

Lexington-Fayette Urban County Government Lexington, Kentucky

		Horse Capital of the World	
Division of Central	Purchasing	Date of Iss	sue: November 13, 2017
		INVITATION TO BID #166-2017 Traffic Signal Installation & Repair	
Bid Opening Date: Address:	November 200 East M	27, 2017 Bid Opening lain Street, 3 rd Floor, Room 338, Lexington, Kentucky 40507	Time: 2:00 PM
Type of Bid:	Price Cont	ract	
Pre Bid Meeting: Address:	N/A N/A	Pre Bid Time	: N/A
Sealed bids will be re prevalling local time of	ceived in the on <u>11/27/20</u>	office of the Division of Central Purchasing, 200 East Main Street, Lexing. 17. Bids must be received by the above-mentioned date and time. Mail	ngton, Kentucky, until 2:00 PM ed blds should be sent to:
		Division of Central Purchasing 200 East Main Street, Room 338 Lexington, KY 40507, (859) 258-3320	
above. Bids that are must be signed and h	e not delive ave the comp	nty Government assumes no responsibility for bids that are not addrest red to the Division of Central Purchasing by the stated time and any name and address, bid invitation number, and the name of the bid on the point of delivery located at: Various, Lexington, KY	date will be rejected. All bid
Bld Specific	cations Met _	Check One: Exceptions to Bid Specifications. Exceptions shall be itemized and attached to bid proposal submitted.	Proposed Delivery:days after acceptance of bid.
Procurement Card and services and also	1 Usage—The o to make pay	Lexington-Fayette Urban County Government may be using Procurement with the Lexington Lexing Procurement Cards?	
Su	bmitted by:	Davis H. Elliot Construction Company, Inc. Firm Name 673 Blue Sky Parkway	
		Address Lexington, KY 40509 City, State & Zip	
Bid must i (original sig	be signed: nature)	Signature of Authorized Company Representative - Title	 e
		Representative's Name (Typed or printed) 859-263-5148 859-263-5486	
		Area Code - Phone — Extension Fax #	

ksimpson@dhec.com

E-Mail Address

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pei	Comes the Affiant, <u>Face P. Marton</u> , and after being first duly sworn under penalty of rjury as follows:
1.	HIs/her name is and he/she is the individual submitting the bid or is the
	authorized representative ofDavis H. Elliot Construction Company, Inc,
	the entity submitting the bid (hereinafter referred to as "Bidder")
2.	Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
3.	Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
4.	Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
5.	Bidder has not knowlngly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.
6.	Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."
7.	Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists. Further, Affiant sayeth naught.
ST	ATE OF Kentucky
CO	The foregoing instrument was subscribed, sworn to and acknowledged before me on this the 27th day Alanka San 2017
	The foregoing instrument was subscribed, sworn to and acknowledged before me
by.	Enc P. Minton on this the 27th day
	November, 2017
	My Commission expires: 8/13/2019
Ple	NOTARY PUBLIC, STATE AT LARGE ease refer to Section II. Bid Conditions, Item "U" prior to completing this form.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR Is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

These products use 25 to 50% less energy Reduced energy costs without compromising quality or performance Reduced air pollution because fewer fossil fuels are burned Significant return on investment Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

The Lexington-Fayette Urban County Government is also committed to using other environmentally products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes <u> </u>	Yes		No
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II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bld. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject <u>any</u> and <u>all</u> bids for either fiscal or technical reasons, and to award each part of the bid separately or all parts to one vendor.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will
 not be considered.
- J. All bids mailed must be marked on the face of the envelope:

"Bid on #166-2017 Traffic Signal Installation & Repair"

and addressed to: Division of Central Purchasing

200 East Main Street, Room 338 Lexington, Kentucky 40507

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

- K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
- L. A certified check or Bid Bond in the amount of <u>XX</u> percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth in this bid, it is agreed the certified check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.
- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction

projects are not tax exempt and are the sole responsibility of the bidder.

- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or Indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

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, age or national origin;
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.

The Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.
- (2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may

- declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions above quoted to be included as <u>special conditions</u> in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and
- (2) Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for <u>1</u> year(s) from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be automatically extended for an additional <u>(3)-1</u> year(s) renewal. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- B. Price Changes (Space Checked Applies)
 - (XXX) 1. Prices quoted in response to the Invitation shall be firm prices for the first 90 days of the Procurement Contract. After 90 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per quarter. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
- No provision for price change is made herein. Prices are to be firm for the term of this contract.
- See bid specifications.
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- F. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.

Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements Imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states: The Contractor will not discriminate against any employee or applicant for employment because of physical or mental disability.
- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states: The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's Intent to affirmatively provide employment opportunities for those Individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, veteran status, disability and age.

Signature / For & Material Cox

Davis H. Elliot Construction Company, Inc.

Name of Business

GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

- Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good. All
 applicable state laws, ordinances and resolutions (including but not limited to Section 2-33 (Discrimination due
 to sexual orientation or gender identity) and Chapter 13 (Licenses and Regulations) of the Lexington-Fayette
 Urban County Government Code of Ordinances, and Resolution No. 484-17 (Minority, Women, and VeteranOwned Businesses)) and the regulations of all authorities having jurisdiction over the project shall apply to the
 contract, and shall be deemed to be incorporated herein by reference.
- 2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
- 4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
- 6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
- 8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
- 9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
- 10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
- 12. Cancellation: LFUCG may unllaterally terminate the bid contract with the selected bidder(s) at any time, with Page 9 of 24

or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No fallure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
- 16. Governing Law: This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
- 17. Ability to Meet Obligations: Bidder affirmatively states that there are no actions, suits or proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Price Discrepancy: In case of price discrepancy, unit bid price written in words will prevail followed by unit price written in numbers then total amount bid per line item.
- 19. Bidder understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.
- 20. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

ignature F Minton

1) 27 2017 Date Name of Organization: Davis H. Elliot Construction Company, Inc.

Categories	Total	(N His c	hite lot pani or ino)	Hisp c (Lat	ОГ	Afrid Ame (N Hisp	ck or can- rican lot panic atino	Haw Ot Pac Isla (N Hisp	tive raiian her cific nder lot panic	Asi (N Hisp c (ot pani pr	India Alas Na (n Hisp	rican an or skan tive tot panic atino	more (I Hisp	o or races Not anic or	То	tal
		М	F	M	F	M	F	М	F	M	F	M	F	М	F	M	F
Administrators		40										1_				41	
Professionals		43	4								1					44	5
Superintendents						1											
Supervisors		58				2						2				62	
Foremen		342		2		4						2		1		351	
Technicians																	
Protective Service															_		
Para-Professionals																	
Office/Clerical		23	32	1			1									34	24
Skilled Craft		956	1	9	1	22						22		6		1015	1
Service/Maintenanc		400	1	15			16					30		11		456	18
Total:		1862	38	27	1	29	17				1	57		18		2003	48

Prepared by: _	Jessica Stuart -	Contract Administration Manager	Date:	11	12712017	<u>1</u>
	(Name and Title	b)			Res	vised 2015-Dec-15

DIRECTOR, DIVISION OF CENTRAL PURCHASING LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 EAST MAIN STREET LEXINGTON, KENTUCKY 40507

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this contract be subcontracted to MBE/WBE's, and set a goal that not less than three percent (3%) of the total value of this contract be subcontracted to Veteran-Owned Small Businesses. The goal for the utilization of <u>Certified</u> MBE/WBE's and Veteran-Owned Small Businesses as subcontractors are recommended goals. Contractors who fail to meet such goals will be expected to <u>provide written explanations to the Director of the Division of Central Purchasing</u> of efforts they have made to accomplish the recommended goals and the extent to which they are successful in accomplishing the recommended goals will be a consideration in the procurement process.

For assistance in locating MBE/WBE Subcontractors contact Sherita Miller at 859/258-3320 or by writing the address listed below:

Sherita Miller, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street – Room 338 Lexington, Kentucky 40507 smiller@lexingtonky.gov

Lexington-Fayette Urban County Government MWDBE PARTICIPATION GOALS

A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.
- 4) The LFUCG has also established a 3% of total procurement costs as a Goal for participation for of Veteran-Owned Businesses.
- 5) It is therefore a request of each Bidder to include in its bid, the same goal (3%) for Veteran-Owned participation and other requirements as outlined in this section.

B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
 - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and Veteran-Owned subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by one or more women.

- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned, managed and controlled by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran-Owned subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) Failure to submit this information as requested may be cause for rejection of bid or delay in contract award.

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form."
 The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE and/or Veteran participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:
 - a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
 - b. Included documentation of advertising in the above publications with the bidders good faith efforts package

- c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
- d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
- f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs and/or Veteran-Owned businesses soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- i. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.
- j. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
- l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

- o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
- p. Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.
- q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

Note: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.



MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented Resolution 484-2017 – A Certified Minority, Women and Disadvantaged Business Enterprise ten percent (10%) minimum goal and a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and Certified Service Disabled Veteran – Owned Businesses for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals (a full copy is available in Central Purchasing):

Certified Disadvantaged Business Enterprise (DBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a person(s) who is socially and economically disadvantaged as define by 49 CFR subpart 26.

Certified Minority Business Enterprise (MBE) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. African American, Asian American/Pacific Islander, Hispanic Islander, Native American/Native Alaskan Indian) as defined in federal law or regulation as it may be amended from time-to-time.

Certified Women Business Enterprise (WBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a woman.

Certified Veteran-Owned Small Business (VOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

Certified Service Disabled Veteran Owned Small Business (SDVOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a disabled veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

The term "Certified" shall mean the business is appropriately certified, licensed, verified, or validated by an organization or entity recognized by the Division of Purchasing as having the appropriate credentials to make a determination as to the status of the business.

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tsmsdc.com	502-365-9762
Small Business Development Council	Shawn Rogers UK SBDC	shawn.rogers@uky.edu	859-257-7666
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwboc.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	production@keynewsjournal.com	859-685-8488



LFUCG MWDBE PARTICIPATION FORM Bid/RFP/Quote Reference #_____166-2017

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. Failure to submit a completed form may cause rejection of the bid.

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. Toni Levy & Associates 1608 W. Broadway Louisville, KY 40203 502-566-3030 X 12 tl@tonilevya.com	DBE	Material Suppluer	Quoles based on work order quantilies	Based on actual work completed
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Davis H. Elliot Construction Company, Inc. Company	Company Representative Eric P. Minton
11 27 2017	3 . V. P. /COO
Date	Title



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference #_	166-2017

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. Failure to submit a completed form may cause rejection of the bid.

MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
	WBE or	WBE or	WBE or Value of the

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

P. A Min

Davis H. Elliot Construction Company, Inc. Company	Company Representative Eric P. Minter
11 27 2017 Date	S. V.P. 100



LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference #	166-2017		
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These substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project. Failure to submit this form may cause rejection of the bid.

SUBSTITUTED	MWDBE Formally	Work to Be	Reason for the	Total Dollar	% Value of Total
MWDBE Company	Contracted/Name,	Performed	Substitution	Value of the	Contract
Name, Address, Phone,	Address, Phone,			Work	
Email	Email Email				
1.					•
2.				_	
3.					
J.					
4.					
	ì				

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Davis H. Elliot Construction Company, Inc.	
Company	Company Representative
Date	Title



Bid/RFP/Quote Reference # 166-2017

MWDBE QUOTE SUMMARY FORM

The undersigne submit a quote								đ		
Company Name Davis H. Elliot Construction Company, Inc.				Contact Person Reather Keith Simpson						
673 Blue Sky Parkway Lexington, KY 40509			#166-2017 Traffic Signal Installation & Repair Bid Due: Nov. 27, 2017 @ 2:00 p.m.							
MWDBE Company Address		Contact Information (work phone Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran		
Toni Levy & Associat 1608 W. Broadway Louisville, KY 40203	es Toni Levy	502-566 3030 X 12 tl@tonilevya.c	11/27/17	material supplier	email	Based on complet	e¢AA Female	No		
				_						
NA= Native The undersign contract and/	American) ned acknowle or be subject	dges that all in	formation is Federal and S	s accurate. An State laws cond Com	American/AS = Am	n may result in ter nearts and claims.	mination of t			
Date				Title						



LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE and Veteran contractors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Project Name/ Contract #				Work Period/	From:		To:	
Company Name	 :			Address:				
Federal Tax ID:				Contact Perso	n:			
Subcontractor Vendor ID (name, address, phone, email	Description of Work	Total Subcontract Amount	% of Total Contrac Awarde to Prim for this Project	this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date	
	_					_		
By the signature boof the representate	ions set forth	below is true.	Any mis	representations i	nay result in the	termination (t, and that e	
Company				Company Repr	esentative			

LFUCG STATEMENT OF GOOD FAITH EFFORTS Bid/RFP/Quote # 166-2017

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.
Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
Included documentation of advertising in the above publications with the bidders good faith efforts package
Attended LFUCG Central Purchasing Economic Inclusion Outreach event
Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities
Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses
Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.
Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

Veteran-Owned businesses which w	quotations received from interested MWDBE firms and vere not used due to uncompetitive pricing or were rejected as unses from firms indicating that they would not be submitting
The fact that the bidder has the abi	reasons why the quotations were considered unacceptable. lity and/or desire to perform the contract work with its own und reason for rejecting a MWDBE and/or Veteran-Owned provision shall be construed to require the bidder to accept ify MWDBE and Veteran goals.
	istance to or refer interested MWDBE firms and Veteran- necessary equipment, supplies, materials, insurance and/or nents of the bid proposal
Made efforts to expand the beyond the usual geographic bounds	search for MWBE firms and Veteran-Owned businesses aries.
made reasonable good faith efforts to Davis H Ellich Construction NOTE: Failure to submit any of the rejection of bid. Bidders may in requirement which is subject to approximately app	nat the bidder submits which may show that the bidder has o include MWDBE and Veteran participation. Company, Facilis affirmetive action programme documentation requested in this section may be cause for include any other documentation deemed relevant to this oproval by the MBE Liaison. Documentation of Good Faith Bid, if the participation Goal is not met.
of the contract and/or be subject to applicable Federation H. Elliot Construction Company, Inc.	s accurate. Any misrepresentations may result in termination ral and State laws concerning false statements and claims. Company Representative Fix P. Minton
Company 11 27 2917	Sp. V.P. COO
Date	Tine



Lexington-Fayette Urban County Government Division of Traffic Engineering Bid #166-2017 Traffic Signal Installation and Repair

The Lexington-Fayette Urban County Government is accepting bids for a price contract for Traffic Signal Installation and Repair for the Department of Public Works, Division of Traffic Engineering, 101 E. Vine Street, Suite 300, Lexington, Kentucky, as per the following specifications:

Bidder Requirements:

The successful bidder shall:

- Submit copies of all required licenses and certifications with his/her bid.
- Be a licensed contractor
- Have a licensed (in Fayette County) journeyman electrician on site at all times overseeing electrical work.
- Have a Traffic Signal Technician certified at Level II by the International Municipal Signal
 Association on site at all times overseeing traffic signal work being done.
- Install traffic signal equipment and materials meeting LFUCG Traffic Engineering division specifications.
- Have and provide all installation equipment and labor (materials if required) to complete any traffic signal installation and or fiber-optic work within thirty (30) days from notice to proceed.
- Complete any/all work within thirty (30) days from notice to proceed and/or complete all
 work within 30-days after ordered materials/equipment have been received, in cases
 where the contractor has to order materials/equipment such as strain poles, etc.
- Submit order and ship dates on any materials/equipment that have to be ordered by the contractor to complete a request.
- Be able to <u>respond</u> to emergency repairs within two (2) hours including weekends and holidays and have traffic signals back in operation within 12-hours.
- Post a performance bond on any contract work being performed equal to signalization costs
- Acquire R/W permits from Division of Engineering before performing work.
- Post a bond and obtain any/all necessary permits before any roadway cuts, trenching, boring drilling, sidewalk work, etc. are performed.
- Be responsible for all traffic control.
- Provide the division of Traffic Engineering with a contact number for normal and after hours repairs, in the event this number changes, the division of Traffic Engineering shall be notified within 8-hours.

Enforcement Codes:

All work shall conform to the:

- National Electrical Code
- National Safety Code
- International Municipal Signal Association
- Manual on Uniform Traffic Control Devices
- Work Zone Traffic Control Codes

- Lexington Fayette Urban County Government or State Highway Department codes relevant to work being done.
- Reduction of Soil Erosion (LFUCG Code of ordinances) Chapter 16, Article X, Division
 5, Section 16-103

Payment:

- Payment for work performed shall be <u>After All</u> work has been completed, inspected, and has met all specifications listed on plans and enforcement codes.
- Payment for conduit installed shall be on a per foot basis and shall include all the necessary components needed to complete the installation (Example: Condulets, conduit hangers, couplings, stand-offs, etc.).

Conduits and Pole Mount Controller Cabinets:

- All PVC conduits installed shall be Schedule 80.
- All PVC conduits installed shall have a threaded PVC bushing installed on the end.
- PVC conduits installed outside signal equipment bases <u>under roadway surfaces</u> shall be encased in concrete (exception: Direction by division of Traffic Engineering).
- All Rigid conduits installed shall be Rigid Steel.
- All rigid steel conduits installed by the contractor per this contract shall be bonded to ground.
- All conduits installed above grade shall be rigid steel <u>(including preformed 90 connecting rigid steel conduit to underground conduit)</u> unless specified otherwise by the Division of Traffic Engineering.
- All conduits installed shall be connected to existing conduits, junction boxes and/or traffic signal equipment, if present.
- Pole mount controller cabinets (when specified on signal plans) shall be mounted 42inches above grade/proposed grade.
- Installation of Conduits, on wood poles (where pole mount cabinets are specified) shall be mounted using standoffs at the controller pole (number of conduits shall be determined by the LFUCG).
- All unused conduits shall be plugged with a removable water tight mechanical plug that can be installed/removed by turning a Wing Nut or "T" Handle

Installation of Vehicle Detectors shall adhere to all specifications outlined in the LFUCG loop installation contract.

The following items shall be considered a part of each bid item and the LFUCG shall not be billed separately for these items:

- Any/All Equipment and manpower needed.
- Electrical materials used/needed by the contractor to complete items bid on when the contractor supplies materials.
- When a bidder submits a price for installation and they are supplying materials, the bid shall include all necessary materials to make the installation meet the codes and requirements listed in this contract.
- Cleaning up of dirt, debris, materials, etc.
- Discarding of materials.
- Electrical service inspections.

- Locating of utilities.
- Repair costs for damages to private property or utilities caused by the contractor (whether items are listed on the plans or not).
- Restoring of the work site back to its original condition whether the work performed is Emergency Repairs, or New Construction.
- Any/All permits
- Traffic control needed.
- Any repairs due to malfunctions or adjustments caused by contractor carelessness or negligence for thirty (30) days after final approval.
- Grouting around strain poles, pedestal bases, etc.
- Caulking (water proof) around controller cabinets, etc.

Technical Assistance:

If requested by the contractor/developer or required due to unsafe conditions, the LFUCG shall provide technical assistance per the following rates:

- Technician Rate: \$40.00/hr.
- Use of vehicle and equipment: \$60.00/hr. (does not include technician rate)

Restoration of Work Areas in Dirt

In all cases where these type work areas are disturbed the contractor will install Sod to restore these areas back to their original condition, under the guidelines outlined within this contract (seed and straw will not be accepted

Wiring (where wiring passes through drilled holes)

- Where holes are drilled through metal/steel for wire routing the contractor shall remove all Burrs and Sharp Edges from the holes and install rubber grommets. Heat Shrink Tubing or Vinyl Tape shall then be installed on the wire where they pass through the hole
- When installing pedestrian signals with pedestrian push buttons a separate 1-pair 14guage cable shall be used for the pedestrian push button (removing cable jackets will not be accepted)

The scope of work shall be as follows:

- The contractor shall be available for the repair, replacement or installation of all traffic signal equipment/materials at any hour.
- In such instances, the Division of Traffic Engineering will request the contractor to perform such work as (but not limited to), setting wood poles, strain poles, mast arm strain poles, installing anchors, replacing signal support spans, installing traffic signals, installing traffic signal control cabinets and all other traffic signal equipment with accessories, and making all wiring connections.
- The vendor will not be asked to troubleshoot malfunctioning traffic signals or to replace failed LED's/Signal Lamps. The Division of Traffic Engineering may elect to have the vendor do all of the work or do only part of the work with the Division of Traffic Engineering completing the work.
- Occasionally the division will have need of the vendor's assistance in the repair or replacement of a traffic signal installation that has been damaged or destroyed by an accident, weather, etc., in such instances, the Division will request that the contractor

perform such work as setting wood or strain poles, installing anchors, replacing signal support spans, hanging and connecting signal indications and installing traffic signal controller cabinets, and all other traffic signal equipment with accessories and connecting them.

