

SUBMIT BIDS TO:	CITY OF TUSCALOOSA P.O. BOX 2089 TUSCALOOSA, AL 35403	PURCHASING OFFICE 2201 UNIV. BLVD. TUSCALOOSA, AL 35401	INVITATION TO BID CITY OF TUSCALOOSA								
BID TITLE LED LIGHT FIXTURE MATERIALS & WIRELESS CONTROL SYSTEM			BID NO. 7003-011415-1								
PAGE 1 OF 30 PAGES	BIDS WILL BE OPENED AT 2:00 PM ON JANUARY 14, 2015 IN THE OFFICE OF THE PURCHASING AGENT, 2201 UNIVERSITY BLVD. TUSCALOOSA, AL 35401 AND MAY NOT BE WITHDRAWN FOR THIRTY (30) DAYS AFTER SUCH DATE & TIME.		ISSUE DATE 12/15/2014								
 <p style="text-align: center;">MAYOR WALTER MADDOX</p> <p style="text-align: center;">COUNCIL MEMBERS</p> <table style="width: 100%; border: none;"> <tr> <td>BURRELL G. ODOM</td> <td>MATTHEW CALDERONE</td> </tr> <tr> <td>HARRISON TAYLOR</td> <td>KIP TYNER</td> </tr> <tr> <td>CYNTHIA LEE ALMOND</td> <td>EDDIE PUGH</td> </tr> <tr> <td>SONYA MCKINSTRY</td> <td></td> </tr> </table> <p>CITY CLERK TRACY B. CROOM</p> <p>PURCHASING AGENT DAVID COGGINS</p>		BURRELL G. ODOM	MATTHEW CALDERONE	HARRISON TAYLOR	KIP TYNER	CYNTHIA LEE ALMOND	EDDIE PUGH	SONYA MCKINSTRY		Vendor Information (SECTION TO BE COMPLETED BY VENDOR) <hr/> Company Name (Please Print) <hr/> Phone Number Fax Number <hr/> Email Address	
BURRELL G. ODOM	MATTHEW CALDERONE										
HARRISON TAYLOR	KIP TYNER										
CYNTHIA LEE ALMOND	EDDIE PUGH										
SONYA MCKINSTRY											

GENERAL CONDITIONS OF INVITATIONS TO BID

1. **PREPARATION OF BIDS**
Bids will be prepared in accordance with the following:
 - (a) Our enclosed Bid Proposal Form is to be used in submitting your bid.
 - (b) All information required by the Bid form shall be furnished. The bidder shall print or type his name and manually sign the schedule and each continuation sheet on which any entry is made.
 - (c) Unit prices shall be shown and where there is an error in extension of price, the unit price shall govern.
 - (d) Proposed delivery time must be shown and shall include Sundays and holidays.
 - (e) Bidder will not include federal taxes nor State of Alabama sales, excise, and use taxes in bid prices as the City is exempt from payment of such taxes. An exemption certificate will be signed where applicable upon request.
 - (f) Bidders shall thoroughly examine the drawings, specifications, schedule, instructions and all other contract documents.
 - (g) Bidders shall make all investigations necessary to thoroughly inform themselves regarding plant and facilities for delivery of material and equipment as required by the bid conditions. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the bidder to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the contract documents, will be accepted as a basis for varying the requirements of the City or the compensation to the vendor.
 - (h) Bidders are advised that all City Contracts are subject to all legal requirements provided for in the Purchasing ordinance and/or State and Federal Statutes.

2. **DESCRIPTION OF SUPPLIES**
 - (a) Any manufacturer's names, trade names, brand name, or catalog numbers used in specifications are for the purpose of describing and establishing general quality levels. SUCH REFERENCES ARE NOT INTENDED TO BE RESTRICTIVE. Bids will be considered for any brand which meets the quality of the specifications listed for any items.
 - (b) Bidders are required to state exactly what they intend to furnish, otherwise they shall be required to furnish the items as specified.
 - (c) Bidders will submit, with their proposal, data necessary to evaluate and determine the quality of the item(s) they are bidding.

3. **SUBMISSION OF BIDS**
 - (a) Bids and changes thereto shall be enclosed in sealed envelopes addressed to David Coggins, Purchasing Agent, 2201 University Blvd., Tuscaloosa, Alabama. The name and address of the bidder, the date and hour of the bid opening and the material or service bid on shall be placed on the outside of the envelope.
 - (b) Bids must be submitted on the forms furnished. Telegraphic bids will not be considered.

4. **REJECTION OF BIDS**
 - (a) The City may reject a bid if:
 1. The bidder misstates or conceals any material fact in the bid, or if,
 2. The bid does not strictly conform to the law or requirement of bid, or if,
 3. The bid is conditional, except that the bidder may qualify his bid for acceptance by the City on an "all or none" basis, or a "low item" basis. An "all or none" basis bid must include all items upon which bids are invited.
 - (b) The City may, however, reject all bids whenever it is deemed in the best interest of the City. The City may also waive any minor informalities or irregularities in any bid.

5. **WITHDRAWAL OF BIDS**
 - (a) Bids may not be withdrawn after the time set for the bid opening for a period of time as specified.
 - (b) Bids may be withdrawn prior to the time set for the bid opening.

