

SECTION D – SPECIFICATIONS/SCOPE OF WORK

1. PROJECT DESCRIPTION

The work to be performed under this contract consists of furnishing all labor, materials, and equipment necessary to maintain all County-owned streetlights in PEPCO, Potomac Edison, and BG&E service areas, including all new lights to be installed during the life of this contract. All lights are underground-fed and primarily free-standing, but the inventory also includes lights mounted on signals, bridges (over/under), tunnels, and bollards. The underground cables transmitting power to the lights are owned and maintained by the utility companies. The Contractor shall be responsible for the maintenance of the above-ground infrastructure including all wires from the hand box (or the hand-hole at the base of the pole in case of direct-buried) to the luminaire. The only exceptions would be at sites described in Attachment K where the contractor shall also be responsible for the maintenance of the underground cables transmitting power to the lights. Contractor compensation for underground wire repairs shall be based on time and materials, to be approved and authorized by the Engineer in advance.

Nearly all of the County-owned streetlights are Light Emitting Diode (LED), but the inventory also includes a small number of High Pressure Sodium (HPS) lights and Florescent lights. All new installations as well as all knockdown replacements under this contract shall be LED fixtures, with the exception of those lights installed under bridges, inside underpasses, or on bollards (see Attachment L), which will be replaced in kind.

The Contractor must be adequately resourced and prepared to maintain all County-owned streetlights as per requirements of this contract, regardless of the type of pole, fixture, or technology. The Contractor's operations superintendent shall attend all of the County's monthly streetlights meetings and shall be prepared to provide data and details on Servicing & Replacing, ongoing lighting projects, outages, knockdowns, and Life Cycle Replacement (LCR) activities. The Contractor shall, at all times during the life of the contract, maintain an adequate stock of all types of poles and all types of streetlight fixtures that are used in the County in order to replace all knockdowns as specified in the contract.

While the County owns several different types of streetlight poles and luminaires as summarized in Attachments O and P, the vast majority the luminaires are colonial post-tops (27W LED), as shown in Attachment M, at 12' to 16' mounting heights. The County's roadway lights primarily consist of LED cobra heads and rectilinears at 25' to 40' mounting heights.

2. GENERAL REQUIREMENTS

1. SPECIFICATIONS

- a. Streetlights shall be installed in accordance with the "Standards and Guidelines for Street Lighting in Subdivisions having Underground Utilities" Montgomery County, Maryland, latest edition (Attachment N)
- b. All materials used shall be approved by the Engineer. All new installations as well as all knockdown replacements of free-standing lights under this contract shall use County's standard poles and LED Luminaires (see Attachments O and P). Non-free-standing lights installed under bridges, inside underpasses, or on bollards (see Attachment L) shall be replaced in kind. All other materials for replacement shall be identical to that originally used, unless alternate materials are specifically authorized by the Engineer.
- c. It is the responsibility of the Contractor to give sufficient notification to the County of any item ordered, that is discontinued and becomes unavailable. Any replacement model being offered to the County must be approved by the Engineer prior to ordering. The replacement model must be of equal or greater quality and offer the same or more features than the discontinued model. The replacement model shall have the same (discount or price) as the discontinued model.
- d. Materials shall comply with and meet the applicable minimum requirements, guidelines, and standards of the following organizations:
 - i. American Association of State Highway and Transportation Officials (AASHTO)
 - ii. Illuminating Engineering Society of North America (IESNA)

IFB #1193959

- iii. Maryland State Highway Administration (MSHA)
- iv. Montgomery County Department of Transportation (Attachment O)
- v. National Electrical Manufacturers Association (NEMA)
- e. All LED luminaires to be used under this contract shall be in conformance with and meet the requirements of LED specifications provided in Attachment O.

2. CODES AND LAWS

- a. All work shall be performed under the supervision of and subject to the approval of the Engineer.
 - b. All work shall be in accordance with the National Electrical Code and the National Electrical Safety Code and shall also conform to the State and Local Laws and ordinances governing such work and the rules and regulations of the electric utility.
 - c. All electrical work performed under this contract (Section C, item 49) shall be under the supervision of a certified electrician.
3. **INVENTORY** – see Attachment M for complete inventory of all existing County-owned streetlights as of February 2021. Any streetlights installed by the Contractor and/or others during the life of this contract will be added to the inventory and the Contractor shall be responsible for their maintenance in accordance with the requirements of this contract. All new installations by others will use County’s standard poles and LED luminaires.

