

# CITY OF MOBILE

## BID SHEET

This is Not an Order

**Mailing Address:**  
 P. O. Box 1948  
 Mobile, Alabama 36633  
 (251) 208-7434

**Purchasing Department  
 and Package Delivery:**  
 Government Plaza  
 4th Floor, Room S-408  
 205 Government St  
 Mobile, Alabama 36644

**READ TERMS AND CONDITIONS  
 ON REVERSE SIDE OF THIS PAGE  
 BEFORE BIDDING**

Typed by: tajb Buyer: 004

**Please quote the lowest price at which you will furnish the articles listed below**

DATE	BID NO.	DEPARTMENT	Commodities to be delivered F.O.B. Mobile to:
04/13/2020	5410	TRAFFIC ENGINEERING	As Specified

**This bid must be received and stamped by the Purchasing office not later than: 10:30 AM, Tuesday, May 5, 2020**

QUANTITY	ARTICLES	UNIT	UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
Bid on this form ONLY. Make no changes on this form. Attach any additional information required to this form.						
	<b>ELECTRICAL SUPPLIES, LED FIXTURE</b>					
Qty. 40	LUMINAIRE, STREET LIGHTING, OVERHEAD, LED, COOPER LIGHTING, MODEL VTS-E05-LED-E1-SL3-BK-IM or equal as per the attached specifications  Make _____ Model _____					
Qty. 105	LUMINAIRE, STREET LIGHTING, OVERHEAD, LED, COOPER LIGHTING, MODEL VTS-F03-LED-E1-SL3-BK-IM or equal as per the attached specifications  Make _____ Model _____  Please observe instructions on Reverse side.  All substitutions must be indicated on your bid.  Please quote your prices in the unit specified in the bid.  All prices to be delivered pricing, FOB Mobile.  Fixture must be on approved list for Alabama Department of Transportation Roadway Lighting.					
			<b>TOTAL</b>			

**RETURN ONE SIGNED COPY OF THIS BID IN ENCLOSED ENVELOPE**

State delivery time within \_\_\_\_\_ days of receipt of P.O.

Firm Name \_\_\_\_\_

Typed Signature \_\_\_\_\_

By \_\_\_\_\_

We will allow a discount \_\_\_\_\_ % 20 days from date of receipt of goods and correct invoice of completed order.

1. All quotations must be signed with the firm name and by an authorized officer or employee.
2. Verify your bid before submission as it cannot be withdrawn or corrected after being opened. In case of error in extension of prices, the unit price will govern.
3. If you do not bid, return this sheet and state reason. Otherwise, your name may be removed from our mailing list.
4. The right is reserved to reject any, or all quotations, or any portions thereof, and to waive technicalities if deemed to be in the interest of the City of Mobile.
5. This bid shall not be reassigned except by written approval of the Purchasing Agent of the City of Mobile.
6. State brand and model number of each item. All items bid must be new and latest model unless otherwise specified.
7. If bid results are desired, enclose a self-addressed and stamped envelope with your bid. (All or None bids only)
8. Do not include Federal Excise Tax as exemption certificate will be issued in lieu of same. The City is exempt from the Alabama and City sales taxes.
9. PRICES ARE TO BE FIRM AND F.O.B. DESTINATION UNLESS OTHERWISE REQUESTED.
10. BID WILL BE AWARDED ON ALL OR NONE BASIS UNLESS OTHERWISE STATED.
11. Bids received after specified time will be returned un-opened.
12. Failure to observe stated instructions and conditions will constitute grounds for rejection of your bid.
13. Furnish literature, specifications, drawings, photographs, etc., as applicable with the items bid.
14. Vendor May be required to obtain City of Mobile Business License as applicable to City of Mobile Municipal Code Section 34-50. For Business License inquiry contact the Revenue Department at (251) 208-7461 or [cityofmobile.org/taxes.php](http://cityofmobile.org/taxes.php).
15. If a bid bond is required in the published specifications, see below:  
Each Bid Shall be Accompanied By A **Cashier's Check, Certified Check, Bank Draft Or Bid Bond** For the Sum Of Five (5) Percent Of The Amount Bid, Made Payable To The City Of Mobile And Certified By A Reputable Banking Institution. All Checks Shall Be Returned Promptly, Except The Check Of The Successful Bidder, Which Shall Be Returned After Fulfilling The Bid.
16. Contracts in excess of \$50,000 require that the successful bidder make every possible effort to have at least fifteen (15) percent of the total value of the contract performed by socially and economically disadvantaged individuals.
17. All bids/bid envelopes must have the bid number noted on the front. Bids that arrive unmarked and are opened in error shall be returned to vendor as an unacceptable bid.
18. If successful vendor's principal place of business is out-of-state, vendor may be required to have a Certificate of Authority to do business in the State of Alabama from the Alabama Secretary of State prior to issuance of a Purchase Order. Vendors are solely responsible for consulting with the Secretary of State to determine whether a Certificate is required. See [www.sos.alabama.gov/BusinessServices/ForeignCorps.aspx](http://www.sos.alabama.gov/BusinessServices/ForeignCorps.aspx). Please note that the time between application for and issuance of a Certificate of Authority may be several weeks.
19. Vendors do not need a City of Mobile Business License or Certificate of Authority from the Alabama Secretary of State to submit a bid, but will need to obtain the Business License and Certificate of Authority, if applicable, prior to issuance of a Purchase Order.