6. **LATE BIDS OR MODIFICATIONS**
 (a) Bids and modifications received after the time set for the bid opening will not be considered.
 (b) Modifications in writing received prior to the time set for the bid opening will be accepted.
7. **CLARIFICATIONS OR OBJECTION TO BID SPECIFICATIONS**
 If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications or other bid documents of any part thereof, he may submit to the Purchasing Agent on or before five (5) days prior to scheduled opening a request for clarification. All such request for information shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Any objection to the specifications and requirements as set forth in this bid must be filed in writing with the Purchasing Agent on or before five (5) days prior to scheduled opening.
8. **DISCOUNTS**
 (a) Bidders may offer a cash discount for prompt payment; however, such discounts shall NOT be considered in determining the lowest net cost for bid evaluation purposes. Bidders are encouraged to reflect cash discounts in the unit prices quoted.
 (b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.
9. **SAMPLES**
 Samples, when required, must be submitted within the time specified at no expense to the City of Tuscaloosa. If not destroyed or used up during testing, samples will be returned upon request at the bidder's expense, unless stated otherwise in Special Conditions or Specifications. Each individual sample must be labeled with bidder's name and manufacturer's brand name and number.
10. **AWARD OF CONTRACT**
 (a) The contract will be awarded to the lowest responsible bidder based upon the following factors: quality, conformity with specifications; purpose for which required; terms of delivery; transportation charges; dates of delivery.
 (b) The city reserves the right to accept and award item by item, and/or by group, or in the aggregate, unless the bidder qualifies his bid by specified limitations. Re Par.4(a)3.
 (c) If two or more bids received are for the same total amount or unit price, quality and service being equal, the contract shall be awarded to a local bidder.
 (d) Prices quoted must be FOB Tuscaloosa with all transportation charges prepaid unless otherwise specified in the Invitation to Bid.
 (e) A written award of acceptance (Purchase Order), mailed or otherwise furnished to the successful bidder shall result in a binding contract.
11. **DELIVERY**
 (a) Deliveries are to be FOB Destination unless otherwise specified in the Invitation to Bids.
 (b) Deliveries are to be made during regular business hours.
12. **CONDITION OF MATERIALS AND PACKAGING**
 All items furnished must be new and free from defects. No others will be accepted under the terms and intent of this bid. All containers shall be new and suitable for storage or shipment, and price bid shall include standard commercial packaging.
13. **CLAIMS**
 Successful bidder(s) will be responsible for making any and all claims against carriers for missing or damaged items.
14. **LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS**
 Bidders shall comply with all local, state, and federal directives, orders and laws as applicable to this bid and subsequent contract(s).
15. **PROVISION FOR OTHER AGENCIES**
 Unless otherwise stipulated by the bidder, the bidder agrees when submitting his bid to make available to all City agencies, departments, and in-city municipalities the bid prices he submits, in accordance with the bid terms and conditions, should any said department, agency, or municipality wish to buy under this proposal.
16. **COLLUSION**
 The bidder, by affixing his signature to this proposal, agrees to the following: "Bidder certifies that his bid is made without previous understanding, agreement, or connection with any person, firm, or corporation making a bid for the same items and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action".
17. **VARIANCE IN CONDITIONS**
 Any and all special conditions and specifications attached hereto which varies from General Conditions shall have precedence.
18. **UTILIZING MINORITY CONTRACTORS**
 Contractors are encouraged to utilize the minority contractor database to identify eligible minority contractors and subcontractors. Bidders should document its efforts to utilize minority contractors for the project and identify the minority subcontractors that the bidder intends to engage on the project. Bidders may obtain database information by contacting LaPerry Howell of the City of Tuscaloosa at (205) 248-5089.

** PRELIMINARY BID TABS WILL BE POSTED ON THE CITY'S WEBSITE ONCE THEY ARE AVAILABLE.

SPECIAL CONDITIONS

The General Conditions of Invitations to Bid and any Special Conditions stated shall be considered as part of the specifications of the bid.

Reference to brand names and numbers is descriptive, but not restrictive, unless otherwise specified. Bids on equivalent items meeting the standards of quality thereby indicated will be considered, providing the bid clearly describes the article offered and indicates how it differs from the referenced brands. **Descriptive literature and manufacturer's specifications plus any supplemental information necessary for comparison purposes must be submitted with the bid or the bid on that item will be rejected.** Reference to literature submitted with a previous bid or on file with the Division of Purchasing will not satisfy this requirement.

The burden is on the bidder to demonstrate that the item bid is equivalent to the item specified in the ITB. Any exceptions taken to any item(s) must be fully explained in written detail on bidders' letterhead and attached to the bid when submitted.

Awards shall be made or contracts entered into with the lowest responsible bidder meeting all specifications and terms and conditions established by the Division of Purchasing. The Division of Purchasing reserves the right to determine the lowest responsible bidder on the basis of an individual item or group of items. Delivery dates may be a factor in awards.

The issuance of a City of Tuscaloosa Purchase Order or Purchasing Card is required to constitute a contract between the vendor and the City of Tuscaloosa, which shall bind the vendor to furnish and deliver the commodities ordered at the prices, terms, and conditions quoted.

Please read "Special Conditions for Federally Funded Contracts" and make sure you meet these conditions before submitting your bid.

Questions concerning the bid process should be directed to David Coggins at (205) 248-5186 or dcoggins@tuscaloosa.com (e-mail is preferred). Questions concerning Specifications should be directed to Jason Walker at (205) 561-3778.

Any addendums issued for this bid will be posted on the City Of Tuscaloosa website at <http://www.tuscaloosa.com/e-services/bids>. It is the responsibility of the bidder to check this page for any addendums before submitting their bid.

Vendor to submit the following:

- Signed Special Conditions page
- Any necessary descriptive literature and/or specifications information as outlined above
- Required documents and information listed in Specifications
- Completed Bid Schedule
- Completed and signed Bidder's Response Form
- NOTE: Sheet(s) submitted without Company Name & Signature WILL NOT be considered for bid award.

Bid submissions shall be submitted in a sealed envelope and addressed to: David Coggins, Purchasing Agent, 2201 University Blvd., Tuscaloosa, Alabama. The name and address of the bidder, the date and hour of the bid opening and the Bid Title shall be placed on the outside of the envelope.

VENDOR MUST SUBMIT AN ORIGINAL BID AND ONE COMPLETE COPY OR THE BID MAY BE REJECTED.

SPECIFICATIONS

The Tuscaloosa City Walk Project is scheduled to be constructed in three segments over an 18 to 24 month period. The quantities listed in the bid schedule are estimates based on the current scope of the project. In the event of unforeseen changes to the project design and scope, the actual quantities purchased may change. The City anticipates placing separate orders for each of the three segments of the project. Bid prices are to be firm for at least 24 months after bid award in order to allow for this project segment schedule.

Unless otherwise specified at the time of order, delivery shall be made to the following location:

Tuscaloosa Department of Transportation (TDOT)
1100 28th Ave.
Tuscaloosa, AL 35401

Delivery requirements shall be within 30 days of order for each segment.

The following information is attached and incorporated into this Invitation to Bid:

- Specifications – LED Light Fixture Materials & Wireless Control System (10 total pages)
- Special Conditions for Federally Funded Projects (13 total pages)

The City Of Tuscaloosa reminds potential bidders to read the General and Special Conditions as well as the Specifications in order to be completely familiar with the requirements and expectations of this Invitation to Bid.



City of Tuscaloosa
LED Light Fixture Materials & Wireless Control System



Bid Schedule

Item No.	Quantity	Unit	Description	Unit Cost	Total Cost
PROJECT BASE BID COST					
University Place / Forest Lake CityWalk Project					
1	41	each	LED Street Light Fixture - 240 watt (minimum) and all mounting hardware and connections	\$	\$
2	27	each	LED Pedestrian Light Fixture - 140 watt (minimum) and all mounting hardware and connections	\$	\$
3	1	each	Wireless Control System in Light Fixture and all other associated antennas, software, and hardware (must be configured to accommodate other sections as they are installed)	\$	\$
4	1	lot	System Programming and Training	\$	\$
Alberta Parkway and CityWalk Project					
5	100	each	LED Street Light Fixture - 240 watt (minimum) and all mounting hardware and connections	\$	\$
6	50	each	LED Pedestrian Light Fixture - 140 watt (minimum) and all mounting hardware and connections	\$	\$
7	1	each	Wireless Control System in Light Fixture and all other associated antennas, software, and hardware	\$	\$
8	1	lot	System Programming and Training	\$	\$
10th Avenue Improvements / City Walk Project					
9	70	each	LED Street Light Fixture - 240 watt (minimum) and all mounting hardware and connections	\$	\$
10	70	each	LED Pedestrian Light Fixture - 140 watt (minimum) and all mounting hardware and connections	\$	\$
11	1	each	Wireless Control System in Light Fixture and all other associated antennas, software, and hardware	\$	\$
12	1	lot	System Programming and Training	\$	\$
				TOTAL BASE BID = \$	

BIDDER'S RESPONSE FORM

MESSAGE TO BIDDERS: Please review your bid documents for accuracy, completeness, required documentation, and necessary signatures before submitting. Please label the outer mailing/shipping package with the bid information as directed.

