



Case No.: 14-0874-EL-EEC

Mercantile Customer: City of Blue Ash

Electric Utility: Duke Energy

Program Title or Description: Prescriptive Traffic Signal LEDs

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. [10-834-EL-POR](#)

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

Section 1: Mercantile Customer Information

Name: **City of Blue Ash**

Principal address: 4343 Cooper Rd.
Cincinnati, OH 45242

Address of facility for which this energy efficiency program applies:

4343 Cooper Rd.
Cincinnati, OH 45242

Name and telephone number for responses to questions:

Megan Fox, (513)287-3367

Electricity use by the customer (check the box(es) that apply):

- ☐ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Please attach documentation.)
- ✓ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) The customer is filing this application (choose which applies):

- ☐ Individually, without electric utility participation.
- ✓ **Jointly with the electric utility.**

B) The electric utility is: **Duke Energy**

C) The customer is offering to commit (check any that apply):

- ☐ Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ✓ **Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)**

Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (check those that apply):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)).
- ✓ Installation of new equipment to replace equipment that needed to be replaced. The customer installed new equipment on the following date(s): August 2011
- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s): _____.
- ☐ Behavioral or operational improvement.

B) Energy savings achieved/to be achieved by the energy efficiency program:

- 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____kWh

- 2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: **85,081** _kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 3) If you checked the box indicating that the project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: **XXXXX kWh (See Attachment 1 - Appendix 2)**

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

Annual savings: **XXXXX kWh (See Attachment 1 - Appendix 2)**

Section 4: Demand Reduction/Demand Response Programs

A) The customer's program involves (check the one that applies):

- ☒ **Coincident peak-demand savings from the customer's energy efficiency program.**
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction (check the one that applies):
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) On what date did the customer initiate its demand reduction program?

Month(s) and Year(s)

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

2.35 KW (See Attachment 1 - Appendix 2)

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

☒ **Option 1: A cash rebate reasonable arrangement.**

OR

☐ Option 2: An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.

OR

☐ Commitment payment

B) The value of the option that the customer is seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☒ A cash rebate of **\$2,237.50 (See Attachment 1 - Appendix 3).**

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for ____ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

☐ A commitment payment valued at no more than \$_____. (Attach documentation and calculations showing how this payment amount was determined.)

OR

- ☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____
(Continue to Subsection 1, then skip Subsection 2)
- ✓ Utility Cost Test (UCT). The calculated UCT values are
SelfDirect LED Pedestrian Signals 6.06
SelfDirect LED Auto Traffic Signals 6.37
(See Attachment 1 - Appendix 4)

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were **\$35,376 (See Attachment 1 - Appendix 5).**

The utility's program costs were **\$1,546 (See Attachment 1 - Appendix 6).**

The utility's incentive costs/rebate costs were **\$2,237.50 (See Attachment 1 - Appendix 3).**

Section 7: Additional Information

Please attach the following supporting documentation to this application:

Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.

A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;
- 2) a description of any consequences of noncompliance with the terms of the commitment;
- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
- 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

Refer to Offer Letter following this application

A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.



DUKE ENERGY
Mercantile Self Direct Program
139 East Fourth Street
Cincinnati, OH 45202
513 629 5572 fax

May 6th, 2014

Zak Bradley
City of Blue Ash
4343 Cooper Rd.
Cincinnati, OH 45242

Subject: Your Application for a Duke Energy Mercantile Self-Direct Lighting Rebate

Dear Mr. Bradley:

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page two, a total rebate of \$2,237.50 has been proposed for your LED pedestrian and auto traffic signals project completed in the 2011 calendar year. **All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).**

At your earliest convenience, please indicate if you accept this rebate by

- providing your signature on page two
- completing the PUCO-required affidavit on page three.

Please return the documents to my attention via fax at 513-629-5572 or e-mail to SelfDirect@Duke-Energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

At Duke Energy, we value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart Saver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Megan Fox".

Megan Fox
Product Manager
Mercantile Self Direct Rebates

cc: Michelle Kolb
Rob Jung

Please indicate your response to this rebate offer within 30 days of receipt.

☒ Rebate is accepted.

☐ Rebate is declined.

By accepting this rebate, City of Blue Ash affirms its intention to commit and integrate the energy efficiency projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.

Additionally, City of Blue Ash also agrees to serve as joint applicant in any future filings necessary to secure approval of this arrangement as required by PUCO and to comply with any information and reporting requirements imposed by rule or as part of that approval.

Finally, City of Blue Ash affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Information in question would include, but not be limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

If rebate is accepted, will you use the monies to fund future energy efficiency and/or demand reduction projects?

☒ YES

☐ NO

to general fund this year, will get next year

If rebate is declined, please indicate reason (optional):



Customer Signature

Printed Name

Date

Zachary Bradley

5/19/14

Proposed Rebate Amounts

Measure ID	Energy Conservation Measure (ECM)	Proposed Rebate Amount
ECM-1	SelfDirect LED Pedestrian Signals	\$625.00
ECM-2	SelfDirect LED Auto Traffic Signals	\$1,612.50
ECM-3 Rejected	SelfDirect Exterior HID replacement above 175W to 250W HID retrofit Rejected: In order to qualify for an incentive, equipment (LEDG120354KAS2G1RF1) must be located on either the Energy Star or Design Lights Consortium qualified product lists.	\$130.00
Total		\$2,237.50



Public Utilities Commission

Application to Commit
Energy Efficiency/Peak
Demand Reduction
Programs
(Mercantile Customers
Only)

Case No.: ____ - ____ -EL-EEC

State of OHIO :

Zachary Bradley, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

City of Blue Ash

[insert customer or EDU company name and any applicable name(s) doing business as]

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
3. I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

Signature of Affiant & Title

Sworn and subscribed before me this 9 day of MAY,
2014 Month/Year

Judith A. Ward
Signature of official administering oath

JUDITH A. WARD, Notary Public
Print Name and Title

JUDITH A. WARD, Notary Public
In and for the State of Ohio
My Commission Expires May 1, 2016

My commission expires on _____



Attachment 1 – City of Blue Ash

Appendix 1 – Electric History

There is no billing history for this account because it is a traffic signal account.

Appendix 2 – Annual kWh and kW savings

Measure	Measure Amount	Unit of Measure	Annual kWh Gross with losses (per unit)	TOTAL Annual kWh Gross with losses	Saved Summer coincident kW with losses Per Unit	Total KW Gross with losses
SelfDirect LED Pedestrian Signals	50	per signal	161	8,047	0.05	2.35
SelfDirect LED Auto Traffic Signals	258	per lamp	299	77,034	0.00	0.00

Existing Energy kWh (Per Unit)	New Energy kWh (Per Unit)	kWh Savings (Per Unit)	Total kWh Savings	Existing Demand- kW (Per Unit)	New Demand (Per Unit)	kW Savings (Per Unit)	Total kW Savings
There are no pre and post values.		150.00	7500	There are no pre and post values.		0.04	2.2
		275.00	70950			0.09	21.93

Appendix 3 – Cash Rebate

Measure	Amount
SelfDirect LED Pedestrian Signals	\$625.00
SelfDirect LED Auto Traffic Signals	\$1,612.50

Total \$2,237.50

Appendix 4 – Utility Cost Test

Measure	UCT
SelfDirect LED Pedestrian Signals	6.06
SelfDirect LED Auto Traffic Signals	6.37

Appendix 5 – Avoided Supply Costs

Measure	T&D	Production	Capacity	Quantity	Total Avoided Costs
SelfDirect LED Pedestrian Signals	\$15.25	\$79.37	\$25.68	50	\$6,015
SelfDirect LED Auto Traffic Signals	\$0.00	\$113.80	\$0.00	258	\$29,361

Total \$35,376

Appendix 6 – Utility Program Costs

Measure	Qty	Admin Costs	Total Costs
SelfDirect LED Pedestrian Signals	50	\$3.86	\$193
SelfDirect LED Auto Traffic Signals	258	\$5.24	\$1,353

Total \$1,546

Ohio Mercantile Self Direct Program

Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to SelfDirect@Duke-Energy.com. You may also fax to 1-513-629-5572.

Mercantile customers, defined as using at least 700,000 kWh annually or having an account in multiple locations are eligible for the Mercantile Self Direct program. Indicate which applies:

- ☐ a single Duke Energy Ohio account with 700,000 kWh annual usage
☒ an account with multiple locations

Please list Duke Energy account numbers below (attach listing of multiple accounts and/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
0140-2171-01	248,184		

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart Saver® Custom Incentive. Self Direct rebates are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program rules allow for, though do not require, certain projects that are Prescriptive in nature under the Smart Saver program to be evaluated using the Custom process in the Self Direct program. Use the list on page two as a guide to determine which Self Direct program best fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet.

Self Direct Program rules also allow for behaviorally based and/or no cost and low cost projects to receive rebates.

Please check each box to indicate completion/inclusion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input checked="" type="checkbox"/> Proof of payment.*	<input checked="" type="checkbox"/> Manufacturer's Spec sheets	<input checked="" type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
----------------------------------------------------------------------------------------------	--------------------------------------------------------	----------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

*If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

**Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application. Rebates for such projects may be small in magnitude.

Installation Street Address:**Performed by Capital Electric:**

Reed Hartman Highway/ Cooper
 Reed Hartman Highway/ Carver
 Reed Hartman Highway/ Malsbary
 Reed Hartman Highway/ Creek

LED Signal Lamps	LED PED Lights	LED Overhead Street Lights
------------------	----------------	----------------------------

0	0	4
51	4	0
32	0	0
0	6	0

Performed by Elex

Kenwood/ Cooper
 Kenwood/ Alma
 Kenwood/ Hunt
 Kenwood/ Town Square
 Kenwood/ YMCA
 Cooper/ Hunt

37	10	0
18	4	0
32	8	0
33	6	0
30	8	0
25	4	0
Total	50	4

Capital Electric Contact:

Mike Bryson
 Phone- (513) 860-9773
 Fax- (513) 682-6682
 11825 Reading Rd
 Cincinnati, OH 45241
mike.bryson@capitalelectric.com

Elex Contact:

Ron Kohorst
 Phone- (513) 851-3539
 Fax- N/A
 11000 Winton Rd
 Cincinnati, OH 45218
ron@elexinc.com

Energy Savings Breakdown:

	kWh	Quantity	Energy Use
Incandesent TSV12 3 Module Lamp:	106	52	5512
Incandesent TSV21A 5 Module Lamp:	136	20	2720
LED34 3 Module Lamp:	9	52	468
LED54 5 Module Lamp:	12	20	240
250W Mercury Vapor Lamp:	93	4	372
1-120W LED Street Light:	52	4	208
Incandesent PED light, TSPO3 69W:	50	50	2500
LED PED light, LED65:	5	50	250
Incandesent Single Flasher, 69W:	2	25	50
LED Double Flasher, LED87:	1	13	13

3 Module Lights:

5512-468= 5044

Street Lights:

372-208= 164

5 Module Lights:

2720-240= 2480

PED Lights:

2500-250= 2250

Flashing Modules:

50-13= 37

Total Savings (kWh):

9975

MERCANTILE SELF DIRECT Ohio Lighting Rebate Application

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

Email the complete, signed application with all required documents to SelfDirect@duke-energy.com or fax to 513-629-5572.

Is this application: ☒ **NEW** (original) or ☐ **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input checked="" type="checkbox"/> Other: <u>street intersections</u>		
How did you hear about the program? (check one)		
<input checked="" type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input checked="" type="checkbox"/> All sections of application	<input checked="" type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input checked="" type="checkbox"/> Tax ID number for payee <input type="checkbox"/> W-9 for payee	<input checked="" type="checkbox"/> Customer/vendor agree to Terms and Conditions
-----------------------------------------------------------------	----------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------

Customer Information					
Customer/Business	<u>City of Blue Ash</u>		Contact	<u>Zak Bradley</u>	
Phone	<u>513-745-8536</u>		Account Number	<u>0140-2171-01</u>	
Street Address (Where rebate should be mailed)			<u>4343 Cooper Rd</u>		
City	<u>Blue Ash</u>	State	<u>Ohio</u>	Zip Code	<u>45242</u>
Installation Street Address <u>various - see attached breakdown</u>					
City	<u>Blue Ash</u>	State	<u>Ohio</u>	Zip Code	<u>45242</u>
E-mail Address	<u>zbradley@blueash.com</u>				

*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.