# BID CONTINUATION SHEET

QUANTITY	ARTICLES	UNIT	UNIT PRICE		EXTENSION	
			Dollars	Cents	Dollars	Cents
<p>Page 2 of 2</p> <p>All vendors will be required to provide verification of enrollment in the E-Verify program. Additional information may be found at <a href="http://immigration.alabama.gov/">http://immigration.alabama.gov/</a></p> <p>If the successful vendor's principal place of business is out-of-state, vendor may be required to have a Certificate of Authority to do business in the State of Alabama from the Secretary of State prior to issuance of a Purchase Order.</p> <p>Vendors are solely responsible for consulting with the Secretary of State to determine whether a Certificate is required. See: <a href="http://www.sos.alabama.gov/BusinessServices/ForeignCorps.aspx">www.sos.alabama.gov/BusinessServices/ForeignCorps.aspx</a>. Please note that the time between application for the issuance of a Certificate of Authority may be several weeks.</p> <p>Upon notification, vendor will have 10 business days to provide the Certificate of Authority and the E-Verify numbers to the Purchasing Department before award can be completed. (Vendors will possibly need to pay the expedite fee to meet this requirement because application is not sufficient. We must have a copy of the certificate with your Company ID number).</p> <p>Vendors do not need a City of Mobile Business License or Certificate of Authority from the Alabama Secretary of State, nor the E-Verify for certification to submit a bid, but will need to obtain the Business License and Certificate of Authority verification and/or provide the E-Verify Certification, if applicable, prior to issuance of a Purchase Order.</p> <p>Prices quoted on bid good for _____ days.</p> <p>State of Alabama Local Vendor Preference Law 41-16-50 (a) and (d) will apply to this purchase.</p> <p>If you have any questions please feel free to contact the Purchasing Department at 251-208-7434 or <a href="mailto:purchasing@cityofmobile.org">purchasing@cityofmobile.org</a>.</p>						
			<b>TOTAL</b>			

**RETURN ONE SIGNED COPY OF THIS QUOTATION IN ENCLOSED ENVELOPE**

**READ ABOVE INSTRUCTIONS BEFORE QUOTING**

Firm Name \_\_\_\_\_

By \_\_\_\_\_

We will allow a discount \_\_\_\_\_ % 20 days from date of receipt of goods and correct invoice of completed order.

## STREET LIGHTING - LED LUMINAIRE BID SPECIFICATION

- I. Cooper Lighting Model VTS-E05-LED-E1-SL3-BK-IM or Equivalent
  - a. 128 Watt LED
  - b. IES Distribution Classification: Type III
  - c. AIM/TILT Angle: NADIR
  - d. MAINT. FACTOR: 0.808
  - e. LUMENS: 15084
  - f. COLOR: 3985K +/- 275K
  - g. VOLTAGE: 240
  - h. FINISH: Powder Coated Black
  - i. WARRANTY: 7 years
  
- II. Cooper Lighting Model VTS-F03-LED-E1-SL3-BK-IM or Equivalent
  - a. 80 Watt LED
  - b. IES Distribution Classification: Type III
  - c. AIM/TILT Angle: NADIR
  - d. MAINT. FACTOR: 0.808
  - e. LUMENS: 7472
  - f. COLOR: 3985K +/- 275K
  - g. VOLTAGE: 240
  - h. FINISH: Powder Coated Black
  - i. WARRANTY: 7 years
  
- III. REFERENCES
  - a. ANSI/NFPA 70, National Electrical Code
  - b. IEEE C62.41, Guide on the Surge Environment in Low-Voltage (1000 V and Less) AC Power Circuits
  - c. FCC 47 CFR Part 15, Federal Code of Regulation (CFR) testing standard for electronic equipment
  - d. IESNA LM-79, Electrical and Photometric Measurements of Solid-State Lighting Products
  - e. IESNA LM-80, Approved Method for Measuring Lumen Maintenance of LED Light Sources
  - f. IESNA TM-15, Luminaire Classification System for Outdoor Luminaires
  - g. UL1598, Standard for Safety of Luminaires
  - h. NEMA SSL 3-2010, High-Power White LED Binning for General Illumination

