRCOG staff and other consultants with integrating all regulatory, engineering, financial and feasibility models, reports, and tasks into a comprehensive implementation plan to be used for the financing and operations, and maintenance sections of this program.
- Assist WRCOG staff with developing a regional lighting recommendation with alternatives accounting for Palomar dark sky requirements, residential, commercial, and other under- and over-lit areas to utilize when retrofitting. This must include competitive bid information for each design.
- Evari is designing an audit and installation support system which will be used by contractors WRCOG has specified.
- Both the initial and current contracts were competitively bid.

The cities included in this project are listed below:

- Eastvale
- Hemet
- Jurupa Community Services District
- Lake Elsinore
- Menifee
- Moreno Valley
- Murrieta
- Perris
- San Jacinto
- Temecula
- Wildomar

Reference: Tyler Masters, Program Manager Western Riverside Council of Governments. 951-203-6281

Energy Efficient Streetlight Projects in Many Cities throughout Westchester County, Subcontractor to Lumen Light Solutions. June 2015 – June 2016

Evairi completed GIS desktop work, field survey, and installation support across many cities in the county of Westchester in support of LED Conversion. The cities included in this project are listed below:

- Port Chester
- Mt Kisco
- Peekskill
- Mamaroneck
- Ardsley
- Dobbs Ferry
- Buchanan
- New Rochelle
- Elmsford
- Irvington
- Village and town of Ossining
- Mt. Pleasant
- Bedford
- Greenburgh
- Hastings-on-Hudson
- Tarrytown

Other Street Lighting Projects

Evairi GIS Consulting Streetlight Data Management Statement of Qualifications



Evairi GIS Consulting, Inc. (Evairi) is the leader in implementing mobile and web Geographic Information Systems (GIS) technology solutions for streetlight conversion/retrofit projects. Streetlights are woven throughout a community and therefore municipal streetlight data is effectively and intuitively managed from a map based interface. A custom web-based GIS is an indispensable tool to collect, manage, query, and report data about streetlight assets. When it comes to streetlight conversions and retrofits, the use of mobile GIS technology is a game-changer.



Evairi tailors custom solutions to project requirements and specific contractor workflows. To date, Evairi has provided custom solutions to assess, inventory, and/or convert over 1 million street lights. Evairi has worked on small 400 light inventories in South Ogden UT and provided enterprise GIS services for audit and installation of 100,000+ lights spread across Pacific Gas and Electric's 70,000-square-mile service area in northern and central California.

Evairi has been in business since June 2009 and was founded with the purpose of providing high-quality GIS services on municipal work. Through a clear understanding of project specific requirements and industry-standard best-practices, Evairi focuses on aligning a project's business needs with effective implementation of GIS. Evairi provides custom systems, services, and products which gives our clients straightforward and intuitive ways to interact and visualize geographic data. This brings

insight and value to key decisions and streamlines communication. Evairi primarily leverages the Esri Technology Stack (ArcGIS) and the Amazon Web Services Cloud Computing platform to deliver solutions for the diverse needs of our clients.

Chicago Infrastructure Trust Chicago Smart Lighting Project – June 2017 – Present

Evairi GIS Consulting is subcontracted to complete the initial field audit and all related data management and IoT integration on 325,000+ street lights over the course of a 219 day period in support of an energy-saving streetlight conversion. Evairi is providing enterprise GIS services, including atlas and data reconciliation, field audit services, reporting throughout the audit, integration with Silver Spring Network's adaptive lighting control system, and final data submission for the largest street lighting upgrade project in the nation. Additionally, Evairi is responsible for developing a standard operating procedure for assessing lighting infrastructure conditions, and carrying out this assessment for all infrastructure. Evairi staff is field checking approximately 327,800 street lights throughout the city of Chicago. This project is on budget, on schedule, and ongoing. Obstacles Overcome: Completing field work in high-crime hotspots; Upholding commitment to hiring more than 60% Minority Business Enterprise/Women Business Enterprise (MBE/WBE) staff; Maintaining highest levels of accuracy during accelerated timeline.



City of Phoenix Energy Saving Street Light Conversion Project – April 2017 – Present
 Evari GIS Consulting was subcontracted to complete the initial audit, data management, and custom web development on a 104K streetlight conversion project in Phoenix, Arizona. For this project, Evari is providing support and working with adjacent municipalities utilizing a piggy-back clause. Evari audited both Arizona Public Service Electric Company (APS) and Salt River Project Power and Water (SRP) streetlights. The audit portion of the project is complete, and installation is on budget, on schedule, and ongoing. When completed, the approximately 104K streetlights in the public roadway will feature an energy efficient 2,700 Kelvin LED fixture. With the substantial savings in energy and reduced maintenance costs associated with LED, the city expects to achieve a total net savings of approximately \$22 million through 2030.



City of Phoenix

Obstacles Overcome: Completing field work in extreme heat conditions, under accelerated timeline.



City of Santa Fe, Streetlight Inventory – January 2018

Evari GIS Consulting was the prime contractor, responsible for conducting a detailed field inventory and assessment of existing street lighting in the City of Santa Fe, NM. Evari collected GIS data detailing the streetlights' location, relevant characteristics, and condition. Upon completion the assessment, Evari provided the city with a spreadsheet, updated GIS database, and reconciled utility data. Click [this link](#) to watch a video testimonial about this project.