3. WORK Activities - SPECIFIC REQUIREMENTS

1. OUTAGES:

- a. Throughout this document, “Outage” shall mean a non-functioning streetlight in need of repairs which may have been reported as being; 1) out, 2) flickering, 3) cycling, 4) dark, or 5) not operational. The Contractor shall repair all reported outages within 4 working days, unless the trouble is in the utility company’s underground wiring and there is no voltage (NV) case. Before reporting an outage as a NV, the Contractor shall ensure it’s not caused by a burned-out bulb, failed photocell, faulty driver/ballast, or trouble in the County’s wires. The County owns the wires from the base of the pole (hand box or hand-hole in case of direct-buried) to the luminaire. Utility companies own and maintain the underground cables transmitting power to the lights with the exception of the sites listed in Attachment K, as explained under “Project Description” above.
- b. The vast majority of the County’s lighting issues are reported on the County’s streetlight website by County residents. Other reporting methods include phone calls, emails, and service requests via MC311. All of these reports will be added to the streetlight website by County staff. The County will designate each reported lighting issue its own unique “Call ID” that shall be used by the Contractor for tracking purposes until the necessary repairs have been made and the call is closed out.
- c. As indicated in Section C, item 47, “Database Management System”, the Contractor’s computer and database system shall be compatible with the County’s and PEPCO’s to provide for automated transmission of streetlights data in real time. As explained in item above, all of the County’s streetlight issues are reported on County’s website, making them accessible to the Contractor in real time.
- d. The automated information transmission described above shall be implemented as a 3-way system and shall be maintained over the life of the contract. All streetlight repairs made by the Contractor shall be entered in his/her system the same day, which shall be automatically transmitted to the County (and PEPCO in case of a NV in the Company’s service area) in real time for optimized efficiency.
- e. Attachment M provides both the Countywide inventory and zone specific inventory of County’s streetlights. Attachment T is a map of the County which outlines the 5 zones as well as the number of lights in each zone and the servicing/relamping schedule. The County also currently owns a small number of non-LED streetlights.
- f. All knockdowns will be measured as EA and paid for separately. See Item 12 for method of payment.
- g. The Contractor shall also be responsible for the maintenance of all of the County’s streetlights (both existing and those that will be added during the life of this contract). Under this requirement, the Contractor shall furnish all necessary labor, materials, and equipment to make the necessary repairs and make functional all of the County’s streetlights that have been reported as outages. Repairs under this requirement shall include but not be limited to any and all necessary wiring and ballast repairs as well as bulb, photocell, missing lens, and ballast replacements as needed.

IFB #1193959

- h. Payment for repairing an outage shall be based on the contractor's unit price for the particular streetlight type as indicated on the Quotation Sheets under "Outage Repairs". The Contractor's unit price shall be per light per year, and shall be inclusive of all of the labor, materials, and equipment necessary to successfully make the needed repairs and maintain the light functional throughout the entire fiscal year, regardless of the number of site visits that may be necessary to maintain the light operational. See Item 12 for method of payment.
- i. If the Contractor closes-out a call number as invalid for reasons such as bad address, not defective, working on arrival, etc.; but the County confirms the validity of the call number, it will be reopened to the original date and liquidated damages will be assessed. Further, the Contractor shall bear all expenses incurred by him while disputing the validity of a call number, including but not limited to any and all trips to the site of the light.
- j. If the Contractor reports a call number as repaired, but the County confirms otherwise, it will be reopened to the original date and liquidated damages will be assessed. Further, the Contractor shall bear all expenses incurred by him, including all subsequent trips to the site until the light is functional.
- k. Montgomery County lights are identified by individual tags that accompany all call numbers forwarded to the Contractor. Occasionally however, tags in the field don't match those in the County's database. To ensure the crews are deployed to the correct location every time, Longitude/Latitude information (through truck-mounted and hand-held GPS) shall be used in addition to pole tag numbers.
- l. Reoccurring outages in large part are reflection of the Contractor's workmanship and quality of the material used. The County will deduct from monies due the Contractor a lump sum dollar amount equal to his/her "Outage Repairs" unit price for the particular light type for each day that a, b, and/or c below occurs, unless deemed (by the Engineer) to be due to reasons beyond Contractor's control:
 - a. Outage due to burned out bulb or faulty photocell more than twice/year; or
 - b. Outage reported as repaired, but in reality it's not, and is later reported as a NV. In such cases, liquidated damages will also be assessed based on the date of the original call number; or
 - c. Outage reported as a NV, but the utility company confirms otherwise. In such cases, liquidated damages will also be assessed based on the date of the original call number.
- m. Liquidated damages of a lump sum amount equal to the Contractor's unit price for "Outage Repairs" per work day per outage may be assessed by the County and deducted from the monies due the Contractor for failure to meet the required time schedule for repairing outages.