COMPANY NAME: _____

CONTACT PERSON: _____

COMPLETE MAILING ADDRESS: _____

AUTHORIZED SIGNATURE: _____

PRINTED NAME: _____

TELEPHONE NUMBER: _____ **FAX NUMBER:** _____

E-MAIL ADDRESS: _____

COPIES SUBMITTED:

_____ **VENDOR MUST SUBMIT AN ORIGINAL BID AND ONE COMPLETE COPY OR THE BID MAY BE REJECTED.**

NOTE: BY SIGNING THIS CONTRACT, THE CONTRACTING PARTIES AFFIRM, FOR THE DURATION OF THE AGREEMENT, THAT THEY WILL NOT VIOLATE FEDERAL IMMIGRATION LAW OR KNOWINGLY EMPLOY, HIRE FOR EMPLOYMENT, OR CONTINUE TO EMPLOY AN UNAUTHORIZED ALIEN WITHIN THE STATE OF ALABAMA. FURTHERMORE, A CONTRACTING PARTY FOUND TO BE IN VIOLATION OF THIS PROVISION SHALL BE DEEMED IN BREACH OF THE AGREEMENT AND SHALL BE RESPONSIBLE FOR ALL DAMAGES RESULTING THEREFROM.

FAILURE TO COMPLETE ALL OF THE ABOVE WITH AN AUTHORIZED SIGNATURE MAY SUBJECT BID TO REJECTION.

NON-BIDDERS RESPONSE FORM

For purposes of maintaining accurate bidder's list and facilitating your firm's response to our invitation for bid, the City of Tuscaloosa is interested in ascertaining reasons for prospective bidders' failure to respond to invitations for bids. If your firm is not responding to this bid, please indicate the reason(s) by checking any appropriate item(s) below and returning this form to Mr. David Coggins, Purchasing Agent, 2201 University Blvd., Tuscaloosa, Alabama 35401. Failure to either submit a bid proposal or return this form may result in removal of your firm's name from our bidder's lists. Thank you for your cooperation.

We are not responding to this invitation for bid for the following reason(s):

___ Items or materials request not manufactured by us or not available to our company.

___ Our items or materials do not meet specifications.

___ Specifications not clearly understood or applicable (too vague, too rigid, etc.)

___ Quantities requested are too small.

___ Insufficient time allowed for preparation of bid.

___ Incorrect address used: Correct mailing address is:

___ Our branch/division handles this type of bid. Correct name and mailing address is:

___ Other reason(s): _____

Company Name: _____

Address: _____

City/State/Zip: _____

Signature: _____

Section A - Materials

1. Scope of Project

- a. The successful contractor will provide the specified Wireless Controlled LED Lighting Fixtures and System and all required mounting/installation materials and parts. The contractor is required to fully configure the LED light fixtures and wireless control system. The overall project is 5.2 mile walking and biking path with poles located approximately 80 feet apart based on the physical land and street conditions. The project will be built in 3 segments and installed over an 18 – 24 months period. The LED lights will be installed by others on poles that support installation of the following hardware and equipment: LED lights (street and pedestrian); wireless access points, security cameras, and communications box. A diagram and schedule of types and quantities of Wireless Control LED Lighting Fixtures and System required per CityWalk segment is attached and incorporated into the specifications.

Required Documents and Information

1. Include a connectivity diagram illustrating how the major hardware items will be connected.
2. Provide specification cut sheets on each major hardware and software item.

2. LED Lighting Fixture General Description

This section contains a description of the lighting system hardware, software and management plus how the system is expected to function once the installation and testing are completed.

3. Required Equipment

- a. Owner/Consultant has identified the following required equipment. Contractors responding to this RFB should note that this listing does not represent all components that may be required for the Contractors response. They do however represent those items which are obviously required. Therefore, Contractors are responsible for including all components in their solution (required for the outdoor lighting system) which results in a complete and fully operational system based on this RFB.
- b. **Approved Outdoor Lighting Manufacturers:** The manufacturers listed which includes Cooper Lighting – Lumark Navion Series, GE Lighting – Evolve Series, Leotek - GreenCobra Series, and Phillips

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Lighting – GreenVision Series have been approved by the Owner and represent product types required in the overall solution. Consideration will be given to other manufacturer’s products with written request and technical specifications in support of performance, and must include a warranty statement.

LED Lighting Fixture Functional Requirements and Minimum Technical Specifications

The Project will consist of and perform these and other specific functions and operations. The primary equipment, structure, software, hardware, and connectivity components of the overall LED Lighting System are:

4. Technical Specifications

Type	Wattage (minimum)
Street Light	240 watt
Pedestrian	140 watt

LED Module/Array Requirements	
Lumen Depreciation of LED Light Sources	LED module(s)/array(s) shall deliver at least 70% of initial lumens, when installed for a minimum of 70,000 hours. Submit lumen depreciation (operating life) data for each luminaire supported by the LED ship manufacturers’ IESNA LM80 test data that directly correlates to luminaire level performance. Submit certified photometric reports per IESNA LM79 from an approved Department of Energy Independent testing laboratory to validate manufacturer’s photometric performance claims for each luminaire.
Power Factor	Shall have a minimum Power Factor of 0.90.
Input Voltage	Shall be standard for multi voltage input from 120 volts to 277 volts.
Max Amperage at LED	Shall conform to the following: 1) Step increments on current to the driver: ~350 mA (with option of ~525 mA and ~700 mA) OR 2) Driver adjustment for multi-current input

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	<p>operation: Standard factory for Equivalent Replacement of 70 W HPS and 100 W HPS shall be 350 mA, 525 mA, and 700 mA as delivered from the factory. Adjustment shall not exceed 1000 mA. L70 shall not be below 70,000 for the highest operating forward current</p> <p>OR</p> <p>3) Fixtures using the smaller chip and operating at lower forward currents of alternate step currents will also be considered so long as the output requirements are met for equivalent light on the roadway.</p>
Transient Protection	Per IEEE C.62.41-1991, Class A operation. The line transient shall consist of seven strikes of a 100K HZ ring wave, 6 KV level, for both common mode and differential mode.
Operating Temperature	Power Supply shall operate between -20°C and 50°C.
Frequency	Output operating frequency must be ≥ 120 Hz (to avoid visible flicker) and input operating frequency of 60 Hz.
Interference	Power supplies shall meet FCC 47 CFR Part 15/18 (Consumer Emission Limits).
Noise	Power Supply shall have a Class A sound rating per ANSI Standard C63.4.
Terminal Block	Shall be capable of #12 to #6 AWG.