- The Division of Traffic Engineering may elect to have the vendor do all of the work or only part of the work with the Division of Traffic Engineering completing the work.
- The contractor will be required to provide and/or obtain materials (Electrical, anchoring, and line hardware) to install traffic signals, pedestrian signals and traffic signal equipment with the exception of traffic signal equipment (See bid item specifications).

The following equipment and/or labor shall be required:

- Laborer
- Foreman
- Electrician
- Pickup Truck
- One 1&1/2 Ton Bucket Truck
- 1&1/2 Ton Platform Truck
- 1&1/2 Ton Line Truck and Auger
- Concrete Saw (Min 35 HP) with Blades (Kinds of Blades)?
- Air Compressor (Min 125 CFM) with Tools
- Trenching Machine (up to 24")
- Flashing Arrow Board
- Backhoe
- Pipe Pusher
- Boring Machine (2" 4" hole)
- Pressure Digger 20' digging depth, minimum 25,700 lbs.
- Down pressure with augers.

The LFUCG will inspect facilities and equipment before award of bid.

The following list, gives the contractor an idea of some of the materials he/she shall be required to provide and/or obtain (but not limited to) other materials that the contractor may be required to provide and/or obtain shall be as outlined within the contract relative to specific bid item numbers:

- Materials to install Down Guys and Side Walk Guys including Expansion Anchors, Guy Guards, Line Hardware etc. (2-inch Hardware and 2-inch rigid steel conduit shall be used for sidewalk guys.
- 8M, 5/16-inch and 1/4-inch Messenger Cable (Span Wire).
- Reliable 5151 (5/16-inch) Strand Vises.
- Materials to install electrical service, with rain-tight breaker type disconnect.
- Materials to install conduits (rigid steel or PVC) into a controller cabinet (strain pole or wood pole mount).
- Concrete, wood and materials needed to install concrete platforms or make concrete repairs
- Materials and equipment to install in-ground Vehicle Detectors, Green Extender Systems, and System Loops including Loop Wire (IMSA 51-5) and BONDO P606 Loop Sealant
- Materials to install Video Detection Cameras, per LFUCG Specifications.
- Other needed materials not listed (Electrical, Anchoring, and Line Hardware) needed to install

Traffic Signals, Pedestrian Signals and Traffic Signal Equipment with the exception of traffic signal equipment.

- Tyco #401139 Closure, Aerial, TRAC-A w/Bolt Fastners Cable 0.50" to 1.25" (Splice Boots)
- 1&1/4-inch flexible water tight conduit with hardware.
- Materials to install Fiber-Optic Cable (except Fiber-Optic Cable).

The Division of Traffic Engineering shall inspect all traffic signal equipment before the contractor proceeds with discarding it.

Bid item specifications:

- Bid activities may have (2) parts:
- · Contractor will supply all materials and labor.
- · Contractor will supply just labor and noted materials.
- The phrase <u>traffic signal equipment</u> in the following bid activities may consist of all or part of the following:
- Traffic controller cabinet (170 controller and all internal components of the cabinet).
- Traffic signal heads and mounting hardware.
- Traffic signal cable (Wire).
- Span wire.
- · Aerial splice boots.
- 5/16 messenger cable.
- 5/16 strand vises
- Cable rings
- In ground junction box
- Pedestrian Signals, bases, poles and push buttons.
- Video Detection Cameras.
- Fiber-Optic Cable & Components.

Bid Activities

Contractor should give price quotes for the following items.

- 01. <u>Provide & install 35-foot, Class 4 wood pole</u>: Includes picking up, transportation and installation at a designated work site. 35-foot Class 4 Wood Pole, must be able to install within 24-hours). Emergency requests for this item: Must be able to install within 4-hours.
- 02. Provide & install 45-foot, Class 4 wood pole: Includes picking up, transportation and installation at a designated work site. 45-foot Class 4 Wood Pole, must be able to install within 24-hours). Emergency requests for this item: Must be able to install within 4-hours.
- 03. <u>Provide and Install Strain Pole</u>: When the vendor purchases strain poles for the Division of Traffic Engineering they shall provide the Division of Traffic Engineering with documentation showing the strain poles they purchased meet the required specifications.
 - Contractor shall provide all materials and equipment.
 - Strain pole specifications may vary depending on the location and use (Specifications shall be determined by the Division of Traffic Engineering.)

- Pole height, minimum load yield and Maximum deflection rate will be given as specifications for the Strain pole.
- The responsibility for the strain poles meeting these specifications shall be the contractors.
- Completed product shall include strain pole, concrete base with reinforcing rods, anchor bolts and all other materials needed to complete the installation in soil or rock, #6 copper ground wire, ground rod, pole cap, hand hole cover, conduits, two (2) pole collars (All items shall match manufacturers specifications).
- Pole collars not used shall be returned to the Division of Traffic Engineering.
- Each pole base shall have (1) 3/4-inch PVC conduit (for the ground wire to route outside the strain pole base to the ground rod) and two (2) 2-inch PVC conduits.
- <u>2" PVC conduits:</u> If there are existing conduits, the conduits installed by the contractor shall be connected to existing conduits.
- Contractor shall provide a sketch as to which direction the conduits are pointing outside the strain pole base.
- The controller pole shall have additional conduits of four (4) 2-inch PVC conduits.
- The pole where the electric service and communication lines are to be attached shall have two (2) 1&1/4-inch rigid steel conduits (Electric Service/Communications) installed in the concrete (outside the strain pole).
- All rigid steel conduits shall be bonded to ground.
- These specifications are for a complete installation and shall be as such.
- All concrete and reinforcement for pole bases shall comply with Kentucky Department of Highways construction standards.

04. Install Standard Down Guy:

- Contractor shall provide all materials and equipment (including guy guard) in concrete
 or soil.
- Contractor shall use expansion type anchor with an 8-foot anchor rod.

05. Install Sidewalk Down Guy:

- Contractor shall provide all materials and equipment (including guy guard) in concrete or soil.
- Contractor shall use 2-inch pole plate and end cap.
- Contractor shall use expansion type anchor with an 8-foot anchor rod.

06. Install Strain Pole provided by LFUCG:

- Contractor shall provide all materials and equipment.
- LFUCG shall provide strain pole, anchor bolts, pole cap, hand hole cover & pole collars.
- Strain pole provided will be up to 40-feet in length.
- Strain pole specifications may vary depending on the location and use (Specifications shall be determined by the Division of Traffic Engineering.)
- Complete install shall include strain pole, concrete base w/reinforcing rods, anchor bolts and all other materials needed to complete the installation in soil or rock, #6 copper ground wire, ground rod, pole cap, hand hole cover, conduits, two (2) pole collars (All items shall match

- manufacturers specifications).
- Each pole base shall have (1) 3/4-inch PVC conduit (for the ground wire to route outside the strain pole base to the ground rod) and two (2) 2-inch PVC conduits.
- <u>2" PVC conduits:</u> If there are existing conduits, the conduits installed by the contractor shall be connected to existing conduits.
- Contractor shall provide a sketch as to which direction the conduits are pointing outside the strain pole base.
- The controller pole shall have additional conduits of four (4) 2-inch PVC conduits.
- The pole where the electric service and communication lines are to be attached shall have two (2) 1&1/4-inch rigid steel conduits (Electric Service/Communications) installed in the concrete (outside the strain pole).
- All rigid steel conduits shall be bonded to ground.
- These specifications are for a complete installation and shall be as such.
- All concrete and reinforcement for pole bases shall comply with Kentucky Department of Highways construction standards.

07. Install Span Wire (Messenger Cable):

- Contractor shall provide all materials (including pole line hardware) and equipment.
- 5/16-inch and/or 1/4-inch span wire and Reliable 5151 strand vises shall be used.

08. Install Span Wire (Messenger Cable), LFUCG provides span and vises:

- Span wire and Strand vises supplied by the LFUCG.
- · Contractor shall supply all other line hardware.

09. Provide/Install 3/4-inch Rigid Steel Conduit:

• Installations shall include vertical, horizontal, in concrete and/or soil.

10. Provide/Install 1&1/4-inch Rigid Steel Conduit:

Installations shall include vertical, horizontal, in concrete, and/or soil.

11. Provide/Install 2-inch Rigid Steel Conduit:

- Installations shall include vertical, horizontal, in concrete, and/or soil.
- 12. Provide/Install 2-inch Rigid Steel Conduit under roadway in open trench.
- 13. Provide/Install 2-inch Rigid Steel Conduit by Boring:
- 14. Contractor shall connect installed conduits to existing conduits

15. Provide/Install 2-inch Inner-Duct, Direct Bury:

Contractor shall connect installed Inner-Duct to existing conduits

16. Provide/Install 2-inch Inner-Duct by Boring:

Contractor shall connect installed Inner-Duct to existing conduits

- 17. Provide/Install 2-inch PVC Conduit underground in concrete or soil:
- 18. Provide/Install 2-inch PVC Conduit under Roadway in open trench:
 - · Conduit shall be encased in concrete.

19. Provide/Install 2-inch PVC by Boring:

Contractor shall connect installed Inner-Duct to existing conduits

20. Install 4-inch PVC Conduit provide by LFUCG:

- Contractor shall provide couplings, preformed 90's, etc..
- Installations shall be horizontal in concrete or soil.

21. Install 4-inch PVC Conduit by Boring, LFUCG) provides conduit:

- Contractor shall connect installed conduits to existing conduits
- Contractor shall provide couplings, preformed 90's, etc.

22. Provide/install 1&1/4-inch (OD) Flexible Inner-Duct with pull string, UV Protected:

23. Install Traffic Bearing Junction Box w/Lid, provided by LFUCG:

- Installations shall include, in concrete, soil.
- Junction boxes installed shall have a 1-foot dry well of #2 rock installed under the junction box.
- Box: Quazite #PG1730BA12 (No Substitutes)
- Lid: Quazite #PG1730HH0044 (No Substitutes)

24. Provide/Install Traffic Bearing Junction Box w/Lid:

Installations in concrete and/or soil, Size: 17" x 30" x 12", 1-foot dry well of #2 rock installed under the junction Box, Box & Lid shall be Tier 22 with Traffic LOGO on Lid (No Substitutes)

25. Provide/Install Flared Wall Traffic Bearing Junction Box w/Lid:

Installations in concrete and/or soil, Size: 24" x 36" x 18", 1-foot dry well of #2 rock installed under the junction box, Box & Lid shall be Tier 22 with Traffic LOGO on Lid (No Substitutes)

26. Install Signal and/or Loop Feeder Cable and Wire In (materials provided by LFUCG):

- Installations shall include vertical, Horizontal.
- Billing shall be on a single cable, per foot basis, when multiple cables are installed at the same time in one conduit, strain pole or on a messenger cable.