Vendor Information					
Vendor	<u>Various - see breakdown</u>		Contact	<u>various - see breakdown</u>	
Phone	<u>various</u>		Fax	<u>various</u>	
Street Address <u>various</u>					
City	<u>various</u>	State	<u>various</u>	Zip Code	<u>various</u>
E-mail Address <u>various</u>					

If Duke Energy has questions about this application, who should we contact? ☒ Customer ☐ Vendor

Payment Information	
Who should receive rebate payment?	<input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of rebate directly to the vendor:	Customer Signature (written signature) _____ Date _____
Provide Tax ID Number for Payee	Customer Tax ID # _____ Vendor Tax ID # _____

Terms and Conditions			
I have read and hereby agree to the Terms & Conditions and Program Requirements.			
Customer Signature (written signature)		Vendor Signature (written signature)	
Date	<u>3/12/2014</u>	Date	
Title	<u>Engineering Technician</u>	Title	

Rebates are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for rebates. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.

Outdoor Lighting	Incentive	Qty	Annual Operating Hrs (minimum of 1800)	Equipment cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
Exterior LED or Induction fixture replacing up to 175 lamp wattage HID fixture Model Number	\$20 / fixture					
Exterior LED or Induction fixture replacing 176 – 250 lamp wattage HID fixture Model Number	\$25 / fixture	4	3000	11070	10/13	\$100
Exterior LED or Induction fixture replacing 251 – 400 lamp wattage HID fixture Model Number	\$40 / fixture					
Exterior LED or Induction fixture replacing > 400 lamp wattage HID fixture Model Number	\$75 / fixture					
Parking Garage LED or Induction fixture replacing up to 175 lamp wattage HID fixture Model Number	\$50 / fixture					
Parking Garage LED or Induction fixture replacing 176 – 250 lamp wattage HID fixture Model Number	\$75 / fixture					
Parking Garage LED or Induction fixture replacing 251 – 400 lamp wattage HID fixture Model Number	\$125 / fixture					
Parking Garage LED or Induction fixture replacing > 400 lamp wattage HID fixture Model Number	\$200 / fixture					
LED Auto Traffic Signals (replacing incandescent) Model Number	\$6.25 / lamp	258	2500	\$40	8/11	\$162.50
LED Pedestrian Signals (replacing incandescent) Model Number	\$12.50 / signal	50	8760	\$120	8/11	\$650
Exterior LED Bollards Model Number:	\$20 / fixture					
Exterior LED Canopy replacing up to 175W HID Model Number:	\$40 / fixture					
Exterior LED Canopy replacing 176-250 lamp wattage HID Model Number:	\$45 / fixture					
Exterior LED Canopy replacing 251-400 lamp wattage HID Model Number:	\$85 / fixture					
Exterior LED Floodlight replacing up to 100W halogen, incandescent or HID floodlight Model Number:	\$10.00/ fixture					
LED Floodlight replacing >100W Incandescent, halogen or HID Model Number:	\$25.00/ fixture					
Exterior LED Lighting Motion Sensor Controls Make and Model Number: check one ** <input type="checkbox"/> R <input type="checkbox"/> NC	\$13.50 / control					

- Replacement must result in energy savings to qualify
- All fixtures, lamps and ballasts must be approved by a recognized OSHA National Recognized Testing Laboratory (NRTL) and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- A minimum of 35 lumens per watt is required.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Outdoor and garage LED and induction lighting must result in a total power reduction of 40% or more.
- Outdoor and garage LEDs must be listed on either the Energy Star or Design Lights consortium qualifying products lists:
http://www.energystar.gov/index.cfm?c=products.pr_find_es_products#business_gov
<http://www.designlights.org/>
- Traffic and pedestrian signals using LED lights must replace conventional incandescent signals.
- Incentive capped at 50% of the equipment cost.
- LED Bollards must be listed on either the Energy Star or Design Lights consortium qualifying products lists.
- DLC-approved retrofit kits for fuel pump canopy luminaires are eligible for incentive under this measure.
- LEDs must be on the DLC qualified product list and in the appropriate category to be eligible for incentives.
- The exterior LED lighting motion-sensor control must be controlled by a photocell or timer to prevent daytime operation.
- Rebates are not available for photocell timers.
- The exterior LED lighting motion-sensor control cannot be installed on parking garages.

CAPITAL ELECTRIC LINE

Vend# 00275

123930

123930

.D.# - Description

G130296 Inv# 27409 dated 09-30-13

----Account----

221.882.525101

Amount

\$31,635.00

Totals

\$31,635.00

THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND A COPY VOID SCREEN. THE PAPER CONTAINS AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW.



The City Of Blue Ash, Ohio

4343 Cooper Road • Blue Ash, Ohio 45242-5699
(513) 745-8500

123930

FIFTH THIRD BANK
CINCINNATI, OHIO
13-31/420

VOID AFTER 90 DAYS

THIRTY ONE THOUSAND SIX HUNDRED THIRTY FIVE
and 00/100 DOLLARS

PAY
TO THE
ORDER OF

CAPITAL ELECTRIC LINE
BUILDERS, INC.
4400 N.W. MATTOX ROAD
RIVERSIDE, MD 64150

DATE	CHECK NO.	AMOUNT
10-11-13	123930	\$31,635.00

NON-NEGOTIABLE

City Mgr.

Treas.

⑈ 123930 ⑈ ⑆042000314⑆ 0089918570⑈

PARTIAL PAYMENT AUTHORIZATION

PURCHASE ORDER NUMBER: 130296

FOR THE MONTH OF: SEPTEMBER ✓

ORDINANCE NO.(if applicable): 2013-7

VENDOR NAME: Capital Electric Line Builders - Wagner Smith Division

DESCRIPTION: LED & UPS UPGRADES FOR SEPT. 2013

PARTIAL OR FINAL PAYMENT: PARTIAL

Note: If this is a FINAL payment, signed green copy of the P.O. must be attached

A payment of \$31,635.00 ✓ is hereby authorized on the above referenced purchase order.

Account Numbers to Charge: List Account Numbers as Shown on P.O.	Amount
<u>221.882.525101</u>	<u>\$ 31,635.00</u> ✓
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
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RECEIVED
OCT 03 2013
FINANCE DIVISION

Dept. Approval by: 

Date: 10/3/2013

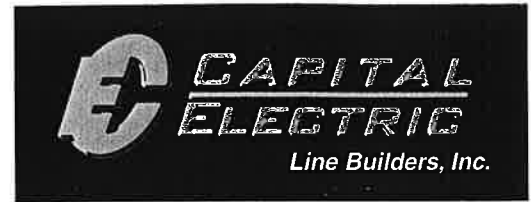
Finance Approval by: K/b

Date: 10/8/13

Notes to Finance: (Examples- add account number to P.O., increase/decrease P.O. amount, address change)

Finance Use Only:

CAPITAL ELECTRIC LINE BUILDERS
4400 N.W. MATTÖX ROAD
RIVERSIDE, MO 64150
816 389-4000



IN OHIO: Phone (937) 424-2550
Fax (937) 297-1365

Invoice 27409

Bill to: CITY OF BLUE ASH 4343 COOPER ROAD CINCINNATI, OH 45242	Job: 69477 R HARTMAN SIGNAL UPGRADES CITY OF BLUE ASH 4343 COOPER ROAD CINCINNATI, OH 45242
--------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------

Invoice #: 27409 Payment Terms: NET 30 Customer Code: BLUASH	Date: 09/30/13 Customer P.O. #: 130296 Salesperson:
--------------------------------------------------------------------	-----------------------------------------------------------

Remarks: REED HARTMAN TRAFFIC SIGNAL UPGRADES

Quantity	Description	U/M	Unit Price	Extension
	LABOR, MATERIAL AND EQUIPMENT FOR UPGRADES TO THE TRAFFIC SIGNALS AT REED HARTMAN AND COOPER AND AT REED HARTMAN AND MALSARY, 100% COMPLETE			
1.000			31,635.00	31,635.00
			Subtotal:	31,635.00
			Total:	31,635.00

RECEIVED
OCT - 3 2013
BLUE ASH PUBLIC WORKS

PURCHASE ORDER

BILL TO: *City of Blue Ash*
Finance Office
4343 ~~Cooper~~ Road • Blue Ash, Ohio 45242-5699
(513) 745-8500 • (513) 745-6230

P.O. NUMBER
RG130296
REQ. NO.
P.O. DATE
05/28/13

DELIVER TO: JUDI WARD
CITY OF BLUE ASH
4343 COOPER ROAD
BLUE ASH, OH 45242

VENDOR NO.
00275

SUPPLIER:

CAPITAL ELECTRIC LINE
BUILDERS, INC.
4400 N.W. MATTOX ROAD
RIVERSIDE, MO 64150

ACCOUNT NUMBER	AMOUNT
221.882.525101	\$33,000.00
221.882.525101	\$8,013.00

FEDERAL I.D. #31-6007293

QUANTITY	UNIT	DESCRIPTION	PRICE / UNIT	AMOUNT
		2013 LED & UPS UPGRADE PROGRAM (BUDGETED ITEM) - PUBLIC WORKS DEPARTMENT ORD. NO. 2013-7 PO Transfer in FROM PO #120478		\$33,000.00 \$8,013.00
TOTAL:				\$41,013.00

FISCAL CERTIFICATION

CITY OF BLUE ASH

It is hereby certified that the amount required to meet the contract, agreement, obligation, payment or expenditure for the above, has been lawfully appropriated or authorized or directed for such purpose and is in the Treasury or in process of collection, free from any obligation or certification now outstanding.

Dated 5/28/13Fiscal Officer 

CITY OF BLUE ASH

FINANCE COPY

P. O. #	Description	Account	Amount
RG110069	INV. #17984	221.682.523302	\$95.10
RG110126	INV. #18025	221.882.525101	\$15,212.00



Totals

\$15,307.10

THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND A COPY VOID SCREEN. THE PAPER CONTAINS AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW.



The City Of Blue Ash, Ohio

4343 Cooper Road • Blue Ash, Ohio 45242-5699
(513) 745-8500

114096

FIFTH THIRD BANK
CINCINNATI, OHIO
13-31/420

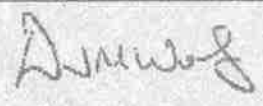
VOID AFTER 90 DAYS

FIFTEEN THOUSAND THREE HUNDRED SEVEN and 10/100 DOLLARS


DATE	CHECK NO.	AMOUNT
05-06-11	114096	\$15,307.10

PAY
TO THE
ORDER OF

CAPITAL ELECTRIC LINE
BUILDERS, INC.
4400 N.W. MATTOX ROAD
RIVERSIDE, MO 64150


City Mgr.

NON-NEGOTIABLE


Treas.

⑈114096⑈ ⑆042000314⑆ 0089918570⑈

PARTIAL PAYMENT AUTHORIZATIONPURCHASE ORDER NUMBER: 110126FOR THE MONTH OF: APRIL

ORDINANCE NO.(if applicable): _____

VENDOR NAME: Capital Electric Line Builders - Wagner Smith DivisionDESCRIPTION: LED AND UPS UPGRADE PROGRAMPARTIAL OR FINAL PAYMENT: FINAL

Note: If this is a FINAL payment, signed green copy of the P.O. must be attached

A payment of \$15,212.00 is hereby authorized on the above referenced purchase order.

Account Numbers to Charge: List Account Numbers as Shown on P.O.	Amount
<u>221.882.525101</u>	<u>\$ 15,212.00</u>
_____	_____
_____	_____
_____	_____
_____	_____
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_____	_____

Dept. Approval by: Date: 5/2/2011Finance Approval by: Date: 5-4-11

Notes to Finance: (Examples- add account number to P.O., increase/decrease P.O. amount, add/deduct change)

RECEIVED

MAY 05 2011

FINANCE DIVISION

Finance Use Only:

CAPITAL ELECTRIC LINE BUILDERS
4400 N.W. MATTOX ROAD
RIVERSIDE, MO 64150
816 389-4000



IN OHIO: Phone (937) 424-2550
Fax (937) 297-1365

Invoice 18025

Bill to: CITY OF BLUE ASH 4343 COOPER ROAD CINCINNATI, OH 45242	Job: 65104 R.HARTMAN & CREEK & CARVE
--------------------------------------------------------------------------	-----------------------------------------

Invoice #: 18025	Date: 04/28/11	Customer P.O. #:
Payment Terms: NET 30		Salesperson:
Customer Code: BLUASH		

Remarks: BLUE ASH 2011 TRAFFIC SIGNAL UPGRADES

Quantity	Description	U/M	Unit Price	Extension
	LABOR, MATERIAL & EQUIPMENT TO UPGRADE THE TRAFFIC SIGNALS AT REED HARTMAN AND CARVER WITH LED UNITS, PROVIDE UNINTERRUPTIBLE POWER SUPPLY SUPPLY WITH CONDITIONING AND GENERATOR PANEL INCLUDED, 100% COMPLETE			10,897.00
	LABOR, MATERIAL & EQUIPMENT TO REPLACE 6 PEDESTRIAN SIGNALS AT REED HARTMAN AND CREEK WITH COUNT DOWN, D2 TYPE HEADS AND REPLACE PUSH BUTTONS SIGNS WITH R10-3E SIGNS TO MATCH THE PEDESTRIAN SIGNALS, 100% COMPLETE			

Subtotal:	4,315.00
	15,212.00
Total:	15,212.00
	15,212.00

RECEIVED

MAY 03 2011

FINANCE DIVISION

RECEIVED

MAY 02 2011

PUBLICWORKS
DIRECTOR'S OFFICE

D. #	Description	Account	Amount
G100207	INV. #1766-50111	442.890.525300	\$212,472.78
	DOWNDOWN BLUE ASH TRAFFIC SIGNALS		
G100207		223.882.525300	\$65,011.88
G100207		442.890.525300	\$11,246.10
Totals			\$288,730.76

THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND A COPY VOID SCREEN. THE PAPER CONTAINS AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW.