LED Roadway Application Requirements	
Minimum Light Output	The 0.2 fc contour line, measured parallel to the luminaire arm on the street side of the fixture, shall fall with +/- 10 percent from the equivalent fixture selected for each location in the lighting plan. The 0.2 fc contour line, measured parallel to the luminaire arm on the house side of the fixture, shall fall no less than 20 percent nor more than 5 percent from the equivalent fixture selected for each location in the lighting plan.
Luminaire Efficacy	Luminaire Light Output (includes fixture efficiency and thermal effects); Luminaire Input Power shall meet DOE Energy Star Criteria.
Minimum Luminaire Efficacy	90 lm/W at 350 mA and 62 lm/W at all operating temperatures and forward currents.

5. Referenced Standards

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The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by their basic designation only.

1. American National Standards Institute (ANSI)
i. ANSI C63.4-2001. Standards for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9kHz to 40GHz
ii. ANSI C136.2-2004 (R2009), American National Standard for Roadway and Area Lighting Equipment-Luminaire Voltage Classification
iii. ANSI C136.3-2005, American National Standard for Roadway and Area Lighting Equipment-Luminaire Attachments
iv. ANSI C136.10-2006, American National Standard for Roadway Lighting Equipment – Locking-Type Photocontrol Devices and Mating Receptacle Physical and Electrical Interchangeability and Testing
v. ANSI C136.25-2009, American National Standard for Roadway and Area Lighting Equipment - Ingress Protection (Resistance to Dust, Solid Objects and Moisture) for Luminaire Enclosures
vii. ANSI C136.31-2001, American National Standard for Roadway Lighting Equipment – Luminaire Vibration
2. American Society for Testing and Materials International (ASTM)
i. ASTM G53 – Standard Practice for Operating Light and Water Exposure Apparatus (Fluorescent UV – Condensation Type) for Exposure of Nonmetallic Materials
3. Illuminating Engineering Society of North America (IESNA)
i. DG-4-03, Design Guide for Roadway Lighting Maintenance
ii. LM-63-1995. IESNA Established Test Procedure for Equivalence.
iii. LM-79-08, IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
iv. LM-80-08, IESNA Approved Method for Measuring Lumen Maintenance of LED Light Sources
v. RP-8-00, ANSI / IESNA American National Standard Practice for Roadway Lighting
vi. RP-16-05 and addenda, “Nomenclature and Definitions for Illuminating Engineering”
vii. TM-3-95, A Discussion of Appendix E – “Classification of Luminaire Lighting Distribution,” from ANSI/IESNA RP-8-83
viii. TM-15-07, “Luminaire Classification System for Outdoor Luminaires”
ix. TM-15-07 Addendum A, “Backlight, Uplight, and Glare (BUG) Ratings”
4. National Electrical Manufacturers Association (NEMA)
i. ANSI/NEMA/ANSI C78.377-2008 – American National Standard for the Chromaticity of Solid State Lighting Products
5. National Fire Protection Association (NFPA)
i. NFPA 70 – National Electrical Code (NEC)
6. Underwriters Laboratories (UL)
i. UL 1012 Power Units Other Than Class 2
ii. UL 1310 Class 2 Power Units
iii. UL 1449, Surge Protective Devices
iv. UL 1598, Luminaires

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v. UL 2108 Low Voltage Lighting Systems
vi. UL 8750 Light-Emitting Diode (LED) Light Sources for Use in Lighting Products
7. IP Rating
8. FCC 47 CFR (Consumer Emission Limit)

6. Mounting Hardware

The Contractor must provide specific installation hardware and mount requirements based their fixture and the associated drawings. Adjustments to installation and mounting methods may be required to accommodate onsite conditions and physical environmental issues (trees, buildings, etc.).

7. Electrical and Grounding Hardware and Circuits

The Contractor must provide specific electrical and ground requirements for provided fixtures. The fixtures will be installed based on manufacturer installation requirements and the details on the associated drawings.

Section B - Wireless Control System Installation, Setup, and Programming

1. Scope of Work Description

- a. The City of Tuscaloosa CityWalk Project LED lighting complete package includes all equipment, network infrastructure, managing software, inventory control, implementation, project management, installation, operating processes, and training.
- b. All proposed technologies are to be efficient and provide a savings over existing and traditional methods of lighting.
- c. Efficiencies must be realized in four separate categories; installation, energy, maintenance, and management.
- d. LED Lighting solution maintains current, similar or acceptable design aesthetics where applicable.
- e. LED Lighting contractor demonstrates ability to provide newly designed equipment. This ability needs to be demonstrated towards fixture aesthetics design changes AND innovative function improvements (software and hardware). All equipment must provide a high level of vandal immunity.
- f. Easily measured performance result throughout lifetime.
- g. Contractor must prove a comprehensive understanding of large scope lighting solution inclusive of energy management, maintenance, network design, implementation, public safety and innovation such as is required by a City or regional lighting system.
- h. All proposed solutions must meet or exceed applicable rules, regulations, codes; Federal, state, local, and electricity power provider. For example but not limited to UL and DOHS energy infrastructure security.
- i. Bids must attempt to match all proposed functions of their lighting solution to the real life requirements of the City of Tuscaloosa.
- j. The contractor will describe any anticipated innovation for the proposed product line along with a compatible roadmap of the contractor's proposed product improvements. Contractor should also describe how the proposed lighting solution could be used in future deployment of LED lighting and other applications.

2. System Documentation, Installation, Programming, and Training Requirements

- b. The successful contractor will provide complete documentation for total system including fixtures, layout/placement, wireless control, configuration, and training materials for the Wireless Controlled LED Lighting Fixtures and System.
- c. The successful Contractor will be required to submit a bid that demonstrates a technical expertise, past experience with similar CityWalk - Tuscaloosa 11-12-14

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systems/networks, a clear understanding of the objectives/goals of the City, and capacity to engage additional resources to enhance or expand the system/network. Therefore, Contractors are responsible for including all components in their solution (required for the outdoor lighting system) which results in a complete and fully operational system based on this RFB.

3. Required Documents and Information

The contractor and / or manufacturer of the LED lighting fixtures and system is required to provide the following documents, information, diagrams, and other related material with their bid and submittals.