#### IV. QUALITY INSURANCE

- a. Luminaires shall be of uniform quality and appearance.
- b. Manufactures of LED luminaires shall demonstrate a suitable testing program incorporating high heat, high humidity and thermal shock test regimens to ensure system reliability and to substantiate lifetime claims.
- c. The use of IES LM -80 data to predict luminaire lifetime is not acceptable.
- d. At the time manufacture, electrical and light technical properties shall be recorded for each luminaire. At a minimum, this should include lumen output, CCT, and CRI. Each luminaire shall utilize a unique serial numbering scheme. Technical properties must be made available for a minimum of 5 years after the date of manufacture.
- e. Luminaires shall be provided with a 7-year warranty covering LEDs, drivers, paint, and mechanical components.
- f. Submit product data on luminaires. Product data to include, but not limited to, materials, finishes, approvals, photometric performance, and dimensional information.
- g. Deliver luminaires and components carefully to avoid breakage, bending, and scoring finishes.

#### V. MATERIAL SPECIFICATION

- a. Each luminaire shall consist of an assembly that utilizes LEDs as the light source. In addition, a complete luminaire shall consist of a housing, LED array, and electronic driver (power supply). Light Emitting Diodes, (LEDs) shall be Lumileds TX and LED drivers shall be Advance or Osram
- b. Each luminaire shall be rated for a minimum operational life of 50,000 hours at an average operating time of 11.5 hours per night. This life rating must be conducted at 40-degree Celsius ambient temperature.
- c. The rated operating temperature range shall be -30 degrees Celsius to 50 degrees Celsius.
- d. Each luminaire shall be capable of operating above 100 degrees Fahrenheit (37 degrees Celsius), but not expected to comply with photometric requirements at elevated temperatures.
- e. Photometry must be compliant with IESNA LM-79 and shall be conducted at 25 degrees Celsius ambient temperature.
- f. The individual LEDs shall be constructed such that a catastrophic loss or failure of one LED will not result in the loss of the entire luminaire.
- g. Luminaire shall be constructed such that LED modules may be replaced or repaired without replacement of the whole luminaire.
- h. Each luminaire shall be listed with Underwriters Laboratory, Inc., under UL1598 for luminaires, or an equivalent standard from a nationally recognized testing laboratory.

## VI. TECHNICAL REQUIREMENTS

### a. Electrical Requirements

- i. Power Consumption: Maximum power consumption allowed for the luminaire shall be determined by application. The luminaire shall not consume power in the off state.
- ii. Operation Voltage: The luminaire shall operate for a 60 Hz  $\pm$ 3 Hz AC line over a voltage ranging from 108 VAC to 305 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output.
- iii. Power Factor: The luminaire shall have a power factor of 0.90 or greater.
- iv. THD: Total harmonic distortion (current and voltage) induced into an AC power line by a luminaire shall not exceed 20 percent.
- v. Surge Suppression: The luminaire on-board circuitry shall include fused surge protection devices (SPD) to withstand high repetition noise transients as a result of Utility line switching, nearby lightning strikes, and other interference. The SPD shall protect the luminaire from damage and failure for common mode transient peak voltages up to 10kV (minimum) and transient peak currents up to 5kA (minimum). SPD shall conform to UL 1449 depending of the components used in the design. SPD performance shall be tested per the procedures in ANSI/IEEE C62.41-1992 (or current edition) for category C (standard). The SPD shall fail in such a way as the luminaire will no longer operate. The SPD shall be field replaceable.
- vi. Each luminaire shall have integral UL Listed Class II power supplies. Class I power supplies will not be acceptable.
- vii. Operational Performance: The LED circuitry shall prevent visible flicker to the unaided eye over the voltage range specified above.
- viii. RF Interference: LED drivers must meet Class A emission limits referred in Federal Communications Commission (FCC) Title 47, Subpart B, Section 15 regulations concerning the emission of electronic noise. Drivers shall have a Class A sound rating.
- ix. LED drive current cannot exceed 1050mA. A minimum of 10,000 hours of LM-80 data is required.

### b. Photometric Requirements

- i. Optical Assemblies: LEDs shall be provided with discreet over optical elements to provide IESNA Type III distribution. Additional distributions for spill light control shall be utilized when light trespass must be mitigated. Mitigation must take place without external shielding elements. Optical assemblies shall have a minimum efficiency of 85% regardless of distribution type. For Type III distributions street side efficiencies shall be a minimum of 80%. All LEDs shall provide the same optical pattern such that catastrophic failures of individual LEDs will not constitute a loss in the distribution pattern.