City of San Diego, Local Government Partnership (Environmental Services Department) with funding from San Diego Gas and Electric (SDG&E). After working as a subcontractor on 2 street light conversion jobs, the City of San Diego Environmental Services Department contracted directly with Evari to provide staff augmentation. Evari is in the second year of this annually recurring contract. Under this contract, Evari provides Investment Grade Audit services, Facilitate the City pursuit of funding a release of work to be accomplished, Update SDGE and GE LightGrid System with post construction data, Geospatial photometric analysis, Equitable Lighting Analysis and lastly represent City of San Diego interests at conferences and decision making bodies. Evari will provide mobile GIS deployment, training and data management services to City contractors during work to convert the 50+ decorative fixture types, lights on series circuits and other lights which were not converted as part of phase 1 and 2. Evari provides a streamlined approach to submit data to secure the new metered rate change after being added to the meter through GE LightGrid. Evari also works closely with GE in their deployment of an automated parking management app through San Diego's streetlights. The Phase 2 portion of this project won a 2016 American Public Works Association "Project of the Year".



Pacific Gas and Electric (PG&E) Contract Work Authorization in support of the LED Streetlight Upgrade Program. Evari GIS Consulting is the prime contractor under a 2.5 year multi-million dollar contract in support of PGE's LED Streetlight Upgrade Program. Evari is providing enterprise GIS services to support initial geocoding, field audit, outreach, installation and data updates to get new rates. Evari staff is field checking approximately 300,000 municipal and PG&E owned street lights and supporting installation of 160,000 street lights across PG&E's 70,000 square mile territory. Evari supports over 50 named users, including management, field audit review, and 3 distinct installation subcontractors contractors. Evari



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provides on-site training and as-needed on-call support for all users. The system leverages PG&E's Enterprise License Agreement (ELA), is load balanced within the Amazon Cloud, and leverages SqlServer and ArcGIS Server (Enterprise Advanced). Through the end of 2016 the project will save more than 25 million kilowatt hours of energy use per year. The project was initially budgeted for \$60M, but is on track to cost \$37.4M by the time conversions are completed in early 2018. This project is ongoing.

Western Riverside Association of Governments 1) Professional Service Agreement for Streetlight Pole Audit and 2) Streetlight Acquisition Assistance and Lighting Design Standards for Western Riverside County, subcontractor to Southern Contracting San Marcos CA office (2 Contracts). Evari GIS provided the web based GIS for Southern Contracting to accomplish a representative field audit as well as an in office update of over 53,000 street light points across 17 municipalities in Western Riverside County. The system enabled desktop editors to collect and correct data from Southern California Edison (SCE). The light location, model, type, wattage, pole height, and mast arm length were updated. The Southern team also identified lights which are in the SCE bill, but not in the field, and visa-versa. In the second contract Evari is part of the Lighting Design team, with Jim Banya (Burnett Consultancy) and Chris Monrad (Monrad Engineering). Our responsibilities are to understand each municipality's priorities and apply the IDA – IES Model Lighting Ordinance. Evari is responsible for leveraging the corrected SCE street light data as well as other relevant data, including road categories and land use, within a web based GIS to classify the municipality into the appropriate zone. The first contract was completed on time and on budget. The second contract is underway.

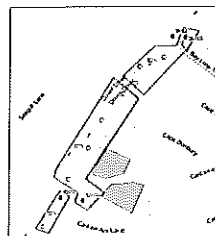


City of Tucson Street Lighting Project - Request for Preliminary Audits, subcontractor to the Ameresco Tucson AZ office. Evari GIS Consulting completed data reconciliation, field audit, and innovative design of over 20,000 street light conversions across the City of Tucson Arizona. The data collection and analysis resulted in a guaranteed energy savings of \$180,000/month in electrical costs while reducing the city's overall lumens by 62%. Evari GIS Consulting worked closely with Ameresco energy engineers to calculate replacement fixture based upon the road type (intersection or road segment), the model, type, and wattage of the existing fixture, the roadway classification, lane numeration, the light layout (staggered, opposite, median mounted or on one side of the road), average pole spacing, as well as whether the light fixture was over a median or right turn lane. The field audit, baseline energy calculations, and guaranteed energy calculations have been completed. Evari will be providing a system and as-needed on-call support throughout the installation as well as final data products. This project has aggressive energy efficiency and dark skies compliance priorities. This project is ongoing, although the majority of Evari's responsibilities have been completed. **Obstacles Overcome:** Non on-to-one proposed fixture, Field auditing in extreme heat, Additional data collection and design work, auditing vast areas without streetlights.



City of San Bernardino, Santa Barbara, and Newport Beach CA L53 Meter Association Project, subcontractor to The Energy Coalition Irvine CA office.

Evari GIS Consulting provided geographic analysis of customer-owned metered streetlighting, under the Southern California Edison (SCE) L5-3 Rate Schedule for the cities of Newport Beach, San Bernardino, and Santa Barbara. The goal is to associate street lights with adjacent meters by analyzing street light wattage, annual load watts reported from the meter, and meter overhead. Evari GIS Consulting drew polygons around each meter encompassing the associated streetlights. A custom tool was developed to calculate the percentage of annual energy used by the associated meters. This project was completed on time and on budget. **Obstacles Overcome:** L53 streetlight outages, custom tool development.



City of Oroville CA Turnkey LED Replacement, Subcontractor to PGE/Advanced Lighting San Francisco CA office. Working directly with PGE Contractor, Evari GIS provided mobile GIS data management support for installation of 693 cobra head replacements. Evari used data provided after a PGE audit to populate a web/mobile GIS. Evari staff outfitted and trained PGE contractors with iPads to edit the data as they converted lights. In real time, project managers from PGE could view the installation progress. Data was exported on a nightly basis into an Excel file which included all data and the same data in the PGE Street Light Conversion Worksheet format. This streamlined the process of entering and receiving lower tariffs and rebates. This project was completed on-time and on-budget. **Obstacles Overcome:** Utilizing PGE audit data, detailed formatting in PGE Street Light Conversion Worksheet.