3. Provide a narrative description of how the system works in an outdoor environment.
4. Include a connectivity diagram illustrating how the major hardware items will be connected.
5. Describe infrastructure, services and other hardware needed to ensure your proposed solution will work in the Owner's environment.
6. Provide a spreadsheet of each item required to fully implement your proposed solution, include quantity, unit cost and manufacturer.
7. Provide specification cut sheets on each major hardware and software item.
8. Provide a typical recommended layout/positioning of hardware inside a designated location for network connectivity and outdoor placement of LED Lights along the City Walk.

4. Wireless Control System Installation Requirements

4.1 Installation Guidelines

- a. All the LED fixtures and associated installation and mounting hardware and work required to fulfill the scope of the project will be the responsibility of the selected Contractor. These specifications cover the installation of a fully functional Wireless Controlled LED Lighting system to be implemented.
- b. All work necessary to install, test and document the Wireless Control System installation specifics shall also be included in the bid. Documentation will include, but not be limited to, the configuration of equipped at implementation, troubleshooting instructions, and inventory.
- c. Contractor shall be responsible for requesting clarification from the Owner/designer regarding any equipment items or work, which

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Contractor believes, may fall outside the scope of the project, such request for clarification, and any response, shall be made in writing and shall become a part of the Contractor's proposal. Unless otherwise clearly indicated, the bid submitted shall be interpreted to include work and equipment described in this RFB to be within the scope of the project.

4.2 Pre - Installation

1. Provide an installation plan of wireless system and associated hardware with a timeline, progress review method and resource allocation.
2. Procedures for adding equipment to the Owner's overall system/network, if applicable.

4.3 Post-Installation

1. Provide user and technical staff training
2. Submit proposed system acceptance checklist to demonstrate that all requirements have been met.
3. Deliver all documentation to the Owner.

5. Wireless Controlled LED Lighting System Performance Requirements

1. Wireless network must be scalable to cover the minimum noncontiguous installed lights to the maximum of CityWalk coverage.
2. Wireless network frequency must operate at a licensed interference free spectrum.
3. Wireless network should meet a high security level protection. Contractor must submit detailed description the security implemented and security related certifications received.
4. Contractor should provide the physical hardware required and logical design layout of the wireless control network and associated hardware and networks connections.

6. Control and Monitoring

The contractor must provide narrative descriptions and other information that indicates how the proposed lighting control and monitoring system will meet the following functional requirements.

1. Lighting equipment control system with capability of monitoring each street light individually.

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2. The Contractor should describe and provide samples of the various types and formats of reporting provided by the control system.
3. Multiple user account access with degree of difference security.
4. Predefined lighting groups.
5. A robust graphical interface showing status and location of lights on an accurate map. Contractor must submit a “screen shot” of this feature.
6. Multiple severity level alarms. Contractor must submit a “screen shot” of this feature.
7. Contractor should describe the various formats/methods for extraction of data from the software/control system.
8. Command line interface or API that allows a City written application to interact with lighting control. Specifications of API must be submitted.
9. Contractor should list and describe the different methods of programming the operations of the control system. Describe the utilization of sunrise / sunset tables for turn-on and turn-off times, if applicable.
10. Demand based delay to prevent brownouts during peak intervals.
11. Delayed on/off timing, to prevent power spikes and surges.
12. Complete elimination of the photos cell. (typically replaced when a dead bulb is found), thus eliminating lights which operate continuously or not at all; while removing a point of hardware failure.
13. Reduced energy consumption and increased product life by pre-programmed turning off every-other light during hours of relative inactivity, or pre-programmed dimming control.
14. Custom groupings of lights can quickly and easily be selected for emergencies and events.
15. Location of dead lights is automatically reported, through an automated alarm notification.
16. Alarm notification and outage reporting. Submit an example of alarm report.

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17. Provides exact GPS location of lights needing repair.

6. System Hardware and Software Setup and Programming

The contractor must provide the required computer hardware and software to fully operate the complete set of features and functions of the wireless control system. Provide technical specifications and configuration of the computer and operating system required for the control system software. The contractor is required to perform any programming and loading of data into the system to provide a complete and operational system that meets the requirements listed in this RFB. Any antenna equipment required must be designed, provided, installed, and configured to ensure complete coverage of the CityWalk area and the all lights along the path. Provide technical specifications and design of the antenna system and mounting hardware. Any software licenses and annual maintenance cost must described and copy of the maintenance agreement included with the bid. Include initial cost of software loading and configuration plus annual upgrade and maintenance charges. A technical system diagram, hardware schedule, and software description must be provided with the bid.

7. Training

The contractor must provide a minimum of 8 hours of training for City personnel and others on the operations, features, and functions of the wireless control system. Provide three (3) copies of the training material in digital format (DVD) and printed material. The cost of additional training must be listed with the description of the length of the training and number of users that can attend.

8. Setup and Configuration – Additional Segments of the CityWalk

The contractor will provide the technical resources to setup, configure, and load additional LED light fixtures into the software, database, and wireless system for additional segments of the CityWalk. The cost of these services will be listed in the bid and remain in effect through the end of the project (estimated duration: 24 months from initial installation).

Section B1 - Additional Programming

The contractor is required to perform additional programming and loading of data into the system as each segment of the CityWalk is constructed. Each segment of the CityWalk will be controlled by a single wireless system (i.e. Same wireless system will control all lights along the CityWalk) and must meet the complete operational system requirements listed in this RFB.

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**CITY OF TUSCALOOSA
SPECIAL CONDITIONS FOR
FEDERALLY FUNDED CONTRACTS
(AS APPLICABLE)**

I. DEFINITIONS

Contractor means an entity that has entered into an agreement with the local government for the performance of specific work on a project or activity, the provision of professional services, or for the supply of equipment and/or materials.

Local Government means the City of Tuscaloosa.

Project Area means the corporate limits of the City of Tuscaloosa.

Subcontractor means a person, firm or corporation supplying services or labor and materials or only labor or only materials for work at the site of the project, for and under contract or agreement with the Contractor.

II. CONFLICT OF INTEREST

A. Interest of Members of the Local Government. No officer, employee or agent of the local government who exercises any function or responsibilities in connection with the planning and carrying out of the program, or any other person who exercises any functions or responsibilities in connection with the program, shall have any personal financial interest, direct or indirect, in this contract, and the Contractor shall take appropriate steps to assure compliance.

B. The Contractor agrees that it will incorporate into every subcontract required in writing the following provision: Interest of Contractor and Employees. The Contractor agrees that no person who presently exercises any functions or responsibilities in connection with the program, has any personal financial interest, direct or indirect, in this contract. The Contractor further covenants that he presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of his services hereunder.