27. Install Fiber-Optic Cable, provided by LFUCG:

- Installations shall include vertical, horizontal, in conduit, etc.
- Billing shall be on a single cable, per foot basis.
- LFUCG shall terminate/splice fiber-optic cable installed.

28. Provide/Install Concrete, per yard: Price shall include forms, finishing, etc.

29. Provide/install Sod per roll (Square Yard, 2-feet x 4.5-feet)

Installation shall be as follows: Perform all necessary preparation for installation, perform all necessary watering to prevent the sod from dying for 30-days, replace any/all sod if it dies within 30-days at no additional costs to the Lexington Fayette Urban County Government

30. Provide/Install Transfer Switch A (1 to 10)

See specifications for box type, needed terminal blocks used shall be Marathon Model #1423307, mounting of box shall be accomplished by using 5/16" x 5/8" stainless steel bolts with stainless steel insulated locking nut, all crimp-ons used shall be insulated type, all wiring shall be enclosed by using a ½-inch spiral wrapping flexible protective sheath (Panduit #T50F-4) and the protective sheath shall be neatly cable tied within the controller cabinet, contractor shall also replace the Breaker and/or Fuse in the disconnect to match the transfer switch requirements, if necessary.

31. Provide/Install Transfer Switch B (10 or more)

See specifications for box type, needed terminal blocks used shall be Marathon Model #1423307, mounting of box shall be accomplished by using 5/16" x 5/8" stainless steel bolts with stainless steel insulated locking nut, all crimp-ons used shall be insulated type, all wiring shall be enclosed by using a ½-inch spiral wrapping flexible protective sheath (Panduit #T50F-4) and the protective sheath shall be neatly cable tied within the controller cabinet, contractor shall also replace the Breaker and/or Fuse in the disconnect to match the transfer switch requirements, if necessary.

32. Provide/Install Electrical Service, Wire In and obtain Electrical Inspection:

- Electrical service shall be a wired with 3-wires going into the top of the meter base and 2-wires going into the cabinet: AC Plus, AC Neutral, and Ground, unless otherwise directed by the LFUCG Division of Traffic Engineering.
- Two ground rods shall be installed for the electric meter, separate from the controller cabinet ground rods.

The following materials shall be used in the installation:

- Service wire shall be #8 THHN.
- 1&1/4-inch Rigid Steel Conduit.
- Two (2) 5/8-inch x 8-foot Copperweld Ground Rods with Clamps.
- #6 Bare Ground Wire.
- One (1) Rain tight, breaker type disconnect with XX-amp breaker (Breaker must meet the requirements of the installed Transfer Switch).

33. Install Traffic Signal, Lane Use Control Signal/Sign, LED Sign, and Wire In:

- LFUCG shall supply all signal equipment and signal cable.
- Bid quote shall be for installation of 3-section, 4-section, 5-section traffic signals, Lane Use Control Signal/Signs, LED Street Name Signs and/or other LED Traffic Sign.
- Contractor shall supply all electrical materials.

- Bid quote shall be for each installation of any one type.
- Installation shall be for vertical or horizontal mount on any support structure.
- 34. <u>Provide/Install 3-section Traffic Signal with Yellow Reflective Backplate</u>: (see enclosed specifications for traffic signals and Backplates).
- 35. <u>Provide/Install 4-section Traffic Signal with Yellow Reflective Backplate</u>: (see enclosed specifications for traffic signals and signal Backplates).
- 36. <u>Provide/Install pole mount pedestrian signal, with or without pedestrian push buttons:</u> (see enclosed specifications for pole mount pedestrian signal).
- 37. <u>Provide/Install pedestal mount pedestrian signal, 1-way, with or without pedestrian push</u> buttons: (see enclosed specifications for pedestal mount pedestrian signal).
- 38. <u>Provide/Install pedestal mount pedestrian signal, 2-way, with or without pedestrian push</u> buttons: (see enclosed specifications for pedestal mount pedestrian signal).
- 39. Install Pedestal Base Without Pedestrian Signals:
 - Contractor shall provide all materials and equipment, complete job shall be as follows:
 - One (1) Concrete Pedestal Base 24" x 24" x 48".
 - Two (2) 1&1/4" PVC 90 (extended outside the concrete base and attached to existing conduits
 - If existing conduit does not exist the PVC conduits shall be capped off with a removable cap to prevent dirt and debris from getting inside the conduit.
 - Provide a sketch as to which direction the conduits are pointing outside the pedestal base.
 - Installation shall be in concrete or soil.
- 40. Install Pedestal Base, Pedestrian Signal (s), Pedestrian Push Buttons, Pedestrian Push Button Signs (if required), and Wire In:
 - Contractor shall provide all materials and equipment, complete job shall be as follows:
 - One (1) Concrete Pedestal Base 24" x 24" x 48".
 - Two (2) 1&1/4" PVC 80 (extended outside the concrete base and attached to existing conduits.
 - If existing conduits do not exist the PVC conduits shall be capped off with a removable cap to prevent dirt and debris from getting inside the conduit.
 - Provide a sketch as to which direction the conduits are pointing outside the pedestal hase
 - Install pedestrian signal/signals.
 - Install pedestrian push buttons and pedestrian push button signs if required.
 - LFUCG will supply all pedestrian signals, pedestrian push buttons, and pedestrian push button signs.
 - Installation shall be in concrete or soil.
 - Bid price shall be for one each with or without pedestrian push buttons and/or push button signs.
 - Bid price shall include installation of a maximum of three (3) pedestrian signals, three (3) pedestrian push buttons, and three (3) pedestrian push button signs on one pedestal pole.

41. Install Pole Mount Pedestrian Signal With or Without Pedestrian Push Button and Pedestrian Push Button Sign, an Wire In:

- Contractor shall provide all materials except pedestrian signals, mounting brackets, pedestrian push buttons, FS boxes and pedestrian push button signs.
- Installation of pedestrian signal(s) shall include wiring of signals and pedestrian push buttons if required.
- Conduits used for pedestrian signal shall be 1&1/4-inch rigid steel.
- Conduits used for Pedestrian push button shall be 3/4-inch rigid steel (THIS SHALL BE A SEPARATE CONDUIT, NOT ATTACHED TO THE BOTTOM OF THE PEDESTRIAN SIGNAL MOUNTING ARM UNLESS APPROVED BY THE LFUCG).
- The Pedestrian Push Button shall be installed 36-inches above grade.
- Pedestrian push button signs shall be mounted directly above the pedestrian push button.
- Bid price shall be for one each with or without installation of pedestrian push button and pedestrian push button sign.

42. Install Base Mount 332 Controller/Cabinet Base, 332 Controller Cabinet, Conduits and Wire In:

- Contractor shall provide all materials and equipment.
- LFUCG shall provide all traffic signal equipment and traffic signal cable.
- If contractor is installing the above at a wood pole installation, rigid conduits shall be mounted to the wood pole using Standoffs (Dixie Bracket) and extending to within 12inches of the overhead messenger cable attached to the wood pole.
- LFUCG shall be billed for conduits installed as outlined in bid.
- Installed conduits shall be 18-inches below grade (non-traffic bearing area) and 24-inches below grade (traffic bearing area).
- Any/all conduits installed inside traffic signal equipment and strain poles shall be PVC schedule 80.
- Any/all conduits installed outside traffic signal equipment shall be rigid steel.
- Install 170 type controller cabinet base using the following information (Location determined by LFUCG):

Cabinet Base (concrete) Dimensions:

- Width 3-foot
- Length 7-foot
- Depth 24-inches

Cabinet Conduits:

- Six (6) 2-inch (Route from cabinet to pole)
- One (1) 2-inch (Stub out for Loops with diagram showing direction of path)
- One (1) 2-inch (Stub out for fiber-optic communications with diagram showing direction of path)
- One (1) 1&1/4-inch for Communications (conduit shall be mounted on the outside of the strain pole).
- One (1) 1&1/4-inch (Power) coordinate inspections and connections (conduit shall be mounted on the outside of the strain pole).
- Two (2) 3/4-inch for grounding

- Cabinet Grounding: (2) Ground Rods (5/8" x 8') installed outside of Cabinet (one on each side, 3-foot from pad, routed from inside cabinet through 3/4-inch PVC conduit).
- . Grounding: #6 Bare for ground
- 43. Granville Streetlight Accident Repairs (during normal work hours): See agreement
- 44. Granville Streetlight Accident Repairs (after normal work hours): See agreement
- 45. Assess maintenance/repair needs to Granville Streetlight Inventory: See agreement
- 46. Retrofit Standard Granville Streetlight Fixture with LED Type Fixture:

Contractor will replace existing fixture with LED fixture and bypass ballast, contractor agrees to charge only the following for requested work; one(1) hour Laborer, one(1) hour Foreman, one (1) hour Bucket Truck and one (1) hour Pickup Truck.

47. <u>Install 332 Pole Mount Controller Cabinet, Conduits, and Wire In (Wood Pole Installation):</u>

- Contractor shall provide all materials and equipment.
- LFUCG shall provide all traffic signal equipment and traffic signal cable.
- Conduits shall be mounted to the wood pole using Standoffs (Dixie Bracket) and extending to within 12-inches of the overhead messenger cable attached to the wood pole.
- LFUCG shall be billed for conduits installed as outlined in bid.
- Pole mount controller cabinet shall be 42-inches above grade/proposed grade.
- Contractor shall install cabinet, conduits w/hardware and make all wiring connections as per instructions and drawings.

Install 170 type Pole Mount controller cabinet using the following information (Location to be determined by LFUCG):

Cabinet shall be installed with:

- Four (4) 2-inch rigid steel conduits up the pole for signals, loop lead-in cables and/or wiring for Video Detection equip.
- One (1) 1&1/4-inch rigid steel conduit for communications.
- One (1) 1&1/4-inch rigid steel conduit for Electric service (as written in specifications herein).
- One (1) 5/8-inch x 8-foot Copperweld Ground Rod with Clamp.
- #6 Bare Ground Wire.