City of Binghamton NY Performance Based Energy Efficient Streetlighting and Water System Improvement Project, Subcontractor to Johnson Controls. Working with Johnson Controls on the streetlighting portion of the project, Evari GIS completed a full audit of all City streets within a 2 week timeline. This \$4M project was estimated to have 6600 cobra heads and 400 decorative lights. Ultimately Evari found 6542 cobra heads and 938 decorative fixtures. The uncovering of many decorative fixtures not only provided for better lighting design by Johnson Lighting Designers, but enabled Johnson to adjust the project to account for the underestimated decorative fixture count. Evari handed off the data in a format to be easily used with Johnson Controls' custom developed workflow management system, JC Worksite. Installation is currently underway and is more than 50% complete. This project was completed on-time and on-budget. **Obstacles Overcome:** Wide range of decorative models, accelerated time-line, background Checks for all Evari Staff.



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AMERESCO PERFORMANCE CONTRACT for the City of Fall River Massachusetts, Subcontractor to Ameresco Inc Framingham MA Office. Under a wide ranging Energy Performance Contract, Ameresco hired Evari GIS Consulting to 1) reconcile NSTAR utility records, 2) field survey approximately 6423 street lights within City right-of-ways, 3) provide web based



GIS throughout the conversion to LED, and 4) preparation of all rebate documentation and final data submission. Evari field auditors confirm/collect/correct wattage, fixture type, mast length, pole type, and any issues related to the condition or obstacles to conversion. Road type is programmatically calculated based upon the closest US Census Road Centerline to the streetlight. Road classifications leverages the MAF/TIGER Feature Class Code (MTFCC) Definitions. This project is ongoing. **Obstacles Overcome:** Submission of all Rebates, auditing high crime neighborhoods at advantageous times.

JCLS HDOT Highways Street Light Audit for the Hawaii Department of Transportation (HDOT) Subcontractor to Johnson Controls Lighting Services Honolulu HI office.

Evari GIS Consulting won a competitive RFP released by Johnson Controls Lighting Solutions to



complete an Investment Grade Audit for Street lighting managed by the HDOT on the Islands of Oahu and Maui. A change order extended the scope to include Lanai and Molokai. This project was on a strict accelerated timeline of 6 weeks. Evari project management applied for and successfully secured an Occupancy and Use of State Highway Right-of-Way permit from HDOT. Evari staff also wrote a Traffic Safety Plan with input and approval from JCLS and Safety Systems and Signs Hawaii Inc (SSSH), a



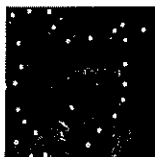
professional traffic control provider in Honolulu. Street centerline GIS services were used to manage where appropriate traffic control efforts were needed. Shadow vehicles with mounted arrow panels, flaggers, truck mounted attenuators, and hired police detail as well as a series of safety practices on the Evari survey vehicle were leveraged to in order to ensure compliance with the HDOT ROW Occupancy Permit and Internal Evari safety standards. This project required field checking lighting inside tunnels on Oahu and Maui. The project also included a "go-back" period where Evari staff accompanied the electrical contractor to re-audit lights which did not have proper NEMA stickers displayed. Lights within a 100ft buffer of protected turtle nesting populations were identified. Ultimately the audit concluded that there were 17,682 street lights, instead of the originally estimated 15,600 lights, across the 4 islands. The project was completed on-time and on-budget. **Obstacles Overcome:** Acquiring permits to work on highway shoulder, field auditing within tunnels at night (safety), accelerated project timeline, bonding, payment schedule/cashflow, inter-island travel logistics, Hawaii general excise tax.

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Last updated: May 3, 2018

AMERESCO PERFORMANCE CONTRACT for the town of Ashland Massachusetts Subcontractor to

Ameresco Inc Framingham MA Office. Under a wide ranging Energy Performance Contract, Ameresco hired Evri GIS Consulting to survey the 787 street lights within the City's ROW, reconcile records with NSTAR bills, deploy an application to manage the installation effort and prepare all applications and documents needed to acquire rebates. On this project we implemented a data logger which recorded the location of our audit team every second. This data is updated nightly and shared across all stakeholders. Throughout a detailed field audit, Evri staff found 817 streetlights. This project was completed on-time and on-budget. Obstacles Overcome: Implementing GPS Trail technology, weather.



PROFESSIONAL SERVICES AGREEMENT FOR DESIGN BUILD AND PROJECT MANAGEMENT SERVICES for the City of Oceanside CA, Subcontractor to Southern Contracting of San Marcos CA. Evri teamed with Southern Contracting to assist in converting 7,703 HPS and MV street lights to LED. The city expects a

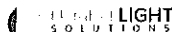
50-percent energy savings from the installation of the new lights, plus an additional 20 percent from adaptive control units. This project required Evri staff to geocode the location of lights based upon SDGE bills. The process includes cleaning the data so an intersection can be calculated, geocoding the intersection, and moving the point to the proper location. This data will be shared over a mobile and web based solution for Southern Contracting to manage project workflow in real time. Daily formatted spreadsheets are exported for contractor payment and rebate processing. This project requires the collection of latitude, longitude and elevation of each streetlight pole.