The Contractor further covenants that in the performance of this contract no person having any conflicting interest shall be employed. Any interest on the part of the Contractor or his employees must be disclosed to the City. Provided, however, that this paragraph shall be interpreted in such a manner so as not to unreasonably impede the statutory requirement that maximum opportunity be provided for employment of and participation by low income residents of the area.

C. Provisions of the Hatch Act. Neither the funds provided by this agreement nor the personnel employed in the administration of the agreed upon work shall be in any way or to any extent engaged in the conduct of political activities in contravention of Chapter 15 of Title 5, U. S. Code.

III. EQUAL OPPORTUNITY REQUIREMENTS: During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, or disability. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, age, or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment, or recruitment advertising; layoff or termination; rates of pay or other forms of compensations; and selection of training, including apprenticeship. The Contractor agrees to

post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, or disability.

3. The Contractor will send to each labor union or representative of workers with which he has collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Contractor will furnish to the local government all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the local government, HUD, and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules regulations, and orders.

6. In the event of the Contractor's non-compliance with the nondiscrimination clauses of this agreement or with any of the said rules, regulations, or orders, this agreement may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further local government contracts in accordance with procedures authorized in Executive Order 11246 of September 24 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the City, Secretary of Labor, or as otherwise provided by law.

7. The Contractor will include the provisions of paragraph 1 through 6 above in every subcontract or purchase order unless exempted by rules, regulations, or orders of the local government or the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed as a means of enforcing such provisions, including sanctions for noncompliance: Provided however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the City, the Contractor may request the local government to enter into such litigation to protect the interests of the local government.

8. The Contractor agrees that it will assist and cooperate actively with the local government and the Secretary of Labor in obtaining the compliance of subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the local government and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the local government in the discharge of its primary responsibility for securing compliance.

9. The Contractor further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order. In addition, the agency agrees that if it fails or refuses to comply with these undertakings, the local government may take any or all of the following actions: terminate or suspend in whole or in part this contract; refrain from extending any further assistance to the Contractor under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such Contractor.

10. Non-segregated Facilities. The Contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Contractor covenants that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control,

where segregated facilities are maintained. As used in this paragraph, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

11. No person in the United States shall, on the ground of race, color, religion, sex, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this contract. The agency and each employer will comply with all requirements imposed by or pursuant to Title VI of the Civil Rights Act of 1964.

12. The Contractor shall maintain data which records its affirmation action in equal opportunity employment, including but not limited to employment, upgrading, demotions, transfers, recruitment or recruitment advertising, layoffs or terminations, pay or other compensation, and selection for training.

IV. LABOR STANDARDS PROVISIONS - CONSTRUCTION CONTRACTS ONLY

A. Contract Work Hours and Safety Standards Act

1. Overtime Requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work to work in excess of forty hours in any work-week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of forty hours in any work-week.

2. Violations; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in subparagraph 1, the Contractor and any subcontractor responsible therefore shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the City for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the clause set forth in subparagraph 1 in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work-week of forty hours without payment of the overtime wages required by the clause set forth in subparagraph 1.

3. Withholding for Unpaid Wages and Liquidated Damages. The local government may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages.

B. Employment of Certain Persons Prohibited. No person under the age of sixteen years and no person who at the time, is serving sentence in a penal or correctional institution shall be employed on the work covered by this contract.

C. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the labor standards provisions of this contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceedings or has testified or is about to testify in any proceedings under or relating to the labor standards applicable under this contract.

D. Questions Concerning Certain Federal Statutes and Regulations. All questions arising under this contract which relate to the application or interpretation of the aforesaid Contract Work Hours and Safety Standards Act, the regulations issued by the Secretary of Labor, United States Department of Labor, pursuant to said Act, or the labor standards provisions of any other pertinent Federal statute, shall be referred, through the City of Tuscaloosa and the Secretary of Housing and Urban Development, to the Secretary of Labor, United States Department of

Labor, for said Secretary's appropriate ruling or interpretation which shall be authoritative and may be relied upon for the purpose of this contract.

V. ENVIRONMENTAL PROTECTION REQUIREMENTS

A. The Contractor hereby agrees that any facility to be utilized in the performance of any nonexempt contract or subcontract shall not be a facility included on the list of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.

B. The Contractor also agrees to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

C. As a condition of the award of the contract, the Contractor agrees to give prompt notice to the City of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

D. The Contractor agrees that it will include or cause to be included the criteria and requirements in subparagraph A through D of this section in every nonexempt subcontract and that it will take such action as the City or the EPS may direct as a means of enforcing such provisions.

VI. FINANCIAL MANAGEMENT: The Contractor shall maintain effective control over and accountability for all funds, property, and other assets that are provided for by this agreement. The Contractor shall adequately safeguard all such assets and shall assure that they are used solely for authorized purposes.

A. Ineligible Costs. In addition to any costs that are ineligible under other criteria included herein the following costs are specifically ineligible:

1. Bad Debts. Any losses arising from uncollected accounts and other claims, and related costs.
2. Contingencies. Contributions to a contingency reserve or any similar provisions for unforeseen events.
3. Contributions and Donations.
4. Entertainment. Costs of amusements, social activities, and incidental costs, such as meals, beverages, lodgings, and gratuities, relating to entertainment.
5. Fines and Penalties. Costs resulting from violations of or failure to comply with Federal, State, and local laws and regulations.
6. Interest and Other Financial Costs. Interest on borrowing (however represented), bond discounts, cost of financing and refinancing operations, and legal and professional fees paid in connection herewith.
7. Legislative Expenses. Salaries and other expenses of local government bodies such as county supervisors, city councils, school boards, etc., whether incurred for purposes of legislation or executive direction.
8. Membership Expenses. Cost of membership in an organization which devotes a substantial part of its activities to influencing legislation.
9. Travel. Costs in excess of those allowed by the Contractor for its equivalent employees. In any case, the difference in cost between first-class air accommodations and less-than-first-class air accommodations are not available and is so documented.
10. Meeting Attendance. Costs of attending meetings which are not open for attendance on a non-segregated basis.

B. Property Management Standards. The Contractor's property management standards for non-

expendable personal property acquired under this contract shall include the following procedural requirements:

1. Property records shall be maintained accurately and provide for: a description of the property; manufacturer's serial number or other identification number; acquisition data, cost, and source of property; percentage of Federal funds used in the purchase of property; location, use and condition of the property; and ultimate disposition data including sales price or the method used to determine current fair market value.
 2. A physical inventory of property shall be taken and the results reconciled with the property records at least once each year to verify the existence, current utilization, and continued need for the property.
 3. A control system shall be in effect to ensure adequate safeguards to prevent loss, damage, or theft to the property. Any loss, damage, or theft of non-expendable property shall be investigated and fully documented.
 4. Adequate maintenance procedures shall be implemented to keep the property in good condition.
- C. Procurement Standards
1. The Contractor shall maintain a code or standard of conduct which shall govern the performance of its officers, employees, or agents in contracting with and expending grant funds. Local government officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from Contractors or potential Contractors.
 2. All procurement transactions regardless of whether negotiated or advertised and without regard to dollar value shall be conducted in a manner so as to provide maximum open and free competition.