The City Of Blue Ash, Ohio

4343 Cooper Road • Blue Ash, Ohio 45242-5699
(513) 745-8500

114621
FIFTH THIRD BANK
CINCINNATI, OHIO
13-31/420

VOID AFTER 90 DAYS

TWO HUNDRED EIGHTY EIGHT THOUSAND SEVEN HUNDRED THIRTY
and 76/100 DOLLARS

PAY
TO THE
ORDER OF
ELEX, INC.
11000 WINTON ROAD
GREENHILLS, OH 45218

DATE	CHECK NO.	AMOUNT
06-03-11	114621	\$288,730.76

[Signature]
City Mgr.
NON-NEGOTIABLE
[Signature]
Treas.

⑈114621⑈ ⑆042000314⑆ 0089918570⑈

PARTIAL PAYMENT AUTHORIZATION

PURCHASE ORDER NUMBER: **100207**

FOR THE MONTH OF: MAY

ORDINANCE NO.(if applicable): 2010-27

VENDOR NAME: ELEX, INC.

DESCRIPTION: DOWNTOWN TRAFFIC SIGNAL PROJECT FOR MAYIL 2011

PARTIAL OR FINAL PAYMENT **PARTIAL**

Note: If this is a FINAL payment, signed green copy of the P.O. must be attached

A payment of \$288,730.76 is hereby authorized on the above referenced purchase order.

Account Numbers to Charge:
List Account Numbers as Shown on P.O.

Amount

442.890.525300

\$ 223,718.88

223.882.525300

\$ 65,011.88

\$

\$

\$

\$

\$

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\$

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\$

\$

\$

Dept. Approval by: Horden

Date: 6/2/2011

Finance Approval by: [Signature]

Date: _____

Notes to Finance: (Examples- add account number to P.O., increase/decrease P.O. amount, address change)

Finance Use Only:	
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The Marquardt House
11000 Winton Road
Cincinnati, Ohio 45218

513-851 ELEX
(3539)

INVOICE INVOICE INVOICE INVOICE INVOICE INVOICE INVOICE

May 6, 2011

CITY OF BLUE ASH
4343 Cooper Road
Blue Ash, OH 45242-5699

RE : Our Invoice No.: **1766-50111**

PROJECT: DOWNTOWN BLUE ASH TRAFFIC SIGNALS
CITY OF BLUE ASH PID No. 81779

ORIGINAL CONTRACT AMOUNT	\$	1,195,636.95
Net Changes to Date	\$	<u>11,246.10</u>
CONTRACT SUM TO DATE	\$	1,206,883.05
TOTAL COMPLETED TO DATE	\$	648,103.75
Less Retainer	\$	<u>47,825.48</u>
TOTAL EARNED LESS RETAINER	\$	600,278.27
Less Previous Payments	\$	<u>311,547.51</u>
 CURRENT PAYMENT DUE	 \$	 <u><u>288,730.76</u></u>

PLEASE REMIT TO: ELEX, INC.
11000 Winton Road
Cincinnati, Ohio 45218

THANK YOU!

ELEX, INC.
11000 Winton Road
Cincinnati, Ohio 45218

CITY OF BLUE ASH
4343 Cooper Road
Blue Ash, OH 45242-5699

Project: DOWNTOWN BLUE ASH TRAFFIC SIGNALS
CITY OF BLUE ASH PID No. 81779

P# (513) 745-85000
F# (513) 745-8594

Pay Estimate Date: May 6, 2011
Pay Estimate No.: 4
Our Invoice No.: 1766-50111

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
		TRAFFIC SIGNALS												
1	202E9810 0	REMOVAL MISC.; REMOVAL OF EXISTING SHRUB	EA.	\$ 55.00	2.00	\$ 110.00	2.00	\$ 110.00	-	\$ -			2.00	\$ 110.00
2	614E1100 1	MAINTAINING TRAFFIC, AS PER PLAN	LUMP	\$ 26,100.00	1.00	\$ 26,100.00	0.560	\$ 14,920.00	0.14	\$ 3,730.00			0.70	\$ 18,650.00
3	623E1000 0	CONSTRUCTION LAYOUT STAKES	LUMP	\$ 5,500.00	1.00	\$ 5,500.00	0.82	\$ 4,500.00	-	\$ -			0.82	\$ 4,500.00
4	625E0050 0	CONNECTOR KIT, TYPE II	EA.	\$ 46.00	22.00	\$ 1,012.00	-	\$ -	9.00	\$ 414.00			9.00	\$ 414.00
5	625E0060 0	CONNECTOR KIT, TYPE III	EA.	\$ 45.00	21.00	\$ 945.00	-	\$ -	9.00	\$ 405.00			9.00	\$ 405.00
6	625E0150 1	CABLE SPLICING KIT, AS PER PLAN	EA.	\$ 44.00	8.00	\$ 352.00	-	\$ -	12.00	\$ 528.00			12.00	\$ 528.00
7	625E1820 1	BRACKET ARM, 15', AS PER PLAN	EA.	\$ 650.00	2.00	\$ 1,300.00	-	\$ -	2.00	\$ 1,300.00			2.00	\$ 1,300.00
8	625E1840 1	BRACKET ARM, 20', AS PER PLAN	EA.	\$ 705.00	1.00	\$ 705.00	-	\$ -	1.00	\$ 705.00			1.00	\$ 705.00
9	625E1850 1	BRACKET ARM, 25', AS PER PLAN	EA.	\$ 970.00	4.00	\$ 3,880.00	-	\$ -	4.00	\$ 3,880.00			4.00	\$ 3,880.00
10	625E1851 1	BRACKET ARM, 30', AS PER PLAN	EA.	\$ 1,090.00	11.00	\$ 11,990.00	-	\$ -	11.00	\$ 11,990.00			11.00	\$ 11,990.00
11	625E2330 4	NO. 8 AWG, 600 VOLT DISTRIBUTION CABLE	FT.	\$ 0.95	4,675.00	\$ 4,441.25	-	\$ -	2,280.00	\$ 2,166.00			2,280.00	\$ 2,166.00
12	625E2340 0	NO.10 AWG POLE AND BRACKET CABLE	FT.	\$ 0.70	2,590.00	\$ 1,813.00	-	\$ -	1,270.00	\$ 889.00			1,270.00	\$ 889.00
13	625E2530 0	CONDUIT, 1-1/2", 725.04	FT.	\$ 5.75	400.00	\$ 2,300.00	524.00	\$ 3,013.00	-	\$ -			524.00	\$ 3,013.00
14	625E2540 2	CONDUIT, 2", 725.05	FT.	\$ 2.30	130.00	\$ 299.00	156.00	\$ 358.80	-	\$ -			156.00	\$ 358.80
15	625E2550 2	CONDUIT, 3", 725.05	FT.	\$ 3.00	235.00	\$ 705.00	557.00	\$ 1,671.00	-	\$ -			557.00	\$ 1,671.00
16	625E2560 0	CONDUIT, 4", 725.04	FT.	\$ 18.00	1,310.00	\$ 23,580.00	1,341.00	\$ 24,138.00	-	\$ -			1,341.00	\$ 24,138.00
17	625E2590 2	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 4", 725.04	FT.	\$ 41.20	245.00	\$ 10,094.00	254.00	\$ 10,464.80	-	\$ -			254.00	\$ 10,464.80
18	625E2593 0	CONDUIT, MISC.; INTERCEPT EXISTING CONDUIT	EA.	\$ 715.00	1.00	\$ 715.00	3.00	\$ 2,145.00	-	\$ -			3.00	\$ 2,145.00
19	625E2625 1	LUMINAIRE, CONVENTIONAL, AS PER PLAN	EA.	\$ 1,275.00	18.00	\$ 22,950.00	-	\$ -	9.00	\$ 11,475.00			9.00	\$ 11,475.00
20	625E2900 0	TRENCH	FT.	\$ 9.00	655.00	\$ 5,895.00	927.00	\$ 8,343.00	-	\$ -			927.00	\$ 8,343.00
TRAFFIC SIGNALS SUBTOTAL PAGE 1					\$	124,686.25	\$	69,663.60	\$	37,482.00	\$	-	\$	107,145.60

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
21	632E2960	TRENCH, IN PAVED AREA, TYPE A	FT.	\$ 48.00	20.00	\$ 960.00		\$ 960.00	-	\$ -			20.00	\$ 960.00
22	632E2960	TRENCH, IN PAVED AREA, TYPE B	FT.	\$ 50.00	1,047.00	\$ 52,350.00		\$ 52,350.00	-	\$ -			1,047.00	\$ 52,350.00
23	632E3070	PULLBOX, 725.08, 18"	EA.	\$ 765.00	23.00	\$ 17,595.00		\$ 17,595.00	-	\$ -			23.00	\$ 17,595.00
24	632E3070	PULLBOX, 725.08, 18", AS PER PLAN	EA.	\$ 765.00	1.00	\$ 765.00		\$ 765.00	-	\$ -			1.00	\$ 765.00
25	632E3070	PULLBOX, 725.08, 24"	EA.	\$ 875.00	6.00	\$ 5,250.00		\$ 5,250.00	-	\$ -			6.00	\$ 5,250.00
	632E3200	GROUND ROD	EA.	\$ 160.00	37.00	\$ 5,920.00		\$ 5,920.00	-	\$ -			37.00	\$ 5,920.00
26	630E7910	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	EA.	\$ 240.00	38.00	\$ 9,120.00		\$ 9,120.00	16.00	\$ 3,840.00			16.00	\$ 3,840.00
27	630E7950	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	EA.	\$ 25.00	2.00	\$ 50.00		\$ 50.00	-	\$ -			-	\$ -
28	630E8010	SIGN, FLAT SHEET, AS PER PLAN	SQ FT	\$ 16.50	182.00	\$ 3,003.00		\$ 3,003.00	48.00	\$ 792.00			48.00	\$ 792.00
29	630E8050	SIGN, DOUBLE FACED, STREET NAME, AS PER PLAN	EA.	\$ 145.00	22.00	\$ 3,190.00		\$ 3,190.00	-	\$ -			-	\$ -
30	630E8300	COVERING OF SIGN	SQ FT	\$ 3.50	119.00	\$ 416.50		\$ 416.50	48.00	\$ 168.00			48.00	\$ 168.00
31	631E8800	PHOTOELECTRIC CONTROL	EA.	\$ 90.00	6.00	\$ 540.00		\$ 540.00	3.00	\$ 270.00			3.00	\$ 270.00
32	632E0500	VEHICULAR SIGNAL HEAD, (LED), 3 SECTION, 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 645.00	34.00	\$ 21,930.00		\$ 21,930.00	16.00	\$ 10,320.00			16.00	\$ 10,320.00
33	632E0508	VEHICULAR SIGNAL HEAD, (LED), 5 SECTION, 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 970.00	13.00	\$ 12,610.00		\$ 12,610.00	6.00	\$ 5,820.00			6.00	\$ 5,820.00
34	632E2073	PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN	EA.	\$ 530.00	40.00	\$ 21,200.00		\$ 21,200.00	16.00	\$ 8,480.00			16.00	\$ 8,480.00
35	632E2500	COVERING OF VEHICULAR SIGNAL HEAD	EA.	\$ 20.00	47.00	\$ 940.00		\$ 940.00	21.00	\$ 420.00			21.00	\$ 420.00
36	632E2501	COVERING OF PEDESTRIAN SIGNAL HEAD	EA.	\$ 20.00	40.00	\$ 800.00		\$ 800.00	16.00	\$ 320.00			16.00	\$ 320.00
37	632E2600	PEDESTRIAN PUSHBUTTON, AS PER PLAN	EA.	\$ 860.00	40.00	\$ 34,400.00		\$ 34,400.00	-	\$ -			-	\$ -
38	632E4030	SIGNAL CABLE, 3 CONDUCTOR, NO.14 AWG	FT.	\$ 1.70	800.00	\$ 1,360.00		\$ 1,360.00	185.00	\$ 314.50			185.00	\$ 314.50
39	632E4050	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	FT.	\$ 1.90	6,470.00	\$ 12,293.00		\$ 12,293.00	2,640.00	\$ 5,016.00			2,640.00	\$ 5,016.00
40	632E4070	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	FT.	\$ 2.10	4,635.00	\$ 9,733.50		\$ 9,733.50	1,975.00	\$ 4,147.50			1,975.00	\$ 4,147.50
41	632E4230	SIGNAL CABLE, 3 CONDUCTOR, NO. 12 AWG	FT.	\$ 2.00	2,970.00	\$ 5,940.00		\$ 5,940.00	1,275.00	\$ 2,550.00			1,275.00	\$ 2,550.00
42	632E6401	SIGNAL SUPPORT FOUNDATION	EA.	\$ 2,070.00	18.00	\$ 37,260.00		\$ 37,260.00	-	\$ -			-	\$ -
43	632E6402	PEDESTAL FOUNDATION	EA.	\$ 430.00	10.00	\$ 4,300.00		\$ 4,300.00	-	\$ -			-	\$ -
44	632E6820	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	FT.	\$ 2.05	325.00	\$ 666.25		\$ 666.25	85.00	\$ 174.25			85.00	\$ 174.25
45	632E6830	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	FT.	\$ 3.95	375.00	\$ 1,481.25		\$ 1,481.25	115.00	\$ 454.25			115.00	\$ 454.25
46	632E7000	POWER SERVICE, AS PER PLAN	EA.	\$ 3,050.00	6.00	\$ 18,300.00		\$ 18,300.00	3.00	\$ 9,150.00			3.00	\$ 9,150.00
47	632E7030	CONDUIT RISER, 1-1/2" DIAMETER	EA.	\$ 335.00	1.00	\$ 335.00		\$ 335.00	-	\$ -			-	\$ -
48														