Evri accomplished this by interpolating 2ft surface contours to obtain elevation values for each street light. The City of Oceanside won SDGE's 2015 Energy Champion award in part due to the success of this project. This project was completed on-time and on-budget. Obstacles Overcome: Elevation calculations, Integration with GE LightGrid Controls system.



PERFORMANCE BASED CONTRACT TO REPLACE CURRENT HID STREETLIGHT SYSTEM WITH AN ENERGY EFFICIENT COBRA HEAD STREETLIGHT SYSTEM for City of Yonkers NY, Subcontractor to Lumen Light Solutions LLC of Yonkers NY. Lumen Light Solutions LLC, a joint venture

of Yonkers Contracting and Verde Electric is converting 12,000 cobra head streetlights to Philips LED fixtures. Evri GIS was contracted to provide an enterprise tier GIS with mobile data access to survey and convert 12,000+ streetlights in the City of Yonkers, New York. Evri deployed a web and mobile GIS to collect data from Evri streetlight auditors and Lumen installers in the field. Evri's goal was to fulfill the data collection requirements identified in the RFP under the Comprehensive Energy Audit, as well as provide a project management tool for stakeholders from Lumen Light Solutions and the City of Yonkers. Evri auditors drove every street at night to collect streetlight data regarding model, type, wattage, location, whether the light was working or not and potential obstacles to streamlined conversion. Due to Hurricane Sandy funding requirements, specific streets needed to be audited first. Evri staff worked alongside Lumen work crews to collect data regarding streetlights which were not available due to NEMA sticker being absent. Web and mobile applications were used to perform the survey work and facilitate construction workflow and reporting. The survey effort is the basis for a Comprehensive Energy Audit which, when compared to current baseline energy, calculate guaranteed savings for the City of Yonkers. This project



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Last updated: May 3, 2018

Identifying guaranteed cost savings as part of the IGA. Evri audit teams collected route, pole numbers, type, and model. Route and pole numbers join to existing data from Nstar (utility). Evri will also provided support for Siemens installers to convert lights and get paid throughout the project. This project was completed on-time and on-budget. Through a change order requested by many municipalities the web GIS is kept on. Obstacles Overcome: Weather, lack of accurate location data, long commute times to some areas.

RESTORATION OF HIGHWAY LIGHTING ON VARIOUS PARKWAYS for the New York State Department of Transportation (NYSDOT), Subcontractor to Verde Electric of Mt. Vernon NY. Verde Electric had a

\$2.5M project to install 1,200 street lights, 49 lighting service cabinets, 49 points of service, and 25 pull boxes for the NYSDOT along highways in Westchester County. Evri GIS leveraged a connected editing environment with a professional grade global position system (GPS) to increase spatial accuracy and meet the strict data requirements outlined in the RFP for these 4 asset types. An empty database was provided upfront by NYSDOT to be filled in with spatial and attribute data. Evri staff worked alongside Verde work crews to identify which assets had been installed through the project and what attribute information. The project was completed on-time and on-budget. Obstacles Overcome: Survey Grade GPS requirement.



POST TOP PEDESTRIAN STREETLIGHT CONVERSION PROJECT DESIGN-BUILD CONTRACT (Phase 2) for the Public Works department City of San Diego CA. Subcontractor to Southern Contracting of San Marcos CA. The Southern\Evri team was chosen to convert 3,000 250W HPS posttops and gateway

fixtures to GE's 81 watt Avery Post Top lights dimmable controlled symmetrical and asymmetrical LEDs. This new streetlight inventory will be on GE's Light Grid Adaptive Controls system. Evri provided support to GE for planning and implementation. This \$5.2M will adjusted the look and feel of downtown San Diego. Evri deployed a system for Southern work crews to collect data regarding tenon sizes, the location of lights on series circuits, and other data key to ordering, installing, and management of the job. Work crews were outfitted

with mobile devices to edit data throughout the installation. This data is shared in real time with city inspectors and city project managers through city mobile devices and a read-only mobile configuration. Building on Evri/Southern's phase 1 teaming successes, Evri bid exclusively with Southern Contracting against 7 of the region's top lighting contractors. This project was completed on-time and on-budget. Obstacles Overcome: Support for unexpected contractor tenon survey, integration of data with GE LightGrid CMS.



STREETLIGHT CONVERSION PROJECT DESIGN BUILD CONTRACT for the Environmental Services Department of City of San Diego CA, Subcontractor to Southern Contracting Inc of San Marcos CA. Evri GIS completed a 2-year, \$16.03M project to convert 34,600 L52 cobra head streetlights from HPS and LPS to 12 different GE Induction fixtures across 325 square miles in the City of San Diego. The project was in compliance with groundbreaking dark sky initiatives where 3,000 kelvin fixtures were installed within a 30-35 mile buffer of local observatories. Evri audited the 20,000+ lights outside of the project scope; i.e. non-cobra models, within city owned parks and within the 30 mile buffer of observatories. Data collected in the field was reconciled with the city SAP inventory and SDGE (utility) inventory. This process culminated in a dataset where all municipal stakeholders could refer



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won NYCOM 27th Annual Local Government Achievement Award and was selected as an anchor project under the New York State Climate Smart Communities program. This project was completed on-time and on-budget. Obstacles Overcome: Lack of NEMA stickers, night audit, high crime areas, order of audit.

STREETLIGHT INVENTORY for South Ogden City UT. Subcontractor to Siemens Road and City Mobility

Anaheim CA office. Evri GIS was contracted by Siemens Mobility, Inc. to survey roughly 600 streetlights in the City of South Ogden, Utah.