VII. GENERAL REQUIREMENTS

A. Retention of Records. All records maintained by the Contractor that pertain to this agreement shall be retained by the Contractor for a period of three years or such longer period as the local government or HUD may require in specific cases.

B. Reports and Information. The Contractor, at such times as the local government may require, shall furnish such statements, reports, records, data and information, as may be requested pertaining to matters covered by this agreement.

C. Audit Requirements. The local government, the Comptroller General of the United States, and/or _____ (Federal Agency), or any of the duly authorized representatives shall have access to all tasks, accounts, records, reports, files and other papers or property of the Contractor pertaining to funds provided under this agreement for the purpose of making surveys, audits, examinations, excerpts, and transcripts. The Contractor's financial management system shall be audited at least once a year. Audits may be made at less frequency considering the nature, size and complexity of the activity. The Contractor shall implement a systematic method to assure timely and appropriate resolution of audit findings and recommendations.

D. Breach of Contract Terms and Conditions. In the event of the Contractor's noncompliance with the terms and conditions of this contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part. Provided, that the right of the Contractor to proceed with this contract shall not be terminated or the Contractor charged with liquidated damages because of delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted, to acts of God, or of the public enemy, acts of the Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of subcontractors due to such causes, if the Contractor shall within ten days from the beginning of any such delay notify the City in writing of the cause of the delay. The City shall ascertain the facts and the extent of the delay and extend

the time for completing the work when, in the City's judgment, the findings of fact justify such an extension, and the City's findings of fact thereon shall be final and conclusive on the parties hereto, subject only to appeal, within thirty days, by the Contractor to the City whose decision on such appeal as to the facts of delay and the extension of time for completing the work shall be final and conclusive on the parties hereto.

E. Safety Standards. No Contractor or subcontractor contracting for any part of a construction contract shall require any laborer or mechanic employed in the performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards promulgated by the Secretary of Labor.

F. Lead-based Paint Regulations. The construction or rehabilitation of residential structures with assistance provided under this contract is subject to the HUD Lead-based Paint regulations, 24 CFR part 35. Should this contract include activities involving the construction or rehabilitation of residential structures, the Contractor hereby agrees to comply with the regulations of 24 CFR part 35.

G. Subcontracts. The Contractor shall insert in any subcontracts all of the terms and conditions set forth in this contract and also a clause requiring the subcontractors to include these terms and conditions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

H. Davis-Bacon. As applicable, Contractors shall comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR Part 5), the provisions of which are incorporated by reference into this contract as if contained herein.

I. Debarment of contractors/subcontractors / City's right to monitor. All contracting and subcontracting agencies shall be actively registered in the sam.gov system and have a non-debarred status to perform work. The City of Tuscaloosa shall have all rights to any and all documentation related to the project. Periodic monitoring visits will be performed by City of Tuscaloosa staff to ensure all federal and contract requirements are followed.

J. Green Building Standard for Replacement and New Construction of Residential Housing. Contractors must meet the Green Building Standard in this subparagraph for: (i) all new construction of residential buildings; and (ii) all replacement of substantially-damaged residential buildings. Replacement of residential buildings may include reconstruction (i.e., demolishing and re-building a housing unit on the same lot in substantially the same manner) and may include changes to structural elements such as flooring systems, columns or load bearing interior or exterior walls. For purposes of this Notice, the Green Building Standard means the contractor will require that all construction covered by subparagraph, above, meet an industry-recognized standard that has achieved certification under at least one of the following programs (i) ENERGY STAR (Certified Homes or Multifamily High Rise); (ii) Enterprise Green Communities; (iii) LEED (NC, Homes, Midrise, Existing Buildings O&M, or Neighborhood Development); (iv) ICC-700 National Green Building Standard; (v) EPA Indoor AirPlus (ENERGY STAR a prerequisite); or (vi) any other equivalent comprehensive green building program, including regional programs. Standards for rehabilitation of non-substantially-damaged residential buildings: For rehabilitation other than that described in subparagraph, above, contractors must follow the guidelines specified in the HUD CPD Green Building Retrofit Checklist, available on the CPD Disaster Recovery Web site. Contractors must apply these guidelines to the extent applicable to the rehabilitation work undertaken, including the use of mold resistant products when replacing surfaces such as drywall. When older or obsolete products are replaced as part of the rehabilitation work, rehabilitation is required to use ENERGY STAR- labeled, WaterSense labeled, or federal Energy Management Program (FEMP)- designated products and appliances. Implementation: For construction projects completed under construction, or under contract prior to the date that federal assistance was approved for the project the contractor is encouraged to apply the applicable standards to the extent feasible but the Green Building Standard is not required; (ii) for specific which an ENERGY STAR-or-WaterSense-labeled or FEMP-designated product does not exist, the requirement to use such products does not apply. The City encourages contractors to implement green infrastructure policies to the extent practicable.

VIII. ADECA-FUNDED CONTRACTS: The Contractor shall include the following provisions in all construction contracts funded by the Alabama Department of Economic and Community Affairs (ADECA). For all ADECA-funded construction contracts, in the event the provisions contained in this section conflict with provisions contained elsewhere in this document, the provisions contained in this section shall prevail.

A. Section 109 Clause, Housing and Community Development Act of 1974. No person in the United States shall on the grounds of race, color, national origin or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

B. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246) (applicable to contract/subcontracts exceeding \$10,000). Contractor's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for	Goals for
Minority	Female
Participation	Participation

(Insert Goals) (Insert Goals)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the Contractor performs construction work in a geographic area located outside of the covered area, it shall apply the goals established for such geographic area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its Federally involved and non-Federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

C. "Section 3" Compliance in the Provision of Training, Employment and Business Opportunities.

1. The work to be performed under this Contract is a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12, U.S.C. 1701u. Section 3 requires that to the greatest extent feasible, opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by, persons residing in the area of the project.
2. The parties to this Contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR 135, and all applicable rules and orders of the Department issued

thereunder prior to the execution of this Contract. The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.

3. The Contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of this commitment under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
4. The Contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the Subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The Contractor will not subcontract with any Subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the Subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
5. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued hereunder prior to the execution of the Contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified in 24 CFR Part 135.

D. Section 402 Veterans of the Vietnam Era (if \$10,000 or over). Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era.