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
49		SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 6 POLE, WITH MAST ARMS TYPE TC-81.21, DESIGN 12 AND DESIGN 11, AS PER PLAN	EA.	\$ 12,125.00	1.00	\$ 12,125.00	1.00	\$ 12,125.00	-	\$ -			1.00	\$ 12,125.00
50		COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 5, WITH MAST ARMS TYPE TC-81.21, DESIGN 11 AND DESIGN 4, AS PER PLAN	EA.	\$ 10,775.00	2.00	\$ 21,550.00	2.00	\$ 21,550.00	-	\$ -			2.00	\$ 21,550.00
51		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 2 POLE, AS PER PLAN	EA.	\$ 4,150.00	5.00	\$ 20,750.00	4.00	\$ 16,600.00	1.00	\$ 4,150.00			5.00	\$ 20,750.00
52		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3 POLE, AS PER PLAN	EA.	\$ 4,365.00	3.00	\$ 13,095.00	3.00	\$ 13,095.00	-	\$ -			3.00	\$ 13,095.00
53		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11 POLE, AS PER PLAN	EA.	\$ 6,290.00	1.00	\$ 6,290.00		\$ -	1.00	\$ 6,290.00			1.00	\$ 6,290.00
54		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 12 POLE, AS PER PLAN	EA.	\$ 7,190.00	3.00	\$ 21,570.00	2.00	\$ 14,380.00	1.00	\$ 7,190.00			3.00	\$ 21,570.00
55		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13 POLE, AS PER PLAN	EA.	\$ 8,655.00	4.00	\$ 34,620.00	4.00	\$ 34,620.00	-	\$ -			4.00	\$ 34,620.00
56		PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN	EA.	\$ 445.00	9.00	\$ 4,005.00		\$ -	6.00	\$ 2,670.00			6.00	\$ 2,670.00
57		PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN	EA.	\$ 485.00	1.00	\$ 485.00		\$ -	-	\$ -			-	\$ -
58		REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	EA.	\$ 4,980.00	6.00	\$ 29,880.00		\$ -	1.00	\$ 4,980.00			1.00	\$ 4,980.00
59		CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN	EA.	\$ 17,325.00	6.00	\$ 103,950.00		\$ -	3.00	\$ 51,975.00			3.00	\$ 51,975.00
60		CONTROLLER, MASTER, TRAFFIC RESPONSIVE, AS PER PLAN	EA.	\$ 11,340.00	1.00	\$ 11,340.00		\$ -	-	\$ -			-	\$ -
61		CABINET RISER, AS PER PLAN	EA.	\$ 875.00	1.00	\$ 875.00		\$ -	1.00	\$ 875.00			1.00	\$ 875.00
62		CABINET FOUNDATION, AS PER PLAN	EA.	\$ 1,610.00	5.00	\$ 8,050.00	5.00	\$ 8,050.00	-	\$ -			5.00	\$ 8,050.00
63		CONTROLLER WORK PAD, AS PER PLAN	EA.	\$ 230.00	5.00	\$ 1,150.00		\$ -	5.00	\$ 1,150.00			5.00	\$ 1,150.00
64		TELEPHONE SERVICE, AS PER PLAN	EA.	\$ 2,500.00	1.00	\$ 2,500.00		\$ -	1.00	\$ 2,500.00			1.00	\$ 2,500.00
65		UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	EA.	\$ 2,890.00	6.00	\$ 17,340.00		\$ -	3.00	\$ 8,670.00			3.00	\$ 8,670.00
66		CONTROLLER ITEM MISC.: PREEMPTION INTERSECTION	EA.	\$ 7,035.00	6.00	\$ 42,210.00		\$ -	-	\$ -			-	\$ -
67		CONTROLLER ITEM MISC.: MODIFY EXISTING CONTROLLER FOUNDATION AND WORK PAD	EA.	\$ 975.00	1.00	\$ 975.00	1.00	\$ 975.00	-	\$ -			1.00	\$ 975.00
68		CONTROLLER ITEM MISC.: REUSE OF VIDEO DETECTION SYSTEM	LUMP	\$ 14,680.00	1.00	\$ 14,680.00		\$ -	-	\$ -			-	\$ -
69		CONTROLLER ITEM MISC.: PREEMPTION, VEHICLES	LUMP	\$ 600.00	1.00	\$ 600.00		\$ -	-	\$ -			-	\$ -
70		CONTROLLER ITEM MISC.: PREEMPTION, SOFTWARE AND TRAINING	LUMP	\$ 500.00	1.00	\$ 500.00		\$ -	-	\$ -			-	\$ -

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
71	650E6501	SPECIAL - WORK INVOLVING PETROLEUM-CONTAMINATED SOIL	TON	\$ 185.00	50.00	\$ 8,250.00	-	\$ -	8.67	\$ 1,430.55	-	-	8.67	\$ 1,430.55
72	650E6502	SPECIAL - WORK INVOLVING REGULATED WATER	GAL.	\$ 0.35	10,000.00	\$ 3,500.00	-	\$ -	-	\$ -	-	-	-	\$ -
73	650E6502	SPECIAL - WORK INVOLVING NON-REGULATED WATER	GAL.	\$ 0.27	20,000.00	\$ 5,400.00	-	\$ -	-	\$ -	-	-	-	\$ -
74	815E3000	SPREAD SPECTRUM RADIO INTERCONNECT, AS PER PLAN	EA.	\$ 2,375.00	7.00	\$ 16,625.00	-	\$ -	3.00	\$ 7,125.00	-	-	3.00	\$ 7,125.00
75	816E3000	VIDEO DETECTION SYSTEM, AS PER PLAN	EA.	\$ 18,275.00	5.00	\$ 91,375.00	-	\$ -	3.00	\$ 54,825.00	-	-	3.00	\$ 54,825.00

TRAFFIC SIGNALS SUBTOTAL PAGE 4

\$ 125,150.00 \$ - \$ 63,380.55 \$ - \$ 63,380.55

TRAFFIC SIGNALS TOTAL

\$ 907,804.75 \$ 315,458.60 \$ 243,548.05 \$ - \$ 559,007.65

ROADWAY/CURB RAMPS														
76	202E30	TRAFFIC ISLAND REMOVED, AS PER PLAN	SQ YD	\$ 57.00	78.00	\$ 4,446.00	-	\$ -	-	\$ -	-	-	-	\$ -
77	448E91	ASPHALT CONCRETE MISC.: ASPHALT PAVEMENT TEXTURING	SQ YD	\$ 85.85	1,035.00	\$ 88,854.75	-	\$ -	-	\$ -	-	-	-	\$ -
78	608E12	5" CONCRETE WALK, AS PER PLAN	SQ FT	\$ 11.50	325.00	\$ 3,737.50	-	\$ -	-	\$ -	-	-	-	\$ -
79	608E13	7" CONCRETE WALK, AS PER PLAN	SQ FT	\$ 12.00	2,130.00	\$ 25,560.00	-	\$ -	1,176.00	\$ 14,112.00	-	-	1,176.00	\$ 14,112.00
80	608E52	CURB RAMP, TYPE A1, AS PER PLAN	EA	\$ 325.00	15.00	\$ 4,875.00	-	\$ -	7.00	\$ 2,275.00	-	-	7.00	\$ 2,275.00
81	608E52	CURB RAMP, TYPE B1	EA	\$ 325.00	1.00	\$ 325.00	-	\$ -	-	\$ -	-	-	-	\$ -
82	608E52	CURB RAMP, TYPE B2, AS PER PLAN	EA	\$ 325.00	7.00	\$ 2,275.00	-	\$ -	3.00	\$ 975.00	-	-	3.00	\$ 975.00
83	608E52	CURB RAMP, TYPE D, AS PER PLAN	EA	\$ 325.00	7.00	\$ 2,275.00	-	\$ -	3.00	\$ 975.00	-	-	3.00	\$ 975.00
84	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVEMENT	SQ FT	\$ 15.00	70.00	\$ 1,050.00	-	\$ -	-	\$ -	-	-	-	\$ -
85	608E98	WALKWAY, MISC.: REMOVE AND REPLACE BRICK PAVEMENT	SQ FT	\$ 11.00	4,465.00	\$ 49,115.00	-	\$ -	-	\$ -	-	-	-	\$ -
86	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVEMENT - MATERIAL ONLY	SQ FT	\$ 2.25	500.00	\$ 1,125.00	-	\$ -	-	\$ -	-	-	-	\$ -
87	609E12	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	FT	\$ 41.00	540.00	\$ 22,140.00	325.00	\$ 13,325.00	201.00	\$ 8,241.00	-	-	526.00	\$ 21,566.00
88	609E26	CURB, TYPE 6, AS PER PLAN	FT	\$ 27.00	370.00	\$ 9,990.00	365.00	\$ 9,855.00	106.00	\$ 2,862.00	-	-	471.00	\$ 12,717.00
89	630E06	GROUND MOUNTED SUPPORT, S4X7.7 BEAM	FT	\$ 15.00	28.00	\$ 420.00	-	\$ -	-	\$ -	-	-	-	\$ -
90	630E09	BREAKAWAY BEAM CONNECTION	EA	\$ 225.00	4.00	\$ 900.00	-	\$ -	-	\$ -	-	-	-	\$ -
91	630E84	GROUND MOUNTED BEAM SUPPORT FOUNDATION	EA	\$ 350.00	4.00	\$ 1,400.00	-	\$ -	-	\$ -	-	-	-	\$ -
92	632E10	RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, CIRCULAR YELLOW, AS PER PLAN	EA	\$ 145.00	2.00	\$ 290.00	-	\$ -	-	\$ -	-	-	-	\$ -
93	642E30	REMOVAL OF PAVEMENT MARKING	FT	\$ 2.00	2,915.00	\$ 5,830.00	-	\$ -	-	\$ -	-	-	-	\$ -
94	642E30	REMOVAL OF PAVEMENT MARKING	SQ FT	\$ 2.60	40.00	\$ 104.00	-	\$ -	-	\$ -	-	-	-	\$ -

ROADWAY/CURB RAMPS SUBTOTAL PAGE 4

\$ 224,712.25 \$ 23,180.00 \$ 29,440.00 \$ - \$ 52,620.00

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
95	642E30 020	REMOVAL OF PAVEMENT MARKING	EA	\$ 62.00	2.00	\$ 124.00		\$ -		\$ -		\$ -		\$ -
96	644E00 300	CENTER LINE	MILE	\$ 3,750.00	0.01	\$ 37.50		\$ -		\$ -		\$ -		\$ -
97	644E00 400	CHANNELIZING LINE	FT	\$ 1.15	80.00	\$ 92.00		\$ -		\$ -		\$ -		\$ -
98	644E00 500	STOP LINE	FT	\$ 4.65	295.00	\$ 1,371.75		\$ -		\$ -		\$ -		\$ -
99	644E00 600	CROSSWALK LINE	FT	\$ 2.40	2,378.00	\$ 5,707.20		\$ -		\$ -		\$ -		\$ -
100	644E00 700	TRANSVERSE/DIAGONAL LINE	FT	\$ 4.50	65.00	\$ 292.50		\$ -		\$ -		\$ -		\$ -
101	644E01 300	LANE ARROW	EA	\$ 90.00	1.00	\$ 90.00		\$ -		\$ -		\$ -		\$ -
102	644E01 410	WORD ON PAVEMENT, 96"	EA	\$ 110.00	1.00	\$ 110.00		\$ -		\$ -		\$ -		\$ -
103	832E30 000	EROSION CONTROL	EA	\$ 0.01	33,500.00	\$ 335.00		\$ -		\$ -		\$ -		\$ -