2. SERVICING & REPLACING

The Contractor shall service and remove/replace the photocell of each and every streetlight within a given zone, see Attachment T for schedule. The work shall include the following:

- a. Cleaning the exterior of the luminaire from all debris, bird/insect nests, and any unauthorized attached objects.
- b. Removing and replacing the photocell at no additional cost to the County.
- c. Reporting any damaged or missing handhole covers to the Engineer and scheduling replacement as directed by the Engineer. Handhole replacement will be paid for separately.
- d. Inspecting ballasts, and repairing or replacing (when necessary) inoperative ballasts at no additional cost to the County.
- e. Inspecting sockets while servicing the luminaire, and replacing all defective or missing sockets at no additional cost to the County. The tension of the blades of series male sockets shall be checked to see if annealing process has taken place. If so, the receptacle shall be checked for proper setting in the female socket. If the female socket is acceptable, a new male socket shall be provided and installed by the Contractor at no additional cost to the County.
- f. Trimming trees when required in order to service a streetlight, the Contractor shall provide two (2) feet of clearance around the luminaire (at no additional cost to the County), unless otherwise directed by the Engineer.

3. KNOCKDOWNS

- a. A knockdown is defined as a streetlight that has been literally knocked over and is no longer standing vertically, or a streetlight that has been physical damaged and is not functioning properly, or a streetlight that is out of its vertical alignment, posing a safety concern to the motorists and/or pedestrian. Complete destruction of a luminaire by vandalism or by other causes, requiring replacement of the luminaire, shall be considered a knockdown (Luminaire Only). In case the materials (pole and/or luminaire) are in good condition, existing materials shall be used, and payment will be for labor only.
- b. Each knockdown reported to the Contractor by the County or by others shall be recorded by the Contractor entered into the contractor's computer database with time, date, location, and person processing the knockdown call. The Contractor shall be responsible for assigning a call number to each knockdown call received. The call number format shall be given to the contractor at the time of award of this contract.
- c. Knockdowns shall be serviced by the Contractor to eliminate the immediate hazard and 'make safe' the site within three (3) hours of notification.
- d. The Contractor shall recover all segments of the knockdown luminaire and pole at that time and may return usable segments of the equipment to his shop. The damaged pole and luminaire shall be removed from the site and brought back to the Contractor's facilities, as part of the initial response to the site.
- e. Complete replacement or repair of all knockdowns shall be accomplished by the Contractor within seven (7) workdays after initial notification of the knockdown.
- f. All free-standing and signal-mounted knockdown replacements shall use LED luminaire. Wattage of the replacement luminaire shall be same as the knocked down luminaire, or equivalent in case of an HPS luminaire knockdown.
- g. Unit prices bid for knockdowns shall include repair or replacement of concrete footings and/or instant foundations (screw footings), anchor bolts, mounting hardware and certain conduits, as necessary or as directed by the Engineer.
- h. Failure to "make safe" a knockdown within the required three-hour time period may result in the assessment of Liquidated Damages by the County at the rate of \$50.00 per hour. Failure to complete the repair of a knockdown within the required seven (7) workdays may result in the assessment by the County of Liquidated Damages at the rate of \$50 per day. Liquidated damages will be deducted from other monies due the Contractor for failing to meet contract time schedule.
- i. "Make Safe Only" Work: Under certain circumstances, the County may direct the Contractor to "make safe" a location where a streetlight pole has been knocked down but not to repair or replace the damaged pole. Whenever so directed, the Contractor shall respond to the site, clear debris off the road and sidewalk, and "make it safe" within three (3) hours of notification, as required by paragraph B.3 above. For knocked-down poles that are of the direct-burial type (no foundation), the wires shall be spliced and then buried below ground and the surface area shall be restored, tamped, and seeded. For knocked-down poles that have a foundation, the wires shall be spliced and enclosed within a safety cone, which shall be securely affixed to the foundation anchor bolts with suitable nuts. The damaged pole and luminaire shall be removed from the site and brought back to the contractor's facilities, as part of the initial response to the site. Compensation for "make safe only" work as described above shall be at fifty percent (50%) of the applicable labor only unit prices for poles only listed on the quotation sheets.