1. The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based on their disability or veteran status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
2. The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this Contract and those which occur during the performance of this Contract, including those not generated by this Contract and including those occurring at an establishment of the Contractor other than the one wherein the Contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required. State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not

- required to provide those reports set forth in paragraphs 4 and 5.
3. Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and non-veterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in Executive Orders or regulations regarding nondiscrimination in employment.
 4. The reports required by paragraph 2 of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of nondisabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C.1787. The Contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made on this Contract identifying data for each hiring location copies of the reports submitted until the expiration of one year after final payment under the Contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the contracting officer or of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment and placement.
 5. Whenever the Contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions and has so advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by the contract clause.
 6. This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 states, the District of Columbia, Puerto Rico, Guam and the Virgin Islands.
 7. The provisions of paragraphs 2, 3, 4 and 5 of this clause do not apply to openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of his own organization or employer-union arrangement for that opening.
 8. As used in this clause:
 - a. "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: production and nonproduction; plant and office; laborers and mechanics; supervisory and nonsupervisory; technical; and executive, administrative, and professional openings that are compensated on a salary basis of less than \$25,000 per year. This term includes full-time employment, temporary employment of more than

three days' duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

b. "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico and the Virgin Islands.

c. "Openings which the Contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) and includes any openings which the Contractor proposed to fill from regularly established "recall" lists.

d. "Openings which the Contractor proposes to fill pursuant to customary and traditional employer-union hiring arrangements" means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of his employees.

9. The Contractor agrees to comply with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.
10. In the event of the Contractor's non-compliance with the requirements of this clause, actions for non-compliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.
11. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notice shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.
12. The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Vietnam Era Veterans Readjustment Assistance Act, and is committed to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era.
13. The Contractor will include the provisions of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontractor or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for non-

compliance.

E. Certification of Compliance with Air and Water Acts (applicable to Federally assisted construction contracts and related subcontracts exceeding \$100,000). Compliance with Air and Water Acts. During the performance of this Contract, the Contractor and all Subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Contract Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended. In addition to the foregoing requirements, all nonexempt Contractors and Subcontractors shall furnish to the Owner, the following:

1. A stipulation by the Contractor or Subcontractors that any facility to be utilized in the performance of any nonexempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
2. Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
3. A stipulation that as a condition for the Contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, or EPA indicating that a facility utilized, or to be utilized for the Contract, is under consideration to be listed on the EPA List of Violating Facilities.
4. Agreement by the Contractor that he will include, or cause to be included, the criteria and requirements in paragraphs A through D of this section in every nonexempt subcontract and requiring that the Contractor will take such actions as the Government may direct as a means of enforcing such provisions.

F. Compliance with Copeland Act Requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

G. Drug-Free Workplace Requirements. The Drug-Free Workplace Act of 1988 (42 U.S.C. 701) requires grantees (including individuals) of federal agencies, as a prior condition of being awarded a grant, to certify that they will provide drug-free workplaces. Each potential recipient must certify that it will comply with drug-free workplace requirements in accordance with the Act and with HUD's rules at 24 CFR part 24, subpart F.

H. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

IV. DISASTER RECOVERY FUNDED CONTRACTS: The Contractor shall include the following provisions in all Disaster Recover (DR) funded construction contracts. For all DR-funded construction contracts, in the event the provisions contained in this section conflict with provisions contained elsewhere in this document, the provisions contained in this section shall prevail.

A. The Contractor agrees to abide by all applicable Federal regulations in receiving, disbursing and accounting for Community Development Block Grant funds including, but not limited to all applicable sections of 24

CFR 570.

B. ADA Compliance. The Contractor hereby covenants and agrees that, in performing its responsibilities and obligations hereunder, the Contractor, its officers, agents or employees will not, on the grounds of race, color, sex, religion, national origin, disability or age, discriminate or permit discrimination against any person or groups of persons in any manner. The Contractor further agrees to comply with all applicable State and Federal ordinances and regulations, including but not limited to, the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA), the Civil Rights Act of 1964 and any regulations promulgated there under.

C. Section 3 Compliance. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations. Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin. Contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135. Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after Contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR part 135. Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

D. Section 109 Compliance. No person in the United States will, on the ground of race, color, national origin, religion, or sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity administered or provided under this Agreement, pursuant to Section 109 of title I of the Housing and Community Development Act of 1974 (Title I) (42 U.S.C. 5309).

E. Section 402 Compliance. Contractors and subcontractors shall take affirmative action to employ and advance in employment qualified covered veterans. Disabled veterans, recently separated veterans (veterans within 3 years of their discharge or release from active duty), veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized (referred to as "other protected veterans"), and Armed Forces service medal veterans are covered veterans under VEVRAA, pursuant to the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended (VEVRAA).

F. Copeland Anti-Kickback Act Compliance. Pursuant to The Copeland "Anti-Kickback" Act, 40 USC §3145 and 18 USC §874, no contractor or subcontractor operating under this agreement shall induce an employee to give up any part of the compensation to which he or she is entitled under his or her contract of employment. Contractors and subcontractors shall submit a weekly statement of the wages paid to each employee performing on covered work during the preceding payroll period.

G. Affirmative Action. During the performance of this contract, the contractors and subcontractors operating under this agreement shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Contractors and subcontractors operating under this agreement shall comply with Affirmative Action laws and regulations to ensure equal employment opportunities, including, but not limited to 41 CFR Part 60-1; 41 CFR Part 60-2; 41 CFR Part 60-250; 41 CFR Part 60-741; compliance with E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity."

H. Compliance with Goals for Minority and Female Participation. The City of Tuscaloosa has voluntarily adopted a Minority / Disadvantaged Business Enterprise ("MBE/DBE/WBE") Program designed to encourage the participation and development of minority and disadvantaged business enterprises and to promote equal business opportunities to the fullest extent allowed by state and federal law. It is the intent of the City to foster competition among contractors, suppliers, and vendors that will result in better quality and more economical services rendered to the City. Under this policy, the City of Tuscaloosa has established a goal of ten to twenty percent (10-20%) inclusion of minority and disadvantaged business enterprises for all services required to deliver City projects. In no case shall the stated percentage be the determining factor in contract awards. Rather, contractors must demonstrate a good faith effort to attain the desired percentage goal. The Developer is encouraged to adopt corresponding goals to those of the City's Minority / Disadvantaged Business Enterprise ("MBE/DBE/WBE") Program.

I. Compliance with Environmental Laws; including The Clean Air Act and Clean Water Act. Contractors and subcontractors operating under this agreement shall be responsible for ensuring compliance with Federal, State, or local pollution control laws and related requirements, including but not limited to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). If a contracting officer becomes aware of noncompliance with clean air or water standards in facilities used in performing nonexempt contracts, that contracting officer shall notify the agency head, or a designee, who shall promptly notify the EPA Administrator or a designee in writing.

J. Byrd Anti-Lobbying Agreement. Contractors operating under this agreement shall file the required certification under the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.