ROADWAY/CURB RAMPS SUBTOTAL PAGE 5

					\$ 8,159.95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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ROADWAY/CURB RAMPS TOTAL

					\$ 232,872.20	\$ 23,180.00	\$ 29,440.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52,620.00	\$ -
ALTERNATE BID 1														
104	633E99 000	CONTROLLER ITEM MISC.: PREEMPTION INTERSECTION (SONEM2000) - ALTERNATE BID 1	EA	\$ 8,410.00	6.00	\$ 50,460.00		\$ -	3.00	\$ 25,230.00			3.00	\$ 25,230.00
108	633E99 300	CONTROLLER ITEM MISC.: PREEMPTION, VEHICLES (SONEM2000) - ALTERNATE BID 1	LUMP	\$ 2,000.00	1.00	\$ 2,000.00		\$ -		\$ -				\$ -
108	633E99 300	PREEMPTION, SOFTWARE AND TRAINING (SONEM2000) - ALTERNATE BID 1	LUMP	\$ 2,500.00	1.00	\$ 2,500.00		\$ -		\$ -				\$ -
ALTERNATE BID 1 TOTAL					\$ 54,960.00	\$ -	\$ 25,230.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,230.00	\$ -

CHANGE ORDERS

C01	E-1	CHANGE STYLE OF TRUNCATED DOME IN HANDICAP RAMP	LUMP	\$ 1,594.00	1.00	\$ 1,594.00		\$ -	1.00	\$ 1,594.00			1.00	\$ 1,594.00
C02	E-2	REDESIGN FOUNDATION FOR TRAFFIC POLE SP6 AT KENWOOD & COOPER	LUMP	\$ 7,619.00	1.00	\$ 7,619.00		\$ -	1.00	\$ 7,619.00			1.00	\$ 7,619.00
C03	E-3	REPAIR SIGNAL WIRES @ HUNT AND COOPER ROADS	LUMP	\$ 2,033.10	1.00	\$ 2,033.10		\$ -	1.00	\$ 2,033.10			1.00	\$ 2,033.10

CHANGE ORDERS SUBTOTAL

					\$ 11,246.10	\$ -	\$ 11,246.10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,246.10	\$ -
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TRAFFIC SIGNALS, ROADWAY/CURB RAMPS,
ALTERNATE BID 1 AND CHANGE ORDERS TOTALS

					\$ 1,206,893.05	\$ 339,638.60	\$ 309,465.15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 648,103.75	\$ -
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ELEX, INC.

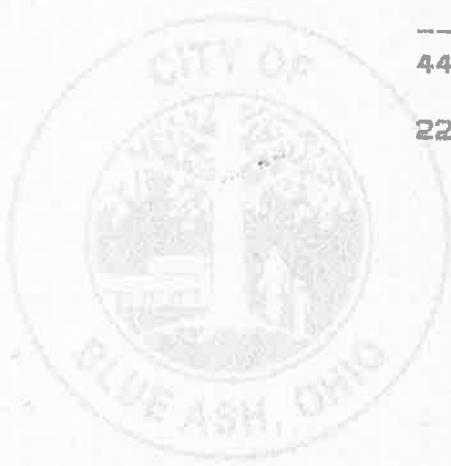
Vend# 04261

114965

114965
07-08-11

P. O. # Description
RG100207
INV. #1766-50111
RG100207

-----Account----- Amount
442.890.525300 \$253,159.53
223.882.525300 \$73,567.22



Totals

\$326,726.75

THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND A COPY VOID SCREEN. THE PAPER CONTAINS AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW.



The City Of Blue Ash, Ohio

4343 Cooper Road • Blue Ash, Ohio 45242-5699
(513) 745-8500

114965

FIFTH THIRD BANK
CINCINNATI, OHIO
13-31/420

VOID AFTER 90 DAYS

THREE HUNDRED TWENTY SIX THOUSAND SEVEN HUNDRED TWENTY SIX
and 75/100 DOLLARS

PAY
TO THE
ORDER OF

ELEX, INC.
11000 WINTON ROAD
GREENHILLS, OH 45218

DATE	CHECK NO.	AMOUNT
07-08-11	114965	\$326,726.75

City Mgr.

NON-NEGOTIABLE

Treas.

⑈114965⑈ ⑆042000314⑆ 0089918570⑈

10903-5

PARTIAL PAYMENT AUTHORIZATION

PURCHASE ORDER NUMBER: 100207

FOR THE MONTH OF: JUNE

ORDINANCE NO.(if applicable): 2010-27

VENDOR NAME: ELEX, INC.

DESCRIPTION: DOWNTOWN TRAFFIC SIGNAL PROJECT FOR JUNE 2011

PARTIAL OR FINAL PAYMENT PARTIAL

Note: If this is a FINAL payment, signed green copy of the P.O. must be attached

A payment of \$326,726.75 is hereby authorized on the above referenced purchase order.

Account Numbers to Charge: List Account Numbers as Shown on P.O.	Amount
<u>442.890.525300</u>	<u>\$ 253,159.53</u>
<u>223.882.525300</u>	<u>\$ 73,567.22</u>
<u> </u>	<u>\$</u>
<u> </u>	<u>\$</u>
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<u> </u>	<u>\$</u>
<u> </u>	<u>\$</u>

Dept. Approval by:  Date: 7/6/2011

Finance Approval by:  Date: 7-7-11

Notes to Finance: (Examples- add account number to P.O., increase/decrease P.O. amount, address change)

Finance Use Only:



The Marquardt House
11000 Winton Road
Cincinnati, Ohio 45218

513-851 ELEX
(3539)

INVOICE INVOICE INVOICE INVOICE INVOICE INVOICE INVOICE

June 1, 2011

CITY OF BLUE ASH
4343 Cooper Road
Blue Ash, OH 45242-5699

RE : Our Invoice No.: **1766-50111**

PROJECT: DOWNTOWN BLUE ASH TRAFFIC SIGNALS
CITY OF BLUE ASH PID No. 81779

ORIGINAL CONTRACT AMOUNT	\$	1,195,636.95
Net Changes to Date	\$	11,246.10
CONTRACT SUM TO DATE	\$	1,206,883.05
TOTAL COMPLETED TO DATE	\$	974,830.50
Less Retainer	\$	47,825.48
TOTAL EARNED LESS RETAINER	\$	927,005.02
Less Previous Payments	\$	600,278.27
CURRENT PAYMENT DUE	\$	326,726.75

PLEASE REMIT TO: ELEX, INC.
11000 Winton Road
Cincinnati, Ohio 45218

THANK YOU!

RECEIVED
JUN 09 2011
PUBLICWORKS
DIRECTOR'S OFFICE

ELEX, INC.
11000 Winton Road
Cincinnati, Ohio 45218

CITY OF BLUE ASH
4343 Cooper Road
Blue Ash, OH 45242-5699

Project: DOWNTOWN BLUE ASH TRAFFIC SIGNALS
CITY OF BLUE ASH PID No. 81779

P# (513) 745-85000
F# (513) 745-8594

Pay Estimate Date: June 1, 2011
Pay Estimate No.: 5
Our Invoice No.: 1766-50111

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
				QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
1	202E9810	REMOVAL MISC.: REMOVAL OF EXISTING SHRUB	EA.	2.00	\$ 110.00	2.00	\$ 110.00	-	\$ -	-	\$ -	2.00	\$ 110.00
2	614E1000	MAINTAINING TRAFFIC, AS PER PLAN	LUMP	1.00	\$ 26,100.00	0.700	\$ 18,650.00	0.15	\$ 3,915.00	-	\$ -	0.85	\$ 22,565.00
3	623E1000	CONSTRUCTION LAYOUT STAKES	LUMP	1.00	\$ 5,500.00	0.82	\$ 4,500.00	0.18	\$ 1,000.00	-	\$ -	1.00	\$ 5,500.00
4	625E0060	CONNECTOR KIT, TYPE II	EA.	22.00	\$ 1,012.00	9.000	\$ 414.00	10.00	\$ 460.00	-	\$ -	19.00	\$ 874.00
5	625E0060	CONNECTOR KIT, TYPE III	EA.	21.00	\$ 945.00	9.00	\$ 405.00	10.00	\$ 450.00	-	\$ -	19.00	\$ 855.00
6	625E0150	CABLE SPLICING KIT, AS PER PLAN	EA.	8.00	\$ 352.00	12.000	\$ 528.00	3.00	\$ 132.00	-	\$ -	15.00	\$ 660.00
7	625E1820	BRACKET ARM, 15', AS PER PLAN	EA.	2.00	\$ 1,300.00	2.00	\$ 1,300.00	-	\$ -	-	\$ -	2.00	\$ 1,300.00
8	625E1840	BRACKET ARM, 20', AS PER PLAN	EA.	1.00	\$ 705.00	1.000	\$ 705.00	-	\$ -	-	\$ -	1.00	\$ 705.00
9	625E1850	BRACKET ARM, 25', AS PER PLAN	EA.	4.00	\$ 3,880.00	4.00	\$ 3,880.00	-	\$ -	-	\$ -	4.00	\$ 3,880.00
10	625E1851	BRACKET ARM, 30', AS PER PLAN	EA.	11.00	\$ 11,990.00	11.000	\$ 11,990.00	-	\$ -	-	\$ -	11.00	\$ 11,990.00
11	625E2330	NO. 8 AWG, 600 VOLT DISTRIBUTION CABLE	FT.	4,675.00	\$ 4,441.25	2,280.00	\$ 2,166.00	2,395.00	\$ 2,275.25	-	\$ -	4,675.00	\$ 4,441.25
12	625E2340	NO. 10 AWG POLE AND BRACKET CABLE	FT.	2,590.00	\$ 1,813.00	1,270.00	\$ 889.00	1,320.00	\$ 924.00	-	\$ -	2,590.00	\$ 1,813.00
13	625E2530	CONDUIT, 1-1/2", 725.04	FT.	400.00	\$ 2,300.00	524.00	\$ 3,013.00	-	\$ -	-	\$ -	524.00	\$ 3,013.00
14	625E2540	CONDUIT, 2", 725.05	FT.	130.00	\$ 299.00	156.000	\$ 358.80	-	\$ -	-	\$ -	156.00	\$ 358.80
15	625E2550	CONDUIT, 3", 725.05	FT.	235.00	\$ 705.00	557.00	\$ 1,671.00	-	\$ -	-	\$ -	557.00	\$ 1,671.00
16	625E2560	CONDUIT, 4", 725.04	FT.	1,310.00	\$ 23,580.00	1,341.000	\$ 24,138.00	-	\$ -	-	\$ -	1,341.00	\$ 24,138.00
17	625E2590	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 4", 725.04	FT.	245.00	\$ 10,094.00	254.00	\$ 10,464.80	-	\$ -	-	\$ -	254.00	\$ 10,464.80
18	625E2593	CONDUIT, MISC.: INTERCEPT EXISTING CONDUIT	EA.	1.00	\$ 715.00	3.00	\$ 2,145.00	2.00	\$ 1,430.00	-	\$ -	5.00	\$ 3,575.00
19	625E2625	LUMINAIRE, CONVENTIONAL, AS PER PLAN	EA.	18.00	\$ 22,950.00	9.00	\$ 11,475.00	9.00	\$ 11,475.00	-	\$ -	18.00	\$ 22,950.00
20	625E2900	TRENCH	FT.	655.00	\$ 5,895.00	927.00	\$ 8,343.00	-	\$ -	-	\$ -	927.00	\$ 8,343.00