Evri GIS was responsible for setting up the IT system that facilitated the mobile field data collection and conducting the audit. Several elements of streetlight data needed to be collected and linked to GIS point-location data generated by GIS. Evri GIS staff performed the mobile data collection using iPad tablets in the field. Evri GIS accomplished this effort with no initial data. Upon completion of this work, Evri GIS confirmed that the City of South Ogden had underestimated their streetlight assets by one third. This project was completed on-time and on-budget.

Obstacles Overcome: no initial data, Travel logistics.



ENERGY SAVINGS PERFORMANCE CONTRACT FOR STREET LIGHTING SYSTEMS for the City of Huntington Beach, CA. Subcontractor to Siemens Road and City Mobility

Anaheim CA office. Evri determined and documented the process to identify 100 representative poles within the City of Huntington Beach.

Representative poles were based on the decade housing tracks were built. Evri GIS designed a flexible system to empower Siemens Road City Mobility staff to update data in the field related to fixture age and condition to inform the value of streetlight poles, arms, fixtures, and associated appurtenances. Data collection included pole type, luminaire arm type, fixture wattage, lamp type, lens type, PEC, service type, pole condition, luminaire condition, luminaire arm condition, conductor condition, pull box condition, weather head condition, conduit type, length of run, conduit size, cable type, and cable size as well as freehand notes and pictures. This data is used by the City of Huntington Beach in negotiations with Southern California Edison (SCE) to purchase streetlights within the City limits with the goal of converting to LED. This project is part of the US Department of Energy's Better Buildings Program announced by President Obama on May 14, 2014. Obstacles Overcome: Identification of 100 truly representative poles, app with extensive dropdown values.

SIEMENS



STREETLIGHT ENERGY MANAGEMENT SERVICES for the Cape Light Compact of Barnstable MA, Subcontractor to Siemens Road and City Mobility Billerica MA office. Evri set up an enterprise GIS to

audit 17,000+ and provide support to convert 15,588 HPS, mercury vapor and metal halide streetlights to BetaCree LED fixtures across 23 towns and fire districts throughout Cape Cod and Martha's Vineyard, Massachusetts. This project is saving \$657,660/yr in electric bills, \$210,750/yr in maintenance and 3,330,022 kWh/yr. This project was accomplished at no cost to individual municipalities. The data is being used as a key component of an Investment Grade Audit (IGA) which guarantees energy and cost savings to the Cape Light Compact. Detailed and accurate inventories of streetlights upfront are vital to

SIEMENS



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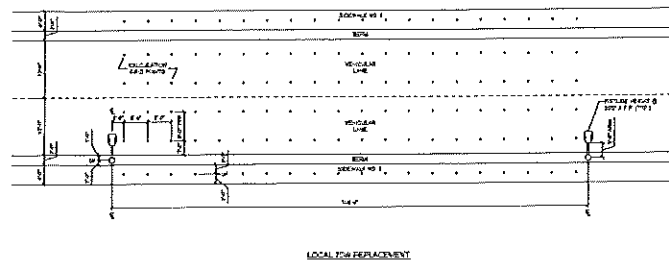
Last updated: May 3, 2018

to assets using the same map based dataset. Evri was responsible for submitting data to secure new rates and rebates from SDGE. Evri provided systems for auditing by Evri staff, conversions by Southern Work crews, and mobile read-only access to City of San Diego inspectors. This data is shared via a read-only website, enabling the city and contractors to have real-time oversight and transparency throughout project lifecycle. Daily spreadsheets were exported to streamline the collection of rebates and for Southern Contracting to submit for payment. The project was completed on-time and on-budget. Obstacles Overcome: Acquiring rebates and tariff, managing audit and installation support simultaneously, Dark Skies compliance.

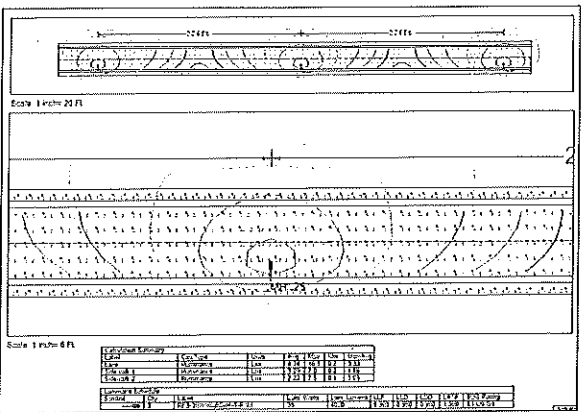
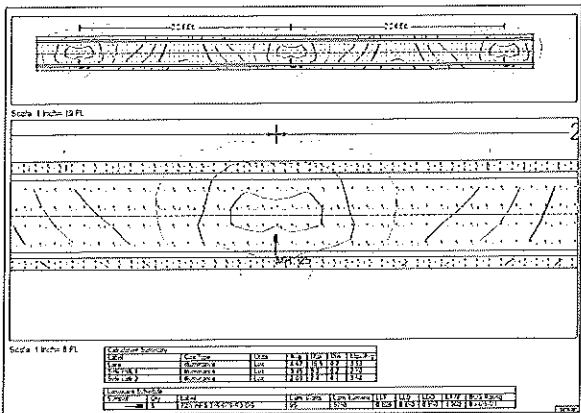
Appendix B:
Sample Work Product and Deliverables