48. <u>Install 170 Pole Mount Controller Cabinet, Conduits, and Wire In, (Strain Pole Installation)</u>:

- Contractor shall provide all materials and equipment.
- LFUCG shall provide all traffic signal equipment and traffic signal cable.
- Communication and Electric Service conduits shall be mounted on the outside of the strain pole and extend to within 12-inches of the overhead messenger cable attachment on the strain pole.
- LFUCG shall be billed for conduits installed as outlined in bid.
- Pole mount controller cabinet shall be 42-inches above grade/proposed grade.

 Contractor shall install cabinet, conduits w/hardware and make all wiring connections as per instructions and drawings.

Install 170 type Pole Mount controller cabinet using the following information (Location to be determined by LFUCG): Cabinet shall be installed with:

- One (1) LB Condulet (cast Aluminum) large enough to accommodate wiring scheme determined by LFUCG, Division of Traffic Engineering Division, condulet shall not be filled with signal cables exceeding 60% capacity (or as outlined in National Electrical Code).
- One (1) 1&1/4-inch rigid steel conduit for communications.
- One (1) 1&1/4-inch rigid steel conduit for Electric service (as written in specifications herein).
- One (1) 5/8-inch x 8-foot Copperweld Ground Rod with Clamp.
- #6 Bare Ground Wire.

New Traffic Signal Installation

The contractor shall be required to install a complete traffic signal and make all wiring connections and terminations.

A full description of the work to be done shall accompany the work order. All work must be completed by the vendor in accordance with the contract plans, and specifications and will be inspected by the Division of Traffic Engineering before final acceptance.

Note:

Quotes regarding a new traffic signal installation are for a complete installation with all listed items included in the quote. "Individual items listed in the contract cannot be billed separately, however, specifications outlined within the contract for individual items shall be adhered to."

<u>Special New Traffic Signal Installation Notes:</u> (All heights shall be measured from the bottom of the signal head).

- All traffic signals and flasher signal sections installed by the contractor shall be a minimum of 17-feet above the roadway unless a lower elevation has been approved by the Division of Traffic Engineering.
- All pedestrian signals installed by the contractor shall be a Minimum of 8-feet above surface grade, sidewalk, and/or proposed grade.
- Pedestrian signal heights shall match the height of existing pedestrian signals, if the
 existing
 pedestrian signals are higher than 8-feet, pedestrian signal heights shall not exceed
 10-feet above surface grade, sidewalk, and/or proposed grade to the bottom of the
 signal).
- All pedestrian push buttons installed by the contractor shall be 36-inches above surface grade, sidewalk, or proposed grade.
- All tether spans installed by the contractor shall be a minimum of 17-feet above the roadway unless a lower elevation has been approved by the Division of Traffic Engineering.
- All materials supplied by the LFUCG, Division of Traffic Engineering that are not used/needed by the contractor shall be returned to the Division of Traffic Engineering.

- All materials or equipment picked up by the contractor shall be the sole responsibility
 of the contractor until the project is completed and accepted by the LFUCG Division
 of Traffic Engineering.
- Any equipment or material damages or loses due to contractor carelessness, negligence shall be replaced by the contractor at their cost.
- Where strain poles are installed there shall be one (1) 2-inch conduit stubbed out at each strain pole base and at the controller cabinet base for future use.
- All new traffic signal installations shall have a transfer switch installed per guidelines in the contract
- Questions may be directed to Construction Supervisor, Division of Traffic Engineering, at 859-258-3493.

49. <u>Install complete 5-Phase to 8-Phase Signalized Intersection and make all wiring connections and terminations (Installation Using Strain Poles):</u>

- LFUCG shall supply all traffic signal equipment: Traffic Signals with mounting hardware, video detection cameras with power cables and Coaxial Cable, signal cable, loop lead-in cable, span wire, strand vises, cable supports, junction boxes, splice boots and traffic signs, etc.
- Contractor shall supply all electrical supplies, and strain poles plus installation as outlined in this bid package.
- Contractor shall supply all loop wire (IMSA 51-5) and Loop Sealant needed (BONDO P-606), any substitutes to these Materials must have prior approval by the Division of Traffic Engineering.
- Contractor shall install all equipment and materials supplied by the LFUCG, Division of Traffic Engineering, and make all wiring connections according to plans provided.
- Bid quote shall be for with or without signal/sign tether.

Installation items shall be as follows:

- Two to Four poles
- Ten Traffic Signals (3, 4 and/or 5-section)
- Eight Pedestrian Signals (Pedestal Mount or Pole Mount)
- Eight Pedestrian Push Buttons with pedestrian push button signs
- One Controller Cabinet Base
- One Controller cabinet
- Four Presence Loops
- One Electrical Service W/ 40-amp. Breaker Type Disconnect (No Substitutes), as outlined in bid.
- One Conduit for Communications, as outlined in bid
- Four junction boxes as marked on signal plans
- Four overhead signs
- All Span wire and Hardware
- All Signal Cable, Loop Feeder, Splice Boots, etc. associated with the complete installation.
- Two to Four Video Detection Cameras.
- 50. <u>Install complete 5-Phase to 8-Phase Signalized Intersection and make all wiring connections and terminations (Installation Using Wood Poles):</u>

- LFUCG shall supply all traffic signal equipment: Traffic Signals with mounting hardware, video detection cameras with power cables and Coaxial Cable, signal cable, loop lead-in cable, span wire, strand vises, cable supports, junction boxes, splice boots and traffic signs, etc.
- Contractor shall supply all electrical supplies, and wood poles plus installation as outlined in this bid package.
- Contractor shall supply all loop wire (IMSA 51-5) and Loop Sealant needed (BONDO P-606), any substitutes to these Materials must have prior approval by the Division of Traffic Engineering.
- Contractor shall install all equipment and materials supplied by the LFUCG, Division of Traffic Engineering, and make all wiring connections according to plans provided.
- Bid quote shall be for with or without signal/sign tether.

Installation items shall be as follows:

- Two to Four Wood Poles (35-foot and/or 45-foot Class 4) Length of wood pole shall be determined by the LFUCG, Division of Traffic Engineering.
- Ten Traffic Signals (3, 4 and/or 5-section)
- Eight Pedestrian Signals (Pedestal Mount or Pole Mount)
- Eight Pedestrian Push Buttons with pedestrian push button signs
- One Controller Cabinet Base
- One Controller cabinet
- Four Presence Loops
- One Electrical Service W/ 40-amp. Breaker Type Disconnect (No Substitutes), as outlined in bid.
- One Conduit for Communications, as outlined in bid.
- Four junction boxes as marked on signal plans
- Four overhead signs
- All Span wire and Hardware
- All Signal Cable, Loop Feeder, Splice Boots, etc. associated with the complete installation.
- Four (4) to Eight (8) down-guys (sidewalk type and/or standard type).
- Two to Four Video Detection Cameras

51. <u>Install complete Flasher Signalized Intersection and make all wiring connections and terminations (Installation using wood poles):</u>

- LFUCG shall supply all traffic signal equipment, traffic Signals with mounting hardware, signal cable, span wire, strand vises, cable supports, splice boots and traffic signs.
- Contractor shall supply all electrical supplies and wood poles as outlined in bid package.
- Contractor shall install all equipment and materials supplied by the LFUCG, Division
 of Traffic Engineering, and make all wiring connections according to plans provided.
- Bid quote shall be for with or without signal/sign tether, and Pick-up if needed.

Installation items shall be as follows:

 Two to Four (2 to 4) Wood Poles (35-foot and/or 45-foot Class 4) (Length of wood pole shall be determined by the LFUCG, Division of Traffic Engineering).

- Six to Eight (6 to 8) 12-inch Signal Sections
- One (1) Pole Mount Flasher cabinet
- One (1) Electrical Service, as outlined in bid.
- One (1) 1&1/4" Conduit for signal cables.
- All overhead signs
- All Span wire and Hardware
- All Signal Cable, Loop Feeder, Splice Boots, etc. associated with the complete installation.
- Two to Four (2 to 4) down-guys (sidewalk type and/or standard type)

52. <u>Install complete 5-Phase to 8-Phase Signalized Intersection and make all wiring connections and terminations (Installation Using Mast Arm Strain Poles)</u>:

- LFUCG shall supply all traffic signal equipment: Traffic Signals w/mounting hardware, video detection cameras w/power cables and Coaxial Cable, signal cable, loop lead-in cable, junction boxes, and traffic signs w/mounting hardware, etc.
- Contractor shall supply all electrical supplies, and mast arm strain poles plus installation as outlined in this bid package.
- Contractor shall supply all loop wire (IMSA 51-5) and Loop Sealant needed (BONDO P-606), any substitutes to these Materials must have prior approval by the Division of Traffic Engineering.
- Contractor shall install all equipment and materials supplied by the LFUCG, Division
 of Traffic Engineering, and make all wiring connections according to plans provided.

Installation items shall be as follows:

- Three to Four Mast Arm Strain Poles
- Ten Traffic Signals (3, 4 and/or 5-section)
- Eight Pedestrian Signals (Pedestal Mount or Pole Mount)
- Eight Pedestrian Push Button Signs
- One Controller Cabinet Base
- One Controller cabinet
- Four Presence Loops
- One Electrical Service W/Disconnect (Breaker Type, No Substitutes)
- One Conduit for Communications
- Four junction boxes as marked on signal plans
- Four overhead signs
- All Span wire and Hardware
- All Signal Cable, Loop Feeder, etc. associated with the complete installation.
- Two to Four Video Detection Cameras
- Three to Four Rigid Steel Conduits between each Mast Arm Strain Pole and the controller cabinet with one conduit stubbed out of each mast arm strain pole base for future use.
- Install up to 1,200-feet of 2-inch rigid steel conduit by boring without additional costs.

53. <u>Install complete 8-Phase Signalized Intersection and make all wiring connections and terminations (Installation Using Double Mast Arm Strain Poles)</u>:

 LFUCG shall supply all traffic signal equipment: Traffic Signals w/mounting hardware, video detection cameras w/power cables and Coaxial Cable, signal cable,

- loop lead-in cable, junction boxes, and traffic signs w/mounting hardware, etc.
- Contractor shall supply all electrical supplies, and mast arm strain poles plus installation as outlined in this bid package.
- Contractor shall supply all loop wire (IMSA 51-5) and Loop Sealant needed (BONDO P-606), any substitutes to these materials must have prior approval by the Division of Traffic Engineering.
- Contractor shall install all equipment and materials supplied by the LFUCG, Division
 of Traffic Engineering, and make all wiring connections according to plans provided.