TRAFFIC SIGNALS SUBTOTAL PAGE 1

\$ 124,686.25 \$ 107,145.60 \$ 22,061.25 \$ - \$ 129,206.85

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
21	632E3950 0	TRENCH, IN PAVED AREA, TYPE A	FT.	\$ 48.00	20.00	\$ 960.00	20.00	\$ 960.00	-	\$ -			20.00	\$ 960.00
22	632E3960 0	TRENCH, IN PAVED AREA, TYPE B	FT.	\$ 50.00	1,140.00	\$ 57,000.00	1,047.00	\$ 52,350.00	-	\$ -			1,047.00	\$ 52,350.00
23	632E3070 0	PULLBOX, 725.08, 18"	EA.	\$ 765.00	23.00	\$ 17,595.00	23.00	\$ 17,595.00	1.00	\$ 765.00			24.00	\$ 18,360.00
24	632E3070 1	PULLBOX, 725.08, 18", AS PER PLAN	EA.	\$ 765.00	1.00	\$ 765.00	1.00	\$ 765.00	-	\$ -			1.00	\$ 765.00
25	632E3200 6	PULLBOX, 725.08, 24"	EA.	\$ 875.00	6.00	\$ 5,250.00	6.00	\$ 5,250.00	-	\$ -			6.00	\$ 5,250.00
26	630E7810 0	GROUND ROD	EA.	\$ 160.00	37.00	\$ 5,920.00	37.00	\$ 5,920.00	-	\$ -			37.00	\$ 5,920.00
27	630E7810 1	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	EA.	\$ 240.00	38.00	\$ 9,120.00	16.00	\$ 3,840.00	22.00	\$ 5,280.00			38.00	\$ 9,120.00
28	630E7950 1	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	EA.	\$ 25.00	2.00	\$ 50.00	-	\$ -	2.00	\$ 50.00			2.00	\$ 50.00
29	630E8010 0	SIGN, FLAT SHEET, AS PER PLAN	SQ FT	\$ 16.50	182.00	\$ 3,003.00	48.00	\$ 792.00	71.00	\$ 1,171.50			119.00	\$ 1,963.50
30	630E8050 1	SIGN, DOUBLE FACED, STREET NAME, AS PER PLAN	EA.	\$ 145.00	22.00	\$ 3,190.00	-	\$ -	22.00	\$ 3,190.00			22.00	\$ 3,190.00
31	630E8300 0	COVERING OF SIGN	SQ FT	\$ 3.50	119.00	\$ 416.50	48.00	\$ 168.00	71.00	\$ 248.50			119.00	\$ 416.50
32	631E8800 0	PHOTOELECTRIC CONTROL	EA.	\$ 90.00	6.00	\$ 540.00	3.00	\$ 270.00	3.00	\$ 270.00			6.00	\$ 540.00
33	632E0500 1	VEHICULAR SIGNAL HEAD, (LED), 3 SECTION, 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 645.00	34.00	\$ 21,930.00	16.00	\$ 10,320.00	18.00	\$ 11,610.00			34.00	\$ 21,930.00
34	632E0600 1	VEHICULAR SIGNAL HEAD, (LED), 3 SECTION, 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 970.00	13.00	\$ 12,610.00	6.00	\$ 5,820.00	7.00	\$ 6,790.00			13.00	\$ 12,610.00
35	632E2073 1	PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN	EA.	\$ 530.00	40.00	\$ 21,200.00	16.00	\$ 8,480.00	24.00	\$ 12,720.00			40.00	\$ 21,200.00
36	632E2500 0	COVERING OF VEHICULAR SIGNAL HEAD	EA.	\$ 20.00	47.00	\$ 940.00	21.00	\$ 420.00	26.00	\$ 520.00			47.00	\$ 940.00
37	632E2501 0	COVERING OF PEDESTRIAN SIGNAL HEAD	EA.	\$ 20.00	40.00	\$ 800.00	16.00	\$ 320.00	24.00	\$ 480.00			40.00	\$ 800.00
38	632E2600 1	PEDESTRIAN PUSHBUTTON, AS PER PLAN	EA.	\$ 880.00	40.00	\$ 34,400.00	-	\$ -	-	\$ -			-	\$ -
39	632E4030 0	SIGNAL CABLE, 3 CONDUCTOR, NO.14 AWG	FT.	\$ 1.70	800.00	\$ 1,360.00	185.00	\$ 314.50	615.00	\$ 1,045.50			800.00	\$ 1,360.00
40	632E4050 0	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	FT.	\$ 1.90	6,470.00	\$ 12,293.00	2,640.00	\$ 5,016.00	3,830.00	\$ 7,277.00			6,470.00	\$ 12,293.00
41	632E4070 0	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	FT.	\$ 2.10	4,635.00	\$ 9,733.50	1,975.00	\$ 4,147.50	2,660.00	\$ 5,586.00			4,635.00	\$ 9,733.50
42	632E4230 0	SIGNAL CABLE, 3 CONDUCTOR, NO. 12 AWG	FT.	\$ 2.00	2,970.00	\$ 5,940.00	1,275.00	\$ 2,550.00	1,695.00	\$ 3,390.00			2,970.00	\$ 5,940.00
43	632E6401 0	SIGNAL SUPPORT FOUNDATION	EA.	\$ 2,070.00	19.00	\$ 39,330.00	18.00	\$ 37,260.00	-	\$ -			18.00	\$ 37,260.00
44	632E6402 0	PEDESTAL FOUNDATION	EA.	\$ 430.00	10.00	\$ 4,300.00	10.00	\$ 4,300.00	-	\$ -			10.00	\$ 4,300.00
45	632E6620 0	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	FT.	\$ 2.05	325.00	\$ 666.25	85.00	\$ 174.25	240.00	\$ 492.00			325.00	\$ 666.25
46	632E6630 0	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	FT.	\$ 3.95	375.00	\$ 1,481.25	115.00	\$ 454.25	260.00	\$ 1,027.00			375.00	\$ 1,481.25
47	632E7000 1	POWER SERVICE, AS PER PLAN	EA.	\$ 3,050.00	6.00	\$ 18,300.00	3.00	\$ 9,150.00	3.00	\$ 9,150.00			6.00	\$ 18,300.00
48	632E7030 0	CONDUIT RISER, 1-1/2" DIAMETER	EA.	\$ 335.00	1.00	\$ 335.00	-	\$ -	1.00	\$ 335.00			1.00	\$ 335.00

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
49		SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 6 POLE, WITH MAST ARMS TYPE TC-81.21, DESIGN 12 AND DESIGN 11, AS PER PLAN	EA.	\$ 12,125.00	1.00	\$ 12,125.00		\$ -		\$ -			1.00	\$ 12,125.00
50		COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 5, WITH MAST ARMS TYPE TC-81.21, DESIGN 11 AND DESIGN 4, AS PER PLAN	EA.	\$ 10,775.00	2.00	\$ 21,550.00		\$ -		\$ -			2.00	\$ 21,550.00
51		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 2 POLE, AS PER PLAN	EA.	\$ 4,150.00	5.00	\$ 20,750.00		\$ -		\$ -			5.00	\$ 20,750.00
52		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3 POLE, AS PER PLAN	EA.	\$ 4,365.00	3.00	\$ 13,095.00		\$ -		\$ -			3.00	\$ 13,095.00
53		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11 POLE, AS PER PLAN	EA.	\$ 6,290.00	1.00	\$ 6,290.00		\$ -		\$ -			1.00	\$ 6,290.00
54		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 12 POLE, AS PER PLAN	EA.	\$ 7,190.00	3.00	\$ 21,570.00		\$ -		\$ -			3.00	\$ 21,570.00
55		COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13 POLE, AS PER PLAN	EA.	\$ 8,655.00	4.00	\$ 34,620.00		\$ -		\$ -			4.00	\$ 34,620.00
56		PEDESTAL, 8', TRANSFORMER BASE, AS PER PLAN	EA.	\$ 445.00	9.00	\$ 4,005.00	6.00	\$ 2,670.00	3.00	\$ 1,335.00			9.00	\$ 4,005.00
57		PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN	EA.	\$ 485.00	1.00	\$ 485.00		\$ -	1.00	\$ 485.00			1.00	\$ 485.00
58		REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	EA.	\$ 4,980.00	6.00	\$ 29,880.00	1.00	\$ 4,980.00	5.00	\$ 24,900.00			6.00	\$ 29,880.00
59		CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN	EA.	\$ 17,325.00	6.00	\$ 103,950.00	3.00	\$ 51,975.00	3.00	\$ 51,975.00			6.00	\$ 103,950.00
60		CONTROLLER, MASTER, TRAFFIC RESPONSIVE, AS PER PLAN	EA.	\$ 11,340.00	1.00	\$ 11,340.00		\$ -	1.00	\$ 11,340.00			1.00	\$ 11,340.00
61		CABINET RISER, AS PER PLAN	EA.	\$ 875.00	1.00	\$ 875.00	1.00	\$ 875.00		\$ -			1.00	\$ 875.00
62		CABINET FOUNDATION, AS PER PLAN	EA.	\$ 1,610.00	5.00	\$ 8,050.00	5.00	\$ 8,050.00		\$ -			5.00	\$ 8,050.00
63		CONTROLLER WORK PAD, AS PER PLAN	EA.	\$ 290.00	5.00	\$ 1,150.00	5.00	\$ 1,150.00		\$ -			5.00	\$ 1,150.00
64		TELEPHONE SERVICE, AS PER PLAN	EA.	\$ 2,500.00	1.00	\$ 2,500.00	1.00	\$ 2,500.00		\$ -			1.00	\$ 2,500.00
65		UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	EA.	\$ 2,890.00	6.00	\$ 17,340.00	3.00	\$ 8,670.00	3.00	\$ 8,670.00			6.00	\$ 17,340.00
66		CONTROLLER ITEM MISC.: PREEMPTION INTERSECTION	EA.	\$ 7,035.00	6.00	\$ 42,210.00		\$ -		\$ -				\$ -
67		CONTROLLER ITEM MISC.: MODIFY EXISTING CONTROLLER FOUNDATION AND WORK PAD	EA.	\$ 975.00	1.00	\$ 975.00	1.00	\$ 975.00		\$ -			1.00	\$ 975.00
68		CONTROLLER ITEM MISC.: REUSE OF VIDEO DETECTION SYSTEM	LUMP	\$ 14,680.00	1.00	\$ 14,680.00		\$ -	1.00	\$ 14,680.00			1.00	\$ 14,680.00
69		CONTROLLER ITEM MISC.: PREEMPTION, VEHICLES	LUMP	\$ 600.00	1.00	\$ 600.00		\$ -		\$ -				\$ -
70		CONTROLLER ITEM MISC.: PREEMPTION, SOFTWARE AND TRAINING	LUMP	\$ 500.00	1.00	\$ 500.00		\$ -		\$ -				\$ -

TRAFFIC SIGNALS SUBTOTAL PAGE 3

\$ 368,540.00 \$ 211,845.00 \$ 113,385.00 \$ - \$ 325,230.00

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
71	690E6501	SPECIAL - WORK INVOLVING PETROLEUM-CONTAMINATED SOIL	TON	\$ 165.00	50.00	\$ 8,250.00	8.67	\$ 1,430.55	-	\$ -	-	\$ -	8.67	\$ 1,430.55
72	690E6502	SPECIAL - WORK INVOLVING REGULATED WATER	GAL.	\$ 0.35	10,000.00	\$ 3,500.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
73	690E6502	SPECIAL - WORK INVOLVING NON-REGULATED WATER	GAL.	\$ 0.27	20,000.00	\$ 5,400.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
74	815E3000	SPREAD SPECTRUM RADIO INTERCONNECT, AS PER PLAN	EA.	\$ 2,375.00	3.00	\$ 7,125.00	3.00	\$ 7,125.00	3.00	\$ 7,125.00	-	\$ -	6.00	\$ 14,250.00
75	816E3000	VIDEO DETECTION SYSTEM, AS PER PLAN	EA.	\$ 18,275.00	3.00	\$ 54,825.00	3.00	\$ 54,825.00	2.00	\$ 36,550.00	-	\$ -	5.00	\$ 91,375.00