Photometric Analysis Examples

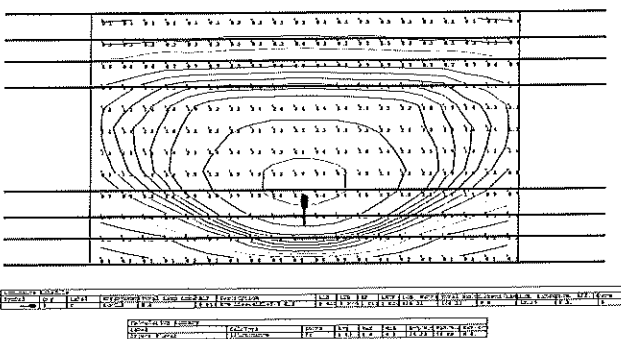
Sample Photometric Template Developed for RSLPP ESCO Bidders



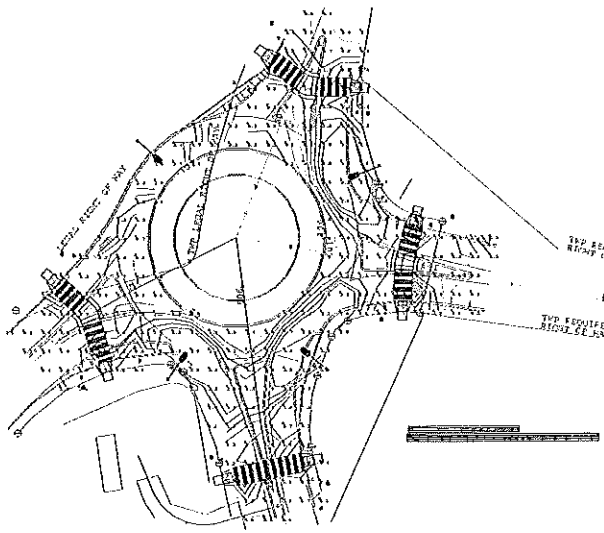
Sample Photometric Comparison of Existing HPS Technology to LED Technology



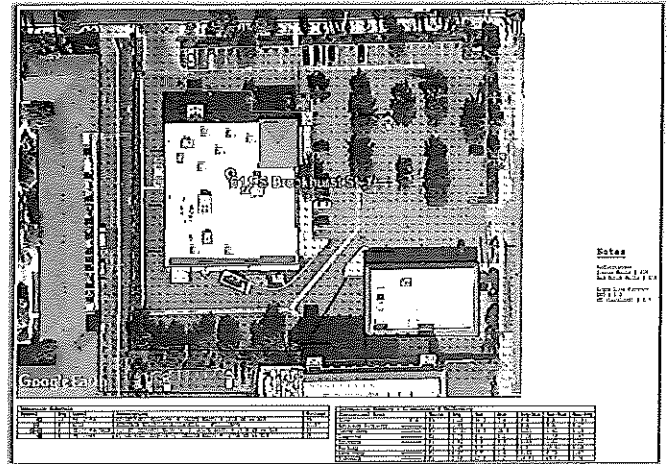
Sample KLS Photometric Analysis of Local Road (with high light output requirement)



Sample KLS Photometric Analysis of Roundabout (Traffic Circle)



Sample KLS Photometric Analysis of CVS Site Lighting



Sample KLS Project Change Tracking Worksheet
(for representative purposes only; worksheet is too large to provide a useful depiction; upon request
KLS can provide actual worksheets for review)

[illegible]

Sample KLS Strategic Procurement™ Analysis
(for representative purposes only; worksheet is too large to provide a useful depiction; upon request
KLS can provide actual worksheets for review)

[illegible][illegible][illegible]

Additional tabular data associated with Installation Support includes:

Data	Examples	Method to calculate/collect
Install DateTime (ObsInstallDate)	2019-03-23 14:26:35	Calculated Automatically based on user login. Stored as DateTime type field.
Installer (ObsInstaller)	John Smith	Calculated Automatically based on last edited. Stored as DateTime type field.
StatusHistory	Audited 20190103, Converted 20190303	Programmatically Based on comparison to Status Yesterday.
Installed Fixture	TED	Pre-calculated based upon Proposed Fixture Installers update/confirm work

The color of each street light point on the map will be determined by the GIS database that forms the backbone of the system. As the audit progresses and the data is edited by Evari auditors in the field, the Status (and associated GIS point color) of each street light will change in real-time. All street lights which meet the requirements of the project will be given an Initial Status value of "No Action." Any street lights deemed outside of the project area will be given an initial status of "Not in Project." Other status categories might include: "to be audited," "audited," "data problem," and "to be QCed."

Additional data associated with lighting design support includes:

Data	Examples	Method to calculate/collect
Nonstandard Intersections (ObsIntNonstandard)	Polygons around nonstandard intersections	Created manually based on aerial photo using ArcGIS for Desktop
High Slope Area (ObsSlope)	Polygons around nonstandard slope areas	Created manually based on digital elevation model (DEM) using ArcGIS for Desktop
Roadway Class (ObsRoadClass)	Major, Collector, Local or an intersection combination of the three (MM, LL, CC, MC, ML, CL)	Created manually based on traffic counts using ArcGIS for Desktop

Appendix III. Important Contract Notes: Limitations, Legal, Insurance, Software

- The cost outlined in the Schedule of Values and Payments is calculated on a per-light basis.
- Final costs reflect the true number of lights audited.
- Timeline begins the day a contract is signed between Evari and KLS, not the day KLS signs a contract with DVRPC, or any other milestone.

Limitations to this Proposal.