Installation items shall be as follows:

- One to Two (1 or 2) Double Mast Arm Strain Poles
- Ten Traffic Signals (3, 4 and/or 5-section)
- Eight Pedestrian Signals (Pedestal Mount or Pole Mount)
- Eight Pedestrian Push Button Signs
- One Controller Cabinet Base
- One Controller cabinet
- Four Presence Loops
- One Electrical Service W/Disconnect (Breaker Type, No Substitutes), as outlined in bid
- · One Conduit for Communications, as outlined in bid
- Four junction boxes as marked on signal plans
- Four overhead signs
- All Span wire and Hardware
- All Signal Cable, Loop Feeder, etc. associated with the complete installation.
- Two to Four Video Detection Cameras
- Three to Four Rigid Steel Conduits between each Double Mast Arm Strain Pole and the controller cabinet with one conduit stubbed out of each double mast arm strain pole base for future use.
- Install up to 1,200-feet of 2-inch rigid steel conduit by boring without additional costs.

54. Provide and Install Mast Arm Strain Pole (see specifications):

- When the vendor purchases mast arm strain poles for the Division of Traffic
 Engineering they shall provide the Division of Traffic Engineering with documentation
 showing the mast strain poles they purchased meet the required specifications in
 this contract.
- Contractor shall provide all materials and equipment. Strain pole specifications may vary depending on the location and use.
- Specifications shall be determined by the Division of Traffic Engineering.
- Pole height, minimum load yield and Maximum deflection rate will be given as specifications for the Strain pole, the responsibility for the strain poles meeting these specifications is the contractors.
- Completed product shall include strain pole, concrete base with reinforcing rods, anchor bolts and all other materials needed to complete the installation in soil or rock, #6 copper ground wire, ground rod, pole cap, hand hole cover, conduits, (All items shall match manufacturers specifications).
- Each pole base shall have (1) 3/4-inch PVC conduit (for the ground wire to route outside the strain pole base to the ground rod) and two (2) 2-inch PVC conduits.

2" PVC conduits:

- If there are existing conduits, the conduits installed by the contractor shall be connected to existing conduits.
- Contractor shall provide a sketch as to which direction the conduits are pointing outside the strain pole base.
- The controller pole shall have additional conduits of four (4) 2-inch PVC conduits.
- The pole where the electric service and communications lines are to be attached shall have one (1) 1&1/4-inch rigid steel conduit (Communications) and one (1) 1&1/4-inch rigid steel conduit (Electric Service) installed in the concrete (outside the mast arm strain pole).
- All rigid steel conduits shall be bonded to ground.
- These specifications are for a complete installation and shall be as such.
- All concrete and reinforcement for pole bases shall comply with Kentucky Department of Highways Construction Standards.

55. Provide and Install Double Mast Arm Strain Pole (see specifications):

- When the vendor purchases double mast arm strain poles for the Division of Traffic Engineering they shall provide the Division of Traffic Engineering with documentation showing the mast strain poles they purchased meet the required specifications in this contract.
- Contractor shall provide all materials and equipment.
- Strain pole specifications may vary depending on the location and use.
- Specifications shall be determined by the Division of Traffic Engineering.
- Pole height, minimum load yield and Maximum deflection rate will be given as specifications for the Strain pole, the responsibility for the strain poles meeting these specifications is the contractors.
- Completed product shall include strain pole, concrete base with reinforcing rods, anchor bolts and all other materials needed to complete the installation in soil or rock, #6 copper ground wire, ground rod, pole cap, hand hole cover, conduits, (All items shall match manufacturers specifications).
- Each pole base shall have (1) 3/4-inch PVC conduit (for the ground wire to route outside the strain pole base to the ground rod) and three (3) 2-inch PVC conduits.

2" PVC conduits:

- If there are existing conduits, the conduits installed by the contractor shall be connected to existing conduits.
- Contractor shall provide a sketch as to which direction the conduits are pointing outside the strain pole base.
- The controller pole shall have additional conduits of four (4) 2-inch PVC conduits.
- The pole where the electric service and phone lines are to be attached shall have one (1) 1&1/4-inch rigid steel conduit (Communications) and one (1) 1&1/4-inch rigid steel conduit (Electric Service) installed in the concrete (outside the mast arm strain pole).
- All rigid steel conduits shall be bonded to ground.
- These specifications are for a complete installation and shall be as such.
- All concrete and reinforcement for pole bases shall comply with Kentucky Department of Highways construction standards.

56. Demolish 5 to 8-phase signalized intersection:

- Remove all old traffic signal equipment and drop off (as directed by Traffic Engineering) at Operational Adjustment Center.
- · Discard all unusable materials as directed by traffic engineering.
- Reduce all old concrete pads to below grade level (up to four (strain pole base, base mount controller cabinet base, up to four pedestrian signal pedestal bases)
- Provide necessary equipment/materials, concrete, soil, seed, straw to restore area to original condition.

57. Install Video Detection Camera:

- Camera, Power Cable & Coaxial Cable supplied by the LFUCG.
- Installations shall include all necessary materials/equipment to complete installation
- Power Cable & Coaxial Cable shall be a continuous run from the camera into the controller cabinet.
- All other materials supplied by contractor.

58. Install Radio Antenna w/10-foot of 1&1/4" rigid Conduit:

- Antenna & Coaxial Cable supplied by the LFUCG.
- Installations shall include all necessary materials/equipment to complete installation
- Coaxial Cable shall be a continuous run from the radio antenna into the controller cabinet.
- All other materials supplied by contractor.

59. <u>Install concrete Pedestal Base for Solar Powered School Flasher, or Pedestal Mount Pedestrian Signal</u>

- LFUCG shall provide anchor bolts (four (4) ¾-inch x 26-inch anchor bolts w/hardware)
- Contractor shall provide all other materials needed to complete bid item
- Base shall be 2-feet x 2-feet x 4-feet deep.

60. Install Solar Powered School Area Flasher (Mast arm Mount), and wire in

- LFUCG shall provide equipment/materials and determine installation location, on site.
- Contractor Shall provide and install:
- two (2) mast arm poles, per bid
- Install all equipment and make all necessary connections.
- Contractor shall make the installation fully operational before acceptance.

61. Install two (2) Solar Powered School Area Flasher (Pedestal Mount), and wire in

- LFUCG shall provide equipment/materials determine installation location, on site.
 - Contractor shall provide materials and install:
 - two (2) concrete pedestal bases (2-feet x 2-feet x 4-feet)
 - four (4) 3/4-inch x 26-inch anchor bolts per pedestal base.
 - Install all equipment and make all necessary connections.
 - Contractor shall make installation fully operational before acceptance.

62. Provide and Install Camera Strain Pole:

When the vendor purchases strain poles for the Division of Traffic Engineering they shall provide the Division of Traffic Engineering with documentation showing the strain poles they purchased meet the required specifications.

- Contractor shall provide all materials and equipment.
- Strain pole specifications may vary depending on the location and use (Specifications shall be determined by the Division of Traffic Engineering.)
- Pole height, minimum load yield and Maximum deflection rate will be given as specifications for the Strain pole.
- The responsibility for the strain poles meeting these specifications shall be the contractors.
- Completed product shall include strain pole, concrete base with reinforcing rods, anchor bolts and all other materials needed to complete the installation in soil or rock, #6 copper ground wire, ground rod, pole cap, hand hole cover, conduits (All items shall match manufacturers specifications).
- Pole height shall be 40-feet with one (1) 15-foot arm to support one (1) 75-lb.
 surveillance camera.
- Each pole base shall have (1) 3/4-inch PVC conduit (for the ground wire to route outside the strain pole base to the ground rod) and two (2) 2-inch PVC conduits.
- 2" PVC conduits: If there are existing conduits, the conduits installed by the contractor shall be connected to existing conduits.
- Contractor shall provide a sketch as to which direction the conduits are pointing outside the strain pole base.
- These specifications are for a complete installation and shall be as such.
- All concrete and reinforcement for pole bases shall comply with Kentucky Department of Highways construction standards.

63. Install Base Mount 332 Double Controller Cabinet Base, Controller Cabinet, Conduits and Wire In:

- Contractor shall provide all materials and equipment.
- LFUCG shall provide all traffic signal equipment and traffic signal cable.
- If contractor is installing the above at a wood pole installation, rigid conduits shall be mounted to the wood pole using Standoffs (Dixie Bracket) and extending to within 12-inches of the overhead messenger cable attached to the wood pole.
- LFUCG shall be billed for conduits installed as outlined in bid.
- Installed conduits shall be 18-inches below grade (non-traffic bearing area) and 24-inches below grade (traffic bearing area).
- Any/all conduits installed inside traffic signal equipment and strain poles shall be PVC schedule 80.
- Any/all conduits installed outside traffic signal equipment shall be rigid steel.

Install 332 type double controller cabinet base using the following information (Location determined by LFUCG):

Cabinet Base (concrete) Dimensions:

- Width 5-foot
- Length 9-foot
- Depth 24-inches

Cabinet Conduits:

• Six (6) 2-inch (Route from cabinet to pole)

- One (1) 2-inch (Stub out for Loops with diagram showing direction of path)
- One (1) 2-inch (Stub out for fiber-optic communications with diagram showing direction of path)
- One (1) 1&1/4-inch for Communications (conduit shall be mounted on the outside of the strain pole).
- One (1) 1&1/4-inch (Power) coordinate inspections and connections (conduit shall be mounted on the outside of the strain pole).
- Two (2) 3/4-inch for grounding
- Cabinet Grounding: (2) Ground Rods (5/8" x 8') installed outside of Cabinet (one on each side, 3-foot from pad, routed from inside cabinet through 3/4-inch PVC conduit).
- Grounding: #6 Bare for ground

Contractual Quoting Guidelines for purchasing and installing individual:

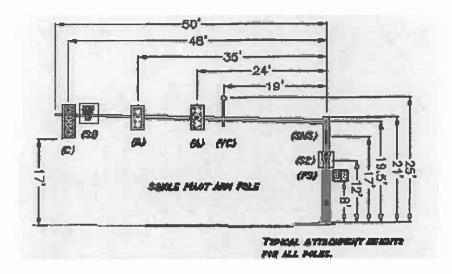
- Strain Poles (KYTC Standard Specified 30' Strain Pole)
- Mast Arm Strain Poles (See below)
- Double Mast Arm Strain Poles (See below)
- *LFUCG Pole Specifications shall match KYTC Traffic Pole Specifications as outlined in Section 835 Signal System Materials of the KYTC Standard Specifications for Road and Bridge Construction, current edition (SSRBC).
- **Signal Pole Bases shall be sized and installed in accordance with Section 723 Signal Systems in the SSRBC. Signal and Lighting Standards Analysis (SALSA) calculations to the approval of the Engineer will be considered incidental to providing signal poles.