4. MINIMUM STOCK REQUIREMENTS

- a. The Contractor shall keep in stock all items that may be needed for replacement purposes. As indicated earlier, all replacement shall use LED fixtures, except for the non-LED lights listed in Attachment L. The following minimum inventory shall be maintained at all times by the Contractor, to assure the availability of a sufficient quantity of standard poles and luminaires to provide for uninterrupted replacement of any knockdown within the required timeline:
- b. At least one of each complete pole and luminaire assembly for each type of decorative and site-specific lights.
 - i. At least 15 each of 16' fiberglass poles
 - ii. At least 5 each of 16' fluted fiberglass poles

IFB #1193959

- iii. At least 8 each of 25' round aluminum poles
 - iv. At least 5 each of 30' round steel poles
 - v. At least 20 each of Cobrahead luminaires
 - vi. At least 15 each of Colonial Post Top luminaires
 - vii. At least 5 Rectilinear luminaires
 - viii. At least 5 Washington Globe luminaires
 - ix. At least 5 pendants luminaires
- c. If a strike or other unavoidable interruption of supplies prevents the Contractor from replacing a knockdown, the Contractor shall promptly notify the Engineer of the interruption of the necessary items. The Engineer may direct the Contractor to install a temporary substitute replacement until such time as the identical replacement is available. No material charges are to be made for the temporary substitute replacement as the temporary items are to be returned to the County's stock by the Contractor when the original replacement item is available and installed by the Contractor.

5. Miscellaneous

- a. Bidders shall indicate in their proposed Schedule of Prices the unit costs for "labor" and for "materials" for each type of knockdown item.
- b. Knocked-down poles that do not have handholes shall be replaced with poles equipped with handholes. Also, #10 USE (underground service entrance) 600 volt rated wire is an acceptable alternate to the original wire in poles when replacing a knockdown.
- c. In the event that the repair of a knockdown does not require any Contractor-provided major materials (poles or luminaires) or if the County elects to supply the necessary pole and/or luminaire, only the unit cost for "labor" shall be paid by the County.
- d. In the event that the repair of a knockdown requires the Contractor to provide both labor and major materials, the County will pay the sum of the appropriate contract unit prices for "labor" and "materials."
- e. The Contractor shall replace the streetlight pole number tag, using the same number, on all replacement poles at no additional charge to the County.
- f. In certain circumstances, the County may require the Contractor to remove existing street lighting equipment that, although not knocked down, is significantly deteriorated or damaged to preclude its continuation in service, or otherwise requiring removal as part of a County streetlight project. For the purposes of this contract such work shall be considered a "knockdown," and shall be paid for at the appropriate contract unit prices for "labor only."
- g. The County also may direct the Contractor to install new luminaires, poles, or combinations thereof at new locations, or to replace poles and fixtures previously removed. Such work shall be paid for in accordance with the Schedule of Prices for "knockdowns."

6. MAPPING & DATABASE:

- a. The County will furnish the Contractor with a database spreadsheet as needed to perform the requirements of this contract.
- b. The Contractor shall notify the Engineer of any corrections needed to the spreadsheet found during service and routine field inspections.
- c. The spreadsheet shall show the streetlight pole number and exact location of every luminaire/pole. The streetlight database shall also provide the type of luminaire and wattage.

7. NUMBERING

- a. Whenever a streetlight pole is replaced due to knockdown, the Contractor shall permanently affix streetlight pole number tag (using the same number) so that the poles can be identified by approaching vehicular traffic.
- b. The numbers shall be permanently attached onto the pole, and shall have enough contrast from the color of the poles so that the number can be easily read.
- c. The Contractor shall install the number plate onto the streetlight pole with tamper proof screws.
- d. The numbering tags will not be a separate pay item, but shall be included in other bid items.
- e. The Contractor may be asked to fabricate and install new numbering tags on existing streetlight poles that

IFB #1193959

lag tags. This work shall be paid for in accordance with prices established under Item H, Streetlight Upgrades and Miscellaneous.