- The system outlined in this proposal is dependent upon other systems, including but not limited to Amazon Web Services, ArcGIS Online, and Verizon 4G LTE cellular networks.
- Evari is only auditing lights accessible via paved roads in a standard sedan-type vehicle. This proposal does not include lights which are only accessible via boat, all-terrain vehicle, or hiking trails.
- The order of the audit is to be managed by Evari GIS Consulting, Inc. All municipality right-of-ways will be audited in holistic and efficient manner. This proposal does not include auditing neighborhoods or streets in a specific order.
- Auditing can only be accomplished in appropriate weather. For safety reasons we do not audit in rain, snow, hail or extreme wind. Inclement weather days beyond 2 days per month are identified and are added to any deadlines. Evari management is solely responsible for determining if auditing cannot be accomplished safely due to inclement weather.

- This audit only accounts for quick visual inspection of each pole from the ground. Wattage and type is collected from a NEMA wattage label located on the underside of the fixture. If this label isn't on the fixture we will indicate this in the data. This proposal doesn't include revisiting these fixtures to determine wattage through more detailed means, such as using bucket trucks to inspect the fixtures.
- Evari GIS Consulting is solely responsible for determining the time of day in which the audit will be accomplished.
- The system runs on a hosted server in the Amazon Elastic Compute Cloud (EC2). This server is paid for hourly and therefore will be turned off and not available during low use times. The server will be available 6AM to 6PM, Monday – Friday local time. The system can be turned on outside of this schedule if required under specific circumstances.
- Evari is able to use independent contractors when necessary.
- This project does not include the cost of Evari purchasing bonding insurance.
- Confirming access to or purchasing Esri software licenses (if required) is the responsibility of KLS.

Legal. We request that any contract or purchase order used include the following language:

"Notwithstanding anything to the contrary in the contract or purchase order, Evari GIS Consulting, Inc shall have no liability for damages in excess of the maximum amount to be paid to Evari GIS Consulting, Inc by KLS under this agreement."

"Evari GIS Consulting, Inc. shall have no liability of any nature, type or kind for the installation by another person of any lights."

"KLS hereby affirms that Evari has been provided with all contractual documents which have a significant or material impact on Evari's scope, payment, and timelines. If there are any changes to these documents, KLS will immediately provide Evari with written updates and copies of the documents."

Insurance Coverage. Evari's current insurance coverage.

Insurance Type	Evari's Insurance Coverage
Commercial General Liability	\$2M/occurrence \$4M aggregate
Professional Liability	\$2M/occurrence \$2M aggregate

Business Automobile Liability	\$1M
Workers Compensation	\$1M
Umbrella Policy	\$5M/occurrence \$5M aggregate

In 2014, there were 1.08 deaths per 100 million vehicle miles traveled¹ and many serious accidents. At Evari GIS, we drive a lot and take this responsibility seriously. We strictly evaluate the driving skills of everyone working on our team, irrespective of other qualifications. Everyone working on our team is paid hourly, irrespective of how many lights they audit. We purposefully do not incentivize our employees to rush by paying them on a "per audited light basis." We do not pay per light because it can lead to unsafe decisions and inaccurate data. Paying auditors on a per light basis would increase our potential liability and the liability of the prime contractors we work for. This is a non-negotiable component of how we do our work.

Esri Software. Esri is the software vendor whose product Evari customizes to bring solutions aligned with our clients' needs. Evari is an Esri Business partner with decades of experience working with the Esri technology stack (ArcGIS). Esri was formed in 1969 and has 1.2 billion in estimated (privately held) annual revenues, from 300,000 customers (\$4,000/customer/year). Esri has the largest market share of any vendor in this space and is the gold-standard of professional enterprise-tier GIS/mapping software.



esri
Partner
Network
Silver

Under the scope proposed (installation support), KLS is required to have access to an active ArcGIS for Server license from Esri. This is because KLS staff will be editing data through the installation process. Esri software licensing can be leveraged by a municipality's consultants or contractors to be used exclusively for the Licensee's benefit. Often municipalities have an Enterprise License Agreement (ELA) which can be used by consultants and contractors.

For KLS to outright buy the software typically costs \$5,000 initially and \$1,250 per year in maintenance, with the first year of maintenance free. Yearly maintenance must be paid in order to update the software and have access to technical support. This software is an asset of KLS and can be used on other jobs. Although it is required to perform this proposal, the business relationship for this software is between KLS and Esri. Evari GIS Consulting is an Esri Business Partner and should be considered an adviser to KLS regarding GIS software.

¹ <http://www.fhwa.org/its/topics/its-general-statistics/fatalities/state-by-state-overview>

KLS Financial and Insurance Information

KLS is a sole-member LLC. All financial reporting is unaudited and tax information is part of the owner's private personal returns. KLS is not typically required to provide financial information. With the intent of being responsive to the RFP, we are supplying the following unaudited historical financial summary. The following page provides KLS' Certificate of Insurance showing our Professional Liability (Errors and Omissions), General Liability and Workers Compensation Insurance.

Keystone Lighting Solutions Profit & Loss

January 1, 2011 through October 12, 2018

Jan 1, '11 - Oct 12, 18

Ordinary Income/Expense

Income	1,450,417.69
Cost of Goods Sold	18,471.12
Gross Profit	1,431,946.57
Expense	1,216,030.63
Net Ordinary Income	215,915.04

Other Income/Expense

Other Income	18,650.32
Other Expense	5,403.28
Net Other Income	13,247.04
Net Income	229,162.08

Appendix C: Project Summary Bill of Material (Base Upgrade)

The Project Summary Bill of Material represents the pricing obtained through the RSLPP procurement process. Material Unit Prices include negotiated manufacturer costs, distributor markup and contractor markup.