It is understood, if the following specifications are altered by the LFUCG to fit their needs at a particular location they will pay the additional costs for the individual alterations regarding strain pole orders.

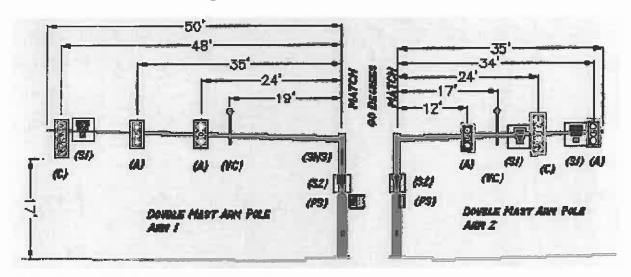
Typical Attachments

	Normal A	rea			
	Length	Width	Thickness	Weight lbs	Drag Coefficient
(A) Signal-(3 Sect. w/bp)	59 in	24 in	16 in	50	1.20
(B) Signal-(5 Sect. w/bp)	59 in	38 in	16 in	73	1.20
(C) Signal-(4 Sect. w/bp)	73 in	24 in	16 in	60	1.20
(D) Signal-(4 D Red w/bp)	59 in	38 in	16 in	60	1.20
(S1) Sign 30x36	30 in	36 in	0 in	16	1.12
(S2) Sign 36x36	36 in	36 in	0 in	16	1.12
(SNS) Illuminated/SNS	20 in	96 in	3 in	100	1.12
(PS) Pedestrian Signal	16 in	16 in	18 in	25	1.12
(MC) Monitoring Camera	10 in	10 in	10 in	50	0.50
(Cab) 336 Pole Mou Cab	46 in	24 in	22 in	300	1.20
(VC) Video Cam.	10 in	10 in	10 in	15	1.20

Single Mast Arm Pole Loading:



Double Mast Arm Pole Loading:



SPECIFICATIONS FOR Traffic Signal Back-Plates

- Back-plates shall be louvered, painted black on both sides, constructed of .050-inch Aluminum and have a yellow retro-reflective strip installed on the outer perimeter.
- Back-plates shall include a minimum of six (6) 12-14x3/4 inch stainless steel self-drilling washer screws. The louvers shall be installed horizontally and as close to the signal face as possible so that a 2-inch wide fluorescent yellow tape can be installed around the outer perimeter, width of the back-plate shall be consistent around the entire signal
- Back-plates shall have a 2-inch wide fluorescent yellow retro-reflective tape installed around the outer perimeter of the face and project a solid rectangular appearance at night. Installed tape shall not cover any part of the louvers.
- Reflective tape shall comply with ASTM D4956-05, Type IX
- Back-plates shall have smooth radius corners.
- Back-plates shall have no more than 3-pieces for a 5-section cluster design signal.
- In addition to these specifications Back-plates shall meet ITE Caltrans specifications.

When back-plates are ordered they shall be packaged by type and in one single box.
 Each box shall include a label of the type of back-plate enclosed. Screws shall be enclosed in a bag and taped to each back-plate before they are packaged in boxes for shipment

Specifications for LED Vehicle signals:

12 inch, black, polycarbonate signal sections, red/yellow/green/left turn red/left turn yellow/left turn green, cutaway hood on Green and Red, tunnel hood on Yellow, complete with hardware for span attachment: span clamp, balance adjuster, black tri-bolt entrance head, bottom plug. (Balance Adjuster shall be equivalent to Path Master VSE-3219)

Specifications for LED Countdown Pedestrian Signal with Mtg. Hrdwre. Kit, pole mount:

Aluminum, one-section, one-way, w/o clamshell mounting hardware, top and bottom plugs removed, two (2) 1&1/2 inch x 10 inch Nipples (equivalent to Pelco SE-0436-10), one (1) Tri-Bolt ELL (equivalent to Pelco SE-0514), one Tri-Stud TEE (equivalent to Pelco SE-0513), one (1) Tri-Bolt Hardware Kit with 5/16 inch, 18 gasket (equivalent to Pelco SE-5048), one (1) Tri-Stud Hardware Kit without 5/16 inch, 18 gasket (equivalent to Pelco SE-5035), one (1) Top Pole Plate (equivalent to Pelco SE-0381), one (1) Bottom Pole Plate (equivalent to Pelco SE-0382/SE-0382) has 1&1/2 inch threaded hole for conduit, powder coated black, Hand/Man Display.

Specifications for LED Countdown Pedestrian signal, 1-Way, Pedestal Mount:

Aluminum, Hand/Man display, one-section, one-way, pedestal mount, square aluminum ped base with 4 inch threaded opening in top (with (3) 3/8" allen head stainless steel set screws) and access hole with cover on one side, 4 inch x 9 foot spun aluminum pedestal pole, threaded on one end, one-way post top pedestal pole bracket (set screw), (bracket to have tri-bolt studs for mounting signal), powder coated black

Specifications for LED Countdown Pedestrian signal, 2-way, Pedestal Mount:

Aluminum, Hand/Man display, two-way, complete with two (2) one-section ICC pedestrian signals, one (1) pedestrian signal two-way top bracket (equivalent to Path Master K2WB-6130B 2WPT black), one (1) pedestal pole two-way top bracket (equivalent to Path Master K2WP-6130B 2WPT black), removable plugs for top and bottom ports, one (1) square aluminum ped base with 4 inch threaded opening in top (with (3) 3/8" allen head stainless steel set screws) and access hole with cover on one side, one (1) 4 inch x 9 foot spun aluminum pedestal pole, threaded on one end, powder coated black.

Granville Streetlight Accident Repair Agreement

- This agreement (outlined below) between Lexington Fayette Urban County
 Government (Division of Traffic Engineering) and awarded contractor establishes a
 set amount which the contractor will charge (utilizing the current price contract, (PCT
 # TBD) when performing accident repairs to Granville Streetlights located within the
 Lexington Fayette Urban County Government.
- Contractor will be notified to respond by Traffic Engineering supervisor/management or staff directed by supervisor/management.
- Normal work hours will be considered 7:00 am to 4:00 pm, Monday thru Friday
- Contractor shall not charge more than a maximum of 8-hours Forman, 8-hours
 Laborer and 8-hours pickup truck per incident (up to 3-hours for each of these items
 can be overtime charges if the contractor is called after normal work hours).

Repair criteria (per incident) will be as follows:

- Respond to location within 1-hour and make safe (per OSHA and National Electrical Code).
- Clean up all miscellaneous damaged materials (light (s) pole, glass, etc.).
- Transport damaged materials to 1515 Old Frankfort Pike.
- Pick up Granville light repair materials at LFUCG Traffic Engineering storage facility.
- Reinstall Granville Light and make any necessary repairs to wiring between the light and base it attaches to within 48-hours of being notified.
- Provide/install any 14/3 electrical cable needed.
- Make all wiring connections to make the light fully operational
- Provide/replace any anchors or blown fuses damaged by accident
- Perform traffic control in accordance with MUTCD Standards
- Provide all tools, vehicles, materials and equipment needed to perform all above items at no additional cost above those outlined within this agreement.

Granville Light Maintenance Repair Assessment Agreement

- The agreement (outlined below) between Lexington Fayette Urban County Government (Division of Traffic Engineering) and awarded contractor establishes a set amount which contractor will charge (utilizing the current price contract, (PCT #_TBD) when performing an assessment of needed maintenance repairs to Granville Streetlights located within the Lexington Fayette Urban County Government.
- Contractor will check each light location (495) for proper operation during daylight hours and nighttime hours and submit a report with the following information:
 - Location of each streetlight in need of repair, repair needs and itemized cost to make repairs.

Itemized cost to repair shall not include the following:

- Granville Streetlight equipment/parts (provided by LFUCG)
- High Pressure Sodium Lamps (provided by LFUCG)
- Photocells (provided by LFUCG)

<u>Awarded contractor will be allowed to charge the following to perform the above assessment when requested:</u>

(20)	hours	Forman
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- (20) hours Laborer
- (20) hours Pickup Truck
- (10) hours 1.5 Ton Bucket Truck

Price Quotes:

The following bid quotes are for work done that is **NON-EMERGENCY**. Non-Emergency is scheduled work conducted by the contractor and/or project agreements between the contractor and the LFUCG.

01. Provide & install 35-foot, Class 4 wood pole		
02. Provide & install 45-foot, Class 4 wood pole	\$900.00	

03. Provide & install Steel Strain Pole (as per specifications)	\$10,888.00
04. Provide (all materials) & install Down Guy	\$200.00
05. Provide (all materials) & install Side-Walk Down Guy	\$300.00
06. Install strain pole provided by LFUCG	\$5,405.00
07. Provide all materials and install span wire	\$5.18
08. Install span wire (materials provided by LFUCG)	\$3.55
09. Provide/install 3/4-inch rigid steel conduit	\$7.10
10. Provide/install 1&1/4-inch rigid steel conduit	\$8.89
11. Provide/install 2-inch rigid steel conduit	\$10.16
12. Provide/install 2-inch rigid steel conduit under roadway, open trench	\$108.00
13. Provide/install 2-inch rigid steel conduit by Boring	\$26.00
14. Provide/install 2-inch Inner-Duct, direct bury	\$6.76
15. Provide/install 2-inch Inner-Duct by Boring	\$17.07
16. Provide/install 2-inch PVC conduit	\$6.56
17. Provide/install 2-inch PVC conduit under roadway, open trench	\$84.74
18. Provide/install 2-inch PVC by Boring	\$17.22
19. Install 4-inch PVC conduit provided by LFUCG	\$2.00
20. Install 4-inch PVC conduit by Boring (provided by LFUCG)	\$5.00
21. Provide/install 1&1/4-inch OD Flexible Inner-Duct w/pull string	\$3.76
22. Install in-ground junction box provided by LFUCG	\$450.00
23. Provide/install Traffic Bearing Junction Box	\$835.00
24. Provide/install Flared Wall Traffic Bearing Junction Box	\$1,159.00
The following bid quotes are for work done that is NON-EMERGENCY . N scheduled work conducted by the contractor and/or project agreements b and the LFUCG.	
25. Install Traffic Signal Cables and wire in (LFUCG provides Cable)	\$0.80
26. Install Fiber-Optic cable provided by LFUCG	\$0.90