TRAFFIC SIGNALS SUBTOTAL PAGE 4 \$ 125,150.00 \$ 63,380.55 \$ 43,675.00 \$ - \$ 107,055.55

TRAFFIC SIGNALS TOTAL																
ROADWAY/CURB RAMPS						\$	907,804.75	\$	559,007.85	\$	250,518.75	\$	-	\$	809,526.40	
76	202E30	TRAFFIC ISLAND REMOVED, AS PER PLAN	SQ YD	\$	57.00	78.00	\$	4,446.00		\$	-			\$	-	
77	448E91	ASPHALT CONCRETE MISC.: ASPHALT PAVEMENT TEXTURING	SQ YD	\$	85.85	1,035.00	\$	88,854.75		\$	-			\$	-	
78	608E12	5" CONCRETE WALK, AS PER PLAN	SQ FT	\$	11.50	325.00	\$	3,737.50		\$	-			\$	-	
79	608E13	7" CONCRETE WALK, AS PER PLAN	SQ FT	\$	12.00	2,130.00	\$	25,560.00	1,176.00	\$	4,536.00			1,554.00	\$	18,648.00
80	608E52	CURB RAMP, TYPE A1, AS PER PLAN	EA	\$	325.00	15.00	\$	4,875.00	7.00	\$	1,950.00			13.00	\$	4,225.00
81	608E52	CURB RAMP, TYPE B1	EA	\$	325.00	1.00	\$	325.00		\$	-			-	\$	-
82	608E52	CURB RAMP, TYPE B2, AS PER PLAN	EA	\$	325.00	7.00	\$	2,275.00	3.00	\$	325.00			4.00	\$	1,300.00
83	608E52	CURB RAMP, TYPE D, AS PER PLAN	EA	\$	325.00	7.00	\$	2,275.00	3.00	\$	-			3.00	\$	975.00
84	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVEMENT	SQ FT	\$	15.00	70.00	\$	1,050.00		\$	-			-	\$	-
85	608E98	WALKWAY, MISC.: REMOVE AND REPLACE BRICK PAVEMENT	SQ FT	\$	11.00	4,465.00	\$	49,115.00		\$	44,022.00			4,002.00	\$	44,022.00
86	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVERS - MATERIAL ONLY	SQ FT	\$	2.25	500.00	\$	1,125.00		\$	-			-	\$	-
87	609E12	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	FT	\$	41.00	540.00	\$	22,140.00	526.00	\$	-			526.00	\$	21,566.00
88	609E26	CURB, TYPE 6, AS PER PLAN	FT	\$	27.00	370.00	\$	9,990.00	471.00	\$	12,717.00			471.00	\$	12,717.00
89	630E06	GROUND MOUNTED SUPPORT, 54X7.7 BEAM	FT	\$	15.00	28.00	\$	420.00		\$	-			-	\$	-
90	630E09	BREAKAWAY BEAM CONNECTION	EA	\$	225.00	4.00	\$	900.00		\$	-			-	\$	-
91	630E84	GROUND MOUNTED BEAM SUPPORT FOUNDATION	EA	\$	350.00	4.00	\$	1,400.00		\$	-			-	\$	-
92	632E10	RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, CIRCULAR YELLOW, AS PER PLAN	EA	\$	145.00	2.00	\$	290.00		\$	145.00			1.00	\$	145.00
93	642E30	REMOVAL OF PAVEMENT MARKING	FT	\$	2.00	2,915.00	\$	5,830.00		\$	-			-	\$	-
94	642E30	REMOVAL OF PAVEMENT MARKING	SQ FT	\$	2.60	40.00	\$	104.00		\$	-			-	\$	-

ROADWAY/CURB RAMPS SUBTOTAL PAGE 4 \$ 224,712.25 \$ 52,620.00 \$ 50,978.00 \$ - \$ 103,598.00

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
95	642E30 020	REMOVAL OF PAVEMENT MARKING	EA	\$ 62.00	2.00	\$ 124.00		\$ -		\$ -		\$ -		\$ -
96	644E00 300	CENTER LINE	MILE	\$ 3,750.00	0.01	\$ 37.50		\$ -		\$ -		\$ -		\$ -
97	644E00 400	CHANNELIZING LINE	FT	\$ 1.15	80.00	\$ 92.00		\$ -		\$ -		\$ -		\$ -
98	644E00 500	STOP LINE	FT	\$ 4.65	295.00	\$ 1,371.75		\$ -		\$ -		\$ -		\$ -
99	644E00 600	CROSSWALK LINE	FT	\$ 2.40	2,378.00	\$ 5,707.20		\$ -		\$ -		\$ -		\$ -
100	644E00 700	TRANSVERSE/DIAGONAL LINE	FT	\$ 4.50	65.00	\$ 292.50		\$ -		\$ -		\$ -		\$ -
101	644E01 300	LANE ARROW	EA	\$ 90.00	1.00	\$ 90.00		\$ -		\$ -		\$ -		\$ -
102	644E01 410	WORD ON PAVEMENT, 96"	EA	\$ 110.00	1.00	\$ 110.00		\$ -		\$ -		\$ -		\$ -
103	832E30 000	EROSION CONTROL	EA	\$ 0.01	33,500.00	\$ 335.00		\$ -		\$ -		\$ -		\$ -

ROADWAY/CURB RAMPS SUBTOTAL PAGE 5 \$ 8,159.95 \$ - \$ - \$ - \$ -

ROADWAY/CURB RAMPS TOTAL														
ALTERNATE BID 1					\$ 232,872.20		\$ 52,620.00		\$ 50,978.00		\$ -		\$ 103,598.00	
104	633E99 000	CONTROLLER ITEM MISC.: PREEMPTION INTERSECTION (SONEM2000) - ALTERNATE BID 1	EA	\$ 8,410.00	6.00	\$ 50,460.00	3.00	\$ 25,230.00	3.00	\$ 25,230.00			6.00	\$ 50,460.00
108	633E99 300	CONTROLLER ITEM MISC.: PREEMPTION, VEHICLES (SONEM2000) - ALTERNATE BID 1	LUMP	\$ 2,000.00	1.00	\$ 2,000.00		\$ -		\$ -				\$ -
108	633E99 300	PREEMPTION, SOFTWARE AND TRAINING (SONEM2000) - ALTERNATE BID 1	LUMP	\$ 2,500.00	1.00	\$ 2,500.00		\$ -		\$ -				\$ -
ALTERNATE BID 1 TOTAL					\$ 54,960.00		\$ 25,230.00		\$ 25,230.00		\$ -		\$ 50,460.00	

CHANGE ORDERS														
CO1	E-1	CHANGE STYLE OF TRUNCATED DONE IN HANDICAP RAMP	LUMP	\$ 1,594.00	1.00	\$ 1,594.00	1.00	\$ 1,594.00		\$ -			1.00	\$ 1,594.00
CO2	E-2	REDESIGN FOUNDATION FOR TRAFFIC POLE SP6 AT KENWOOD & COOPER	LUMP	\$ 7,619.00	1.00	\$ 7,619.00	1.00	\$ 7,619.00		\$ -			1.00	\$ 7,619.00
CO3	E-3	REPAIR SIGNAL WIRES @ HUNT AND COOPER ROADS	LUMP	\$ 2,033.10	1.00	\$ 2,033.10	1.00	\$ 2,033.10		\$ -			1.00	\$ 2,033.10
CHANGE ORDERS SUBTOTAL					\$ 11,246.10		\$ 11,246.10		\$ -		\$ -		\$ 11,246.10	

TRAFFIC SIGNALS, ROADWAY/CURB RAMPS,
ALTERNATE BID 1 AND CHANGE ORDERS TOTALS \$ 1,206,883.05 \$ 326,726.75 \$ - \$ 974,830.50

ELEX, INC.

Vend# 04261

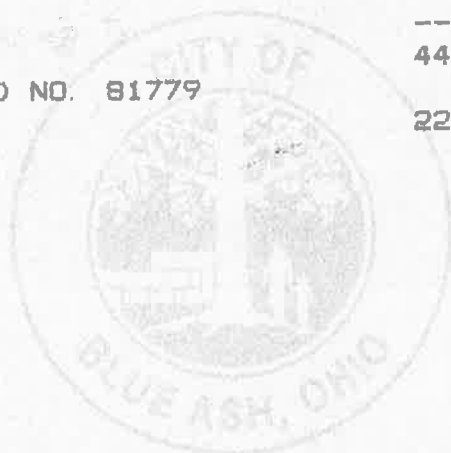
115356

115356
08-19-11

P.O. #	Description	Account	Amount
RG100207	INV. # 1766-70111 PID NO. 81779	442. 890. 525300	\$77,110.12
RG100207		223. 882. 525300	\$22,162.13

Totals

\$99,272.25



THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND A COPY VOID SCREEN. THE PAPER CONTAINS AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW.



The City Of Blue Ash, Ohio

4343 Cooper Road • Blue Ash, Ohio 45242-5699
(513) 745-8500

115356

FIFTH THIRD BANK
CINCINNATI, OHIO
13-31/420

VOID AFTER 90 DAYS

NINETY NINE THOUSAND TWO HUNDRED SEVENTY TWO
and 25/100 DOLLARS

DATE	CHECK NO.	AMOUNT
08-19-11	115356	\$99,272.25

PAY
TO THE
ORDER OF

ELEX, INC.
11000 WINTON ROAD
GREENHILLS, OH 45218

[Signature]
City Mgr.
NON-NEGOTIABLE
[Signature]
Treas.

⑈115356⑈ ⑆042000314⑆ 0089918570⑈

PARTIAL PAYMENT AUTHORIZATION

PURCHASE ORDER NUMBER: 100207

FOR THE MONTH OF: JULY

ORDINANCE NO.(if applicable): 2010-27

10981-1

VENDOR NAME: ELEX, INC.

DESCRIPTION: DOWNTOWN TRAFFIC SIGNAL PROJECT FOR JULY 2011

PARTIAL OR FINAL PAYMENT PARTIAL

Note: If this is a FINAL payment, signed green copy of the P.O. must be attached

A payment of \$99,272.25 is hereby authorized on the above referenced purchase order.

Account Numbers to Charge:
List Account Numbers as Shown on P.O.

Amount

442.890.525300	\$ 77,110.12
223.882.525300	\$ 22,162.13
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$

Dept. Approval by:



Date:

8/18/2011

Finance Approval by:

 8-19-11 JCB

Date:

AUG 19 2011

Notes to Finance: (Examples- add account number to P.O., increase/decrease P.O. amount, address change)

Finance Use Only:

ELEX, INC.
11000 Winton Road
Cincinnati, Ohio 45218

Project: DOWNTOWN BLUE ASH TRAFFIC SIGNALS
CITY OF BLUE ASH PID No. 81779

CITY OF BLUE ASH
343 Cooper Road
Blue Ash, OH 45242-5699

(513) 745-85000
(513) 745-8594

Pay Estimate Date: August 1, 2011
Pay Estimate No.: 7
Our Invoice No.: 1766-70111

ITEM NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
TRAFFIC SIGNALS														
1	202E9810 0	REMOVAL MISC.: REMOVAL OF EXISTING SHRUB	EA.	\$ 55.00	2.00	\$ 110.00	2.00	\$ 110.00	-	\$ -			2.00	\$ 110.00
2	614E1100 1	MAINTAINING TRAFFIC, AS PER PLAN	LUMP	\$ 26,100.00	1.00	\$ 26,100.00	1.000	\$ 26,100.00	-	\$ -			1.00	\$ 26,100.00
3	623E1000 0	CONSTRUCTION LAYOUT STAKES	LUMP	\$ 5,500.00	1.00	\$ 5,500.00	1.00	\$ 5,500.00	-	\$ -			1.00	\$ 5,500.00
4	625E0050 0	CONNECTOR KIT, TYPE II	EA.	\$ 46.00	22.00	\$ 1,012.00	19.000	\$ 874.00	3.00	\$ 138.00			22.00	\$ 1,012.00
5	625E0060 0	CONNECTOR KIT, TYPE III	EA.	\$ 45.00	21.00	\$ 945.00	19.00	\$ 855.00	2.00	\$ 90.00			21.00	\$ 945.00
6	625E0150	CABLE SPLICING KIT, AS PER PLAN	EA.	\$ 44.00	8.00	\$ 352.00	15.000	\$ 660.00	-	\$ -			15.00	\$ 660.00
7	625E1820 1	BRACKET ARM, 15', AS PER PLAN	EA.	\$ 650.00	2.00	\$ 1,300.00	2.00	\$ 1,300.00	-	\$ -			2.00	\$ 1,300.00
8	625E1840 1	BRACKET ARM, 20', AS PER PLAN	EA.	\$ 705.00	1.00	\$ 705.00	1.000	\$ 705.00	-	\$ -			1.00	\$ 705.00
9	625E1850 1	BRACKET ARM, 25', AS PER PLAN	EA.	\$ 970.00	4.00	\$ 3,880.00	4.00	\$ 3,880.00	-	\$ -			4.00	\$ 3,880.00
10	625E1851 1	BRACKET ARM, 30', AS PER PLAN	EA.	\$ 1,090.00	11.00	\$ 11,990.00	11.000	\$ 11,990.00	-	\$ -			11.00	\$ 11,990.00
11	625E2330 4	NO. 8 AWG, 600 VOLT DISTRIBUTION CABLE	FT.	\$ 0.95	4,675.00	\$ 4,441.25	4,675.00	\$ 4,441.25	-	\$ -			4,675.00	\$ 4,441.25
12	625E2340 0	NO.10 AWG POLE AND BRACKET CABLE	FT.	\$ 0.70	2,590.00	\$ 1,813.00	2,590.000	\$ 1,813.00	-	\$ -			2,590.00	\$ 1,813.00
13	625E2530 0	CONDUIT, 1-1/2", 725.04	FT.	\$ 5.75	400.00	\$ 2,300.00	524.00	\$ 3,013.00	-	\$ -			524.00	\$ 3,013.00
14	625E2540 2	CONDUIT, 2", 725.05	FT.	\$ 2.30	130.00	\$ 299.00	156.000	\$ 358.80	-	\$ -			156.00	\$ 358.80
15	625E2550 2	CONDUIT, 3", 725.05	FT.	\$ 3.00	235.00	\$ 705.00	557.00	\$ 1,671.00	-	\$ -			557.00	\$ 1,671.00
16	625E2560 0	CONDUIT, 4", 725.04	FT.	\$ 18.00	1,310.00	\$ 23,580.00	1,341.000	\$ 24,138.00	-	\$ -			1,341.00	\$ 24,138.00
17	625E2590 2	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 4", 725.04	FT.	\$ 41.20	245.00	\$ 10,094.00	254.00	\$ 10,464.80	-	\$ -			254.00	\$ 10,464.80
18	625E2593 0	CONDUIT, MISC.: INTERCEPT EXISTING CONDUIT	EA.	\$ 715.00	1.00	\$ 715.00	5.00	\$ 3,575.00	-	\$ -			5.00	\$ 3,575.00
19	625E2625 1	LUMINAIRE, CONVENTIONAL, AS PER PLAN	EA.	\$ 1,275.00	18.00	\$ 22,950.00	18.00	\$ 22,950.00	-	\$ -			18.00	\$ 22,950.00
20	625E2900 0	TRENCH	FT.	\$ 9.00	655.00	\$ 5,895.00	927.00	\$ 8,343.00	-	\$ -			927.00	\$ 8,343.00
TRAFFIC SIGNALS SUBTOTAL PAGE 1					\$	124,696.25	\$	132,741.85	\$	228.00	\$	-	\$	132,969.85