DSP Unit Price Schedule and Payment Milestones (Base Upgrade with FAWS)

DSP Service Item	KLS Unit Price (Firm Estimate)	KLS Billing Milestones	Future B Signal Quantity	KLS Fee	DSP C Program Fee	Total KLS & DSP Fee
Project Development (Phase II)						
Field Audit (Overnight)	\$14/Person	100% at Completion of audit (if less than 1 month), otherwise on monthly auditing program	118	\$1,654	\$63	\$1,717
Field Audit (Traffic Signals)	\$147/Lamp		0	\$0	\$0	\$0
Design (Overnight)	\$8/Person or Signal	100% at Delivery of Final Project Specification & Proposal	115	\$1,044	\$52	\$1,096
Design (Traffic Signals)	\$1/Lamp		0	\$0	\$0	\$0
Project Development Sub-Total				\$1,654	\$115	\$1,769
Construction Project Management (Phase III)						
Project Management Services (Overnight)	\$14/Person (on site)	20% at Pre-Construction Meeting, remainder on Monthly Installation Progress Billing	115	\$1,610	\$1,474	\$3,084
Project Management Services (Traffic Signals)	\$1/Lamp		0	\$0	\$0	\$0
Project Management Services (LMS Admin)	\$1/Node		0	\$0	\$0	\$0
LMS Commissioning, PM & Training	\$1/Node	100% at Completion of "Hand Off" Training	0	\$0	\$0	\$0
Utility Roll Update & Retest (Overnight)	\$14/Person	100% at Final Submittal of FSCC Bill by Date & Retest Application	115	\$1,610	\$17	\$1,627
Utility Roll Update (Traffic Signals)	\$1/Lamp	100% at Final Submittal of FSCC Bill Updates	0	\$0	\$0	\$0
FSCC Rollback	\$1/Person	100% at Rollback Completion	0	\$0	\$0	\$0
Project Management Sub-Total				\$1,610	\$1,491	\$3,101
Post-Construction Services (Phase IV)						
OLM Manual, Op Plan, Settings Verification and Audit Stock (Overnight)	\$14/Person	100% at Report Delivery	115	\$1,610	\$17	\$1,627
OLM Manual, Op Plan, Settings Verification and Audit Stock (Traffic Signals)	\$1/Lamp	100% at Plan Delivery	0	\$0	\$0	\$0
Development or Update of a Lighting Ordinance	\$1,000/month (typical)	Estimated Cost Between \$1,000 - \$10,000	0	\$0	\$0	\$0
Post-Construction Sub-Total				\$1,610	\$17	\$1,627
Total Fees				\$1,610	\$1,642	\$3,252

Notes:
1) All UNIT prices above are "Firm" as defined in the municipal DSP contract.
2) DSP C program fees are based on the RSLPP LCI signed by each participating municipality.

Lighting Upgrade Feasibility Study - Dublin Borough - 10.9.24

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205049 Keystone Lighting Solutions

Certificate of Insurance

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CERTIFICATE OF LIABILITY INSURANCE

DATE PERIOD (YYYYMMDD)

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 have ADDITIONAL INSURED provisions or 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 Insureon Insureon (BN Insurance Holdings LLC) 30 N. LaSalle, 25th Floor, Chicago, IL 60602	INSURED Keystone Lighting Solutions 1382 S Asherton St., State College, PA, 16801
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COVERAGE	CERTIFICATE NUMBER	REVISION NUMBER
1. COMMERCIAL GENERAL LIABILITY CLAIMS MADE POLICY COCCUR	42824P4545	6/10/24
2. AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS LEASED AUTOS HIRE AUTOS	42824P4545	6/10/24
3. UMBRELLA LIA EXCESS LIA COCCUR CLAIMS MADE	42824P4545	6/10/24
4. WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY EMPLOYMENT OFFICIALS/EXCLUDED EMPLOYEES EXCLUDED EMPLOYEES EXCLUDED	42824P4545	6/10/24
5. PROFESSIONAL LIABILITY (Errors and Omissions)	42824P4545	6/10/24

DESCRIPTION OF OPERATIONS (LOCATIONS) (VEHICLES) (ACCORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER Keystone Lighting Solutions 204 Ramsey Road Centre Hall, PA 16802 Alicia Miller, President	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 <i>[Signature]</i>
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205049 Keystone Lighting Solutions

Certificate of Insurance

10/10/2024 8:05:33 PM



CERTIFICATE OF LIABILITY INSURANCE

DATE PERIOD (YYYYMMDD)

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.

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PRODUCER Insureon Insureon (BN Insurance Holdings LLC) 30 N. LaSalle, 25th Floor, Chicago, IL 60602	INSURED Keystone Lighting Solutions PO Box 687, Boalsburg, PA, 16827-0687
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COVERAGE	CERTIFICATE NUMBER	REVISION NUMBER
1. COMMERCIAL GENERAL LIABILITY CLAIMS MADE POLICY COCCUR	42824P4545	6/10/24
2. AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS LEASED AUTOS HIRE AUTOS	42824P4545	6/10/24
3. UMBRELLA LIA EXCESS LIA COCCUR CLAIMS MADE	42824P4545	6/10/24
4. WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY EMPLOYMENT OFFICIALS/EXCLUDED EMPLOYEES EXCLUDED EMPLOYEES EXCLUDED	42824P4545	6/10/24
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CERTIFICATE HOLDER Insured Copy	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 <i>[Signature]</i>
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