27. Provide/install Concrete, per yard	\$683.00
28. Provide/install Sod, per roll (Square Yard, 2-feet x 4.5-feet)	\$30.00
29. Provide/install Transfer Switch-A (1 to 10)	\$1,306.00
30. Provide/install Transfer Switch-B (10 or more)	\$1,306.00
31. Provide/install Electrical Service w/inspections	\$1,402.00
32. Install traffic signal, lane use control signal/sign, led sign and wire in	\$215.00
33. Provide/install 3-section signal w/yellow reflective backplate	\$618.00
34. Provide/install 4-section signal w/yellow reflective backplate	\$756.00
35. Provide/install pole mount pedestrian signal with or without buttons	\$718.00
36. Provide/install 1-way pedestal mount pedestrian signal	\$750.00
37. Provide/install 2-way pedestal mount pedestrian signal	\$1,050.00
38. Provide/install pedestal base 24" x 24" x 48"	\$694.00
39. Install pedestal base w/pedestrian signals (LFUCG provides Equip.)	\$2,593.00
40. Install pole mount pedestrian signal (LFUCG provides equipment	\$215.00
41. Install Base Mount 332 Cabinet Base, Cabinet, Conduits and wire in, LFUCG provides equipment	\$2,635.00
42. Granville Streetlight Accident Repairs during normal work hours	\$859.20
43. Granville Streetlight Accident Repairs after normal work hours	\$214.80
44. Assess maintenance/repair needs to Granville Streetlight Inventory	\$2,390.80
45. Retrofit Standard Granville Streetlight Fixture with LED Type Fixture	\$132.04
46. Install 332 pole mount controller cabinet, conduits and wire in (Wood pole installation)	\$2,540.00
The following bid quotes are for work done that is NON-EMERGENCY . No scheduled work conducted by the contractor and/or project agreements be and the LFUCG.	
47. Install 332 pole mount controller cabinet, conduits and wire in (Strain pole installation)	\$2,540.00
48. Install complete 5-phase to 8-phase signalized intersection and make all wiring connections and terminations (Strain Pole Installation)	\$68,020.00
49. Install complete 5-phase to 8-phase signalized intersection and make all wiring connections and terminations (Wood Pole Installation)	\$1,000.00

50. Install complete Flasher signalized intersection and make all wiring connections and terminations (Wood Pole Installation)	\$1,000.00
 Install complete 5-phase to 8-phase signalized intersection and make all wiring connections and terminations (Mast Arm Pole Installation) 	\$105,604.00
 Install complete 5-phase to 8-phase signalized intersection and make all wiring connections and terminations (Double Mast Arm Pole Installation) 	\$100,194.00
53. Provide and install mast arm strain pole	\$15,000.00
54. Provide and install double mast arm pole	\$25,000.00
55. Demolish 5 to 8-phase signalized intersection	\$3,198.00
56. Install video detection camera	\$640.00
57. Install radio antenna w/10-foot of 1&1/4-inch rigid conduit	\$320.00
58. Install pedestal base for solar powered school flasher	\$694.00
 Install solar powered school area flasher and wire in, (Mast arm pole installation) 	\$2,680.00
60. Install two solar powered school area flashers and wire in, (Pedestal Mount)	\$3,875.00
61. Provide and install Camera Strain Pole	\$3,500.00
62. Install Base Mount 332 Double Controller Cabinet Base, Controller Cabinet, Conduits and Wire In	\$3,635.00

The following bid quotes are for work done that is <u>NON-EMERGENCY</u>. Non-Emergency is scheduled work conducted by the contractor and/or project agreements between the contractor and the LFUCG.

For work needed not falling into one of the categories outlined in the contract, please supply hourly wages for services and equipment.

Service/Equipment	<u>Unit Price/Hour</u>
63. Laborer	\$35.50
64. Foreman	\$61.54
65. Electrician	\$52.10
66. Pickup Truck	\$10.00
67. 1.5 Ton Bucket Truck	\$25.00

68. 1.5 Ton Platform Truck	\$0.01
69. 1.5 Ton Line Truck with Auger	\$30.00
70. Concrete Saw (Min 35 HP with Blades)	\$0.01
71. Air Compressor (Min 125 CFM with Tools)	\$0.01
72. Trenching Machine (up to 8")	\$0.01
73. Flashing Arrow Board	\$0.01
74. Backhoe	\$0.01
75. Pipe Pusher	\$0.01
76. Boring Machine (2" 4" Hole)	\$0.01
77. Pressure Digger (20' digging depth, Minimum 25,700 lbs. Down Pressure with Augers	\$0.01

Price Quotes (Emergency Work):

The following bid quotes are for work done that is an **EMERGENCY**. Emergency work shall be considered as non-scheduled work conducted after normal working hours of the contractor.

For work needed not falling into one of the categories outlined in the contract, please supply hourly wages for services and equipment.

Service/Equipment	<u>Unit Price/Hour</u>
78. Laborer	\$43.01
79. Foreman	<u>\$74.55</u>
80. Electrician	\$63.08
81. Pickup Truck	\$10.00
82. 1.5 Ton Bucket Truck	\$25.00
83. 1.5 Ton Platform Truck	\$0.01
84. 1.5 Ton Line Truck with Auger	\$30.00
85. Concrete Saw (Min 35 HP with Blades)	\$0.01
86. Air Compressor (Min 125 CFM with Tools)	\$0.01
87. Trenching Machine (up to 8")	\$0.01
88. Flashing Arrow Board	\$0.01
89. Backhoe	\$0.01

90. Pipe Pusher	\$5.00
91. Boring Machine (2" 4" Hole)	\$0.01
92. Pressure Digger (20' digging depth, Minimum 25,700 lbs. Down Pressure with Augers	\$0.01
93. Provide & install 35-foot, Class 4 wood pole	\$995.00
94. Provide & install 45-foot, Class 4 wood pole	\$1,111.00
95. Provide (all materials) & install Down Guy	\$697.00
96. Provide (all materials) & install Side-Walk Down Guy	\$781.00
97. Install span wire (materials provided by LFUCG)	\$3.00
98. Provide/install 3/4-inch rigid steel conduit	\$6.00
99. Provide/install 1&1/4-inch rigid steel conduit	\$9.78

Price Quotes (Emergency Work):

The following bid quotes are for work done that is an <u>EMERGENCY</u>. Emergency work shall be considered as non-scheduled work conducted after normal working hours of the contractor.

100. Provide/install 2-inch rigid steel conduit	\$11.00
101. Provide/install 1&1/4-inch OD Flexible Inner-Duct w/pull string	\$2.00
102. Install in-ground junction box provided by LFUCG	\$250.00
103. Provide/install Traffic Bearing Junction Box	\$500.00
104. Provide/install Flared Wall Traffic Bearing Junction Box	\$900.00
105. Install Traffic Signal Cables and wire in (LFUCG provides Cable)	\$1.00
106. Install Fiber-Optic cable provided by LFUCG	\$1.15
107. Provide/install Transfer Switch-A (1 to 10)	\$1,440.00
108. Provide/install Electrical Service w/inspections	\$1,200.00
109. Install traffic signal, lane use control signal/sign, led sign and wire in	\$225.00
110. Install pedestal base w/pedestrian signals (LFUCG provides Equip.)	\$680.00
111. Install pole mount pedestrian signal (LFUCG provides equipment	\$200.00
112. Install 332 pole mount controller cabinet, conduits and wire in (Wood pole installation)	\$1,575.00

113. Install 332 pole mount controller cabinet, conduits and wire in (Strain pole installation)	\$1,575.00
114. Install complete 5-phase to 8-phase signalized intersection and make all wiring connections and terminations (Wood Pole Installation)	\$42,500.00
115. Install complete Flasher signalized intersection and make all wiring connections and terminations (Wood Pole Installation)	\$8,500.00

Pro/Tran™ "Signa" Series Manual Transfer Switches for Traffic Signal applications.

Specifications

Model	C30AIL
Model Description	Signa Series
Max. Generator Running Watts	7500
Max. Utility Input Amps	30
Max. Generator Input Amps	30
Switched Neutral	No
Volts	125
Utility-On Light Included	Yes
Shipping Weight (lbs.) 6	
Dimensions II v M/v D (inches)	0 4 6 4 4 275

Dimensions H x W x D (inches) 9 x 6 x 4.375 Cabinet Type, NEMA 9 cutdoor, NEMA 3R

RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION Bid #166-2017 Traffic Signal Installation and Repair

INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AAND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED

HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

Coverage	<u>Limits</u>
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement unless deemed not to apply by LFUCG.
- d. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- e. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO GOVERNMENT. COUNTY DIVISION OF RISK LEXINGTON-FAYETTE URBAN MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles. self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- Any records of any self-insured trust fund plan or policy and related accounting statements.
- Actuarial funding reports or retained losses.
- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as

available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

DEPARTMENT OF HOUSENESS.

Kentucky Department of Housing, Buildings & Construction



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Traffic Signal Renewal Program

Steven S. Vance

is hereby certified as a

Traffic Signal Senior Field Technician Level III

on 4/2/2015

Valid Thru 4/2/2018

Douglas M. Aiken - Deputy Executive Director

Traffic Signal Renewal Program
Steven S. Vance
Is Hereby Certified as a
Traffic Signal Senior Field Technician Level III
By completing all requirements and examination.

Cert # Date Good Thru
CE_32605 4/2/2015 4/2/2018





Roadway Lighting Renewal Program

Steven S. Vance

is hereby certified as a

Roadway Lighting Technician Level I

on 3/24/2017

Valid Thru 3/24/2020

Douglas M. Aiken - Executive Director

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Roadway Lighting Renewal Program
Steven S. Vance
Is Hereby Certifled as a
Roadway Lighting Technician Level I
By completing all requirements and
examination.

<u>Cert.#.</u> <u>Date</u> <u>Good Thru</u> RR_32605 3/24/2017 3/24/2020





Traffic Signal Program

Estill J. Smith

is hereby certified as a

Traffic Signal Field Technician Level II

on 9/1/2017

Valid Thru 9/1/2020

Douglas M. Alken - Executive Director

Traffic Signal Program
Estill J. Smith
Is Hereby Certified as a
Traffic Signal Field Technician Level II
By completing all requirements and examination.

 Cert #
 Date
 Good Thru

 BE_86258
 9/1/2017
 9/1/2020