- ii. Illuminance: The illuminance shall not decrease by more than 30% over the expected operating life. The measurements shall be calibrated to standard photopic calibrations.
  - iii. Light Color/Quality: The luminaire shall have a correlated color temperature (CCT) of 3895K plus or minus 275K. The color rendition index (CRI) shall be 70 or greater. Binning of LEDs shall conform to ANSV G.NEMA SSL3-2010.
  - iv. Backlight-Uplight-Glare: The luminaires shall not allow more than 10% of the rated lumens to project above 80 degrees from vertical. The luminaire shall not allow more and 2.5% of the rated lumens to project above 90 degrees from vertical. Backlight and glare ratings as per fixture schedule and calculator per IESNA TM-15.
- c. Thermal Management
- i. The thermal management (of the heat generated by the LEDs) shall be of sufficient capacity to assure proper operation of the luminaire over the expected useful life.
  - ii. The LED manufacturer's maximum thermal pad temperature for the expected life shall not be exceeded.
  - iii. Thermal management shall be passive by design. The use of fans or other mechanical devices shall not be allowed.
  - iv. The luminaire shall have a minimum heat sink surface such that the LED manufacturer's maximum junction temperature is not exceeded at maximum rated ambient temperature.
  - v. The heat sink material shall be aluminum.
- d. Physical and Mechanical Requirements
- i. The luminaire shall be a single, self-contained device, not requiring on-site assembly for installation. The power supply for the luminaires shall be integral to the unit.
  - ii. The maximum weight of the luminaire shall be 30 lbs.
  - iii. The maximum effective projected area shall be 1.20 sqft.
  - iv. The assembly and manufacturing process for the LED luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration from high winds and other sources.
  - v. Luminaires shall be capable of withstanding cyclical loading in (G= Acceleration of Gravity); a minimum peak acceleration of 3.0G peak-to-peak sinusoidal loading with the internal driver installed, for a minimum of 100,000 cycles without failure of any luminaire parts. Testing to be performed in three planes: a horizontal plane parallel to the direction of mounting, a horizontal plane perpendicular the direction of mounting and the vertical plane.
  - vi. The housing shall be designed to prevent the buildup of water on the top of the housing. Exposed heat sink fins shall be oriented so that water can freely run off the luminaire and carry dust and other accumulated debris away from the unit.

- vii. The optical assembly of the luminaire shall be protected against dust and moisture intrusion per the requirements of IP-66 (minimum) to protect all optical components.
  - viii. The electronics/power supply enclosure shall meet the requirements of NEMA/UL wet location.
  - ix. Each mounted luminaire may be furnished without a photoelectric unit receptacle.
  - x. Door shall be hinged and secured to the housing in a manner to prevent its accidental opening.
  - xi. The circuit board and power supply shall be contained inside the luminaire. Electrolytic capacitors used in the power supplies shall be rated for -40 degrees Fahrenheit to 220 degrees Fahrenheit, long life (>5000 hours), and operated at no more than 70% of the rated voltage, and 70% of rated current.
- e. Materials
- i. Housings shall be fabricated from materials that are designed to withstand a 3000-hour salt spray test as specified in ASTM Designation: B117.
  - ii. Each refractor or lens shall be made from UV inhibited high impact plastic such as acrylic and be resistant to scratching.
  - iii. Polymeric materials (if used) of enclosures containing either the power supply or electronic components of the luminaire shall be made of UL94VO flame retardant materials. The lens(es) of the luminaire is excluded from this requirement.

## VII. INSTALLATION

- a. Installation and configuration shall conform to the requirements of the ANSI/EWTIA Standards 568A and 569, NFPA 70 (National Electrical Code), and applicable local code.





## **PROCUREMENT DEPARTMENT**

**Potential bidders are responsible to check this site for any ADDENDUMS that are issued. It is the responsibility of the BIDDER to check for, download, and include with their BID RESPONSE any and all ADDENDUMS that are issued for a specific BID published by the City of Mobile. Failure to download and include ADDENDUMS in your BID RESPONSE may cause your bid to be rejected.**

**This is a sealed bid. Any responses faxed or e-mailed will be rejected.**

**This is a sealed bid. Any response must be submitted in a sealed envelope with the bid number and bid opening date on the outside of the envelope.**

**Any response that arrives improperly marked or with no bid number and opening date on the outside of the delivery or express package and opened in error will be rejected and not considered.**

**It is the responsibility of the bidder to insure that their bid response is delivered to and received in the Purchasing Department before the date and time of the bid opening.**

**Be sure to read the Terms and Conditions. All bids are F.O.B. Destination unless otherwise stated.**

**Be sure to sign your bid!**

**Package/Bid Delivery Address:  
Purchasing Department  
205 Government St. Room S408  
Mobile, AL 36644**

**(Request First Delivery)**