8. STREETLIGHT UPGRADES AND MISCELLANEOUS (OPTIONAL)

- a. At the County's option, the Contractor shall upgrade existing HPS or MH lights by changing the wattage, ballast, wires, lamps, lenses, or installing tags and/or handhole covers. A separate price schedule listing the materials and labor charges shall be included with the Contractor's bid for such upgrading tasks. Handhole covers shall be installed permanently, using tamper proof screws.
- b. The exercise of these optional work assignments by the County is dependent on availability of appropriated funds.
- c. The Contractor may be asked to install handhole in existing County light poles throughout the County. The County has estimated a quantity to establish unit price for this work. For this work, handhole cover shall be considered incidental and not paid for separately.

9. PAINTING AND RESTORATION

- a. When it is determined by the County that a cast iron, steel, or fiberglass streetlight pole requires repainting or restoration to restore an acceptable appearance, the County will require the Contractor to perform such necessary painting or restoration work.
- b. The Contractor shall pre-treat poles to remove all rust, dirt, and grit.
- c. Steel or cast-iron poles shall also be coated with an application of a primer/rust preventative of a type approved by the Engineer in advance.
- d. All poles shall be painted with as oil-based Imron paint, of top commercial quality, intended to provide first-class coatings with long life. No materials shall be applied until specific approval is obtained from the Engineer. The Engineer will also specify the exact paint color for each pole.
- e. The Contractor shall supply all materials, equipment, and labor to clean, prepare, and paint poles in accordance with these requirements.
- f. The painting and restoration shall be paid on a per pole basis in accordance with the Schedule of Prices for "painting and restoration".

10. INSTALLATION OF NEW LIGHTS

- a. SIDEWALK REMOVAL (Brick pavers) – The Contractor shall sawcut the sidewalk leaving a neat, clean edge line and remove the material without disturbing adjacent sidewalk on either side of the removed material. Sawing operation shall be considered incidental construction and included in price bid for removal of sidewalk.
- b. SIDEWALK REPLACEMENT (Brick pavers) – Shall replace in-kind, as approved by the Engineer, in accordance with the County's most recent sidewalk standards. The price bid for this item shall be all-inclusive for furnishing all necessary materials and completing the sidewalk.
- c. CONCRETE SIDEWALK REMOVAL – The Contractor shall sawcut the sidewalk leaving a neat, clean edge line and remove the material without disturbing adjacent sidewalk on either side of the removed material. Sawing operation shall be considered incidental construction and included in price bid for removal of sidewalk.
- d. CONCRETE SIDEWALK REPLACEMENT – Contractor shall use MSHA Mix 3 concrete and construct concrete sidewalk in accordance with the County's most recent sidewalk standards.
- e. GALVANIZED STEEL SPIN-IN BASES – The Contractor shall use CHANCE – Model #C11232JG4VL or equal.
- f. STREETLIGHT HANDHOLE COVERS – Handhole covers shall meet the following specs:
 - i. Model # M-15 Handhole Cover (3 x 5 opening)
 - ii. Model # M-16 Handhole Cover (4 x 6.5 opening)
 - iii. Model # M-34 Handhole Cover (3 x 8 opening)
 - iv. Millerbernd Manufacturing Company

11. Contract Terms & Conditions

- a. This contract shall take effect on July 1, 2026;
- b. Contract term shall be one (3) year with two (2) 1-year renewal options;
- c. All contract renewals shall be at the County's discretion and authorization;
- d. All renewals (if any) will be finalized and communicated to the Contractor in writing at least three (3) months prior to contract termination date;
- e. All renewals (if any) will be for one full year, ending on June 30th; and
- f. All tasks (if any) assigned, but not completed prior to the termination of the contract, shall be completed by the Contractor in a timely manner, and in accordance with the requirements of the contract.

12. Method of measurement and Payment

- a. Outages – outages shall be measured in EA, shall be per light per year, and shall be based on the Contractor's unit prices for various types of streetlights as provided by the Contractor on the Quotation Sheets under Outage Repairs. The Contractor shall invoice the County on a monthly basis and shall, for each streetlight, use 1/12 of his/her unit price for the particular type of light. Payment will be processed upon the receipt and validation of accurate invoices.
- b. Knockdowns – knockdowns shall be measured in EA and paid for based on the Contractor's unit price for the specific type of knockdown. The Contractor shall submit invoices on a bi-weekly or monthly basis. Payment will be processed upon the receipt and validation of accurate invoices that shall include as supporting document, a table of all of the knockdowns including the pole number, street name, and the type of the pole and the fixture.
- c. The Contractor shall submit accurate invoices based on his unit prices after the completion of work.

END SECTION D