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
21	625E2950 0	TRENCH, IN PAVED AREA, TYPE A	FT.	\$ 48.00	20.00	\$ 960.00	20.00	\$ 960.00	-	\$ -			20.00	\$ 960.00
22	625E2960 0	TRENCH, IN PAVED AREA, TYPE B	FT.	\$ 50.00	1,140.00	\$ 57,000.00	1,075.00	\$ 53,750.00	-	\$ -			1,075.00	\$ 53,750.00
23	625E3070 0	PULLBOX, 725.08, 18"	EA	\$ 765.00	23.00	\$ 17,595.00	24.00	\$ 18,360.00	-	\$ -			24.00	\$ 18,360.00
24	625E3070 1	PULLBOX, 725.08, 18", AS PER PLAN	EA.	\$ 765.00	1.00	\$ 765.00	1.00	\$ 765.00	-	\$ -			1.00	\$ 765.00
25	625E3070 6	PULLBOX, 725.08, 24"	EA.	\$ 875.00	6.00	\$ 5,250.00	6.00	\$ 5,250.00	-	\$ -			6.00	\$ 5,250.00
26	625E3200 0	GROUND ROD	EA.	\$ 160.00	37.00	\$ 5,920.00	37.00	\$ 5,920.00	-	\$ -			37.00	\$ 5,920.00
27	630E7910 1	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	EA.	\$ 240.00	38.00	\$ 9,120.00	38.00	\$ 9,120.00	-	\$ -			38.00	\$ 9,120.00
28	630E7950 1	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	EA.	\$ 25.00	2.00	\$ 50.00	2.00	\$ 50.00	-	\$ -			2.00	\$ 50.00
29	630E8010 0	SIGN, FLAT SHEET, AS PER PLAN	SQ FT	\$ 16.50	182.00	\$ 3,003.00	182.00	\$ 3,003.00	-	\$ -			182.00	\$ 3,003.00
30	630E8050 1	SIGN, DOUBLE FACED, STREET NAME, AS PER PLAN	EA.	\$ 145.00	22.00	\$ 3,190.00	24.00	\$ 3,480.00	-	\$ -			24.00	\$ 3,480.00
31	630E8300 0	COVERING OF SIGN	SQ FT	\$ 3.50	119.00	\$ 416.50	119.00	\$ 416.50	-	\$ -			119.00	\$ 416.50
32	631E8600 0	PHOTOELECTRIC CONTROL	EA.	\$ 90.00	6.00	\$ 540.00	6.00	\$ 540.00	-	\$ -			6.00	\$ 540.00
33	632E0500 1	VEHICULAR SIGNAL HEAD, (LED), 3 SECTION 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 645.00	34.00	\$ 21,930.00	34.00	\$ 21,930.00	-	\$ -			34.00	\$ 21,930.00
34	632E0508 1	VEHICULAR SIGNAL HEAD, (LED), 5 SECTION 12" LENS, 1-WAY, AS PER PLAN	EA.	\$ 970.00	13.00	\$ 12,610.00	13.00	\$ 12,610.00	-	\$ -			13.00	\$ 12,610.00
35	632E2073 1	PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN	EA.	\$ 530.00	40.00	\$ 21,200.00	40.00	\$ 21,200.00	-	\$ -			40.00	\$ 21,200.00
36	632E2500 0	COVERING OF VEHICULAR SIGNAL HEAD	EA.	\$ 20.00	47.00	\$ 940.00	47.00	\$ 940.00	-	\$ -			47.00	\$ 940.00
37	632E2501 0	COVERING OF PEDESTRIAN SIGNAL HEAD	EA.	\$ 20.00	40.00	\$ 800.00	40.00	\$ 800.00	-	\$ -			40.00	\$ 800.00
38	632E2600 1	PEDESTRIAN PUSHBUTTON, AS PER PLAN	EA.	\$ 860.00	40.00	\$ 34,400.00		\$ 34,400.00	40.00	\$ 34,400.00			40.00	\$ 34,400.00
39	632E4030 0	SIGNAL CABLE, 3 CONDUCTOR, NO.14 AWG	FT.	\$ 1.70	800.00	\$ 1,360.00	800.00	\$ 1,360.00	-	\$ -			800.00	\$ 1,360.00
40	632E4050 0	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	FT.	\$ 1.90	6,470.00	\$ 12,293.00	6,470.00	\$ 12,293.00	-	\$ -			6,470.00	\$ 12,293.00
41	632E4070 0	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	FT.	\$ 2.10	4,635.00	\$ 9,733.50	4,635.00	\$ 9,733.50	-	\$ -			4,635.00	\$ 9,733.50
42	632E4230 0	SIGNAL CABLE, 3 CONDUCTOR, NO. 12 AWG	FT.	\$ 2.00	2,970.00	\$ 5,940.00	2,970.00	\$ 5,940.00	-	\$ -			2,970.00	\$ 5,940.00
43	632E6401 0	SIGNAL SUPPORT FOUNDATION	EA.	\$ 2,070.00	18.00	\$ 37,260.00	18.00	\$ 37,260.00	-	\$ -			18.00	\$ 37,260.00
44	632E6402 0	PEDESTAL FOUNDATION	EA.	\$ 430.00	10.00	\$ 4,300.00	10.00	\$ 4,300.00	-	\$ -			10.00	\$ 4,300.00
45	632E6820 0	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	FT.	\$ 2.05	325.00	\$ 666.25	325.00	\$ 666.25	-	\$ -			325.00	\$ 666.25
46	632E6830 0	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	FT.	\$ 3.95	375.00	\$ 1,481.25	375.00	\$ 1,481.25	-	\$ -			375.00	\$ 1,481.25
47	632E7000 1	POWER SERVICE, AS PER PLAN	EA.	\$ 3,050.00	6.00	\$ 18,300.00	6.00	\$ 18,300.00	-	\$ -			6.00	\$ 18,300.00
48	632E7030 0	CONDUIT RISER, 1-1/2" DIAMETER	EA.	\$ 335.00	1.00	\$ 335.00	1.00	\$ 335.00	-	\$ -			1.00	\$ 335.00
TRAFFIC SIGNALS SUBTOTAL PAGE 2					\$ 289,428.50	\$ 250,763.50	\$ 34,400.00	\$ -	\$ 34,400.00	\$ -	\$ -	\$ 285,163.50		

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
49	632E7519 3	SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 6 POLE, WITH MAST ARMS TYPE TC-81.21, DESIGN 12 AND DESIGN 11, AS PER PLAN	EA.	\$ 12,125.00	1.00	\$ 12,125.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 12,125.00
50	632E7713 3	COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, DESIGN 5, WITH MAST ARMS TYPE TC-81.21, DESIGN 11 AND DESIGN 4, AS PER PLAN	EA.	\$ 10,775.00	2.00	\$ 21,550.00	-	\$ -	-	\$ -	-	\$ -	2.00	\$ 21,550.00
51	632E8098 1	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 2 POLE, AS PER PLAN	EA.	\$ 4,150.00	5.00	\$ 20,750.00	-	\$ -	-	\$ -	-	\$ -	5.00	\$ 20,750.00
52	632E8099 1	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3 POLE, AS PER PLAN	EA.	\$ 4,365.00	3.00	\$ 13,095.00	-	\$ -	-	\$ -	-	\$ -	3.00	\$ 13,095.00
53	632E8107 1	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 11 POLE, AS PER PLAN	EA.	\$ 6,290.00	1.00	\$ 6,290.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 6,290.00
54	632E8108 1	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 12 POLE, AS PER PLAN	EA.	\$ 7,190.00	3.00	\$ 21,570.00	-	\$ -	-	\$ -	-	\$ -	3.00	\$ 21,570.00
55	632E8109 1	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 13 POLE, AS PER PLAN	EA.	\$ 8,655.00	4.00	\$ 34,620.00	-	\$ -	-	\$ -	-	\$ -	4.00	\$ 34,620.00
56	632E8990 1	PEDESTAL, 8", TRANSFORMER BASE, AS PER PLAN	EA.	\$ 445.00	9.00	\$ 4,005.00	-	\$ -	-	\$ -	-	\$ -	9.00	\$ 4,005.00
57	632E9000 1	PEDESTAL, 11", TRANSFORMER BASE, AS PER PLAN	EA.	\$ 485.00	1.00	\$ 485.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 485.00
58	632E9010 1	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	EA.	\$ 4,980.00	6.00	\$ 29,880.00	-	\$ -	-	\$ -	-	\$ -	6.00	\$ 29,880.00
59	633E0158 1	CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN	EA.	\$ 17,325.00	6.00	\$ 103,950.00	-	\$ -	-	\$ -	-	\$ -	6.00	\$ 103,950.00
60	633E3900 1	CONTROLLER, MASTER, TRAFFIC RESPONSIVE, AS PER PLAN	EA.	\$ 11,340.00	1.00	\$ 11,340.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 11,340.00
61	633E6700 1	CABINET RISER, AS PER PLAN	EA.	\$ 875.00	1.00	\$ 875.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 875.00
62	633E6710 1	CABINET FOUNDATION, AS PER PLAN	EA.	\$ 1,610.00	5.00	\$ 8,050.00	-	\$ -	-	\$ -	-	\$ -	5.00	\$ 8,050.00
63	633E6720 1	CONTROLLER WORK PAD, AS PER PLAN	EA.	\$ 230.00	5.00	\$ 1,150.00	-	\$ -	-	\$ -	-	\$ -	5.00	\$ 1,150.00
64	633E6850 1	TELEPHONE SERVICE, AS PER PLAN	EA.	\$ 2,500.00	1.00	\$ 2,500.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 2,500.00
65	633E7500 1	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	EA.	\$ 2,890.00	6.00	\$ 17,340.00	-	\$ -	-	\$ -	-	\$ -	6.00	\$ 17,340.00
66	633E9900 0	CONTROLLER ITEM MISC.: PREEMPTION INTERSECTION	EA	\$ 7,035.00	6.00	\$ 42,210.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
67	633E9900 0	CONTROLLER ITEM MISC.: MODIFY EXISTING CONTROLLER FOUNDATION AND WORK PAD	EA	\$ 975.00	1.00	\$ 975.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 975.00
68	633E9930 0	CONTROLLER ITEM MISC.: REUSE OF VIDEO DETECTION SYSTEM	LUMP	\$ 14,680.00	1.00	\$ 14,680.00	-	\$ -	-	\$ -	-	\$ -	1.00	\$ 14,680.00
69	633E9930 0	CONTROLLER ITEM MISC.: PREEMPTION, VEHICLES	LUMP	\$ 600.00	1.00	\$ 600.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
70	633E9930 0	CONTROLLER ITEM MISC.: PREEMPTION, SOFTWARE AND TRAINING	LUMP	\$ 500.00	1.00	\$ 500.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
TRAFFIC SIGNALS SUBTOTAL PAGE 3					\$ 368,540.00	\$ 368,540.00	\$ 325,230.00	\$ 325,230.00	\$ -	\$ -	\$ -	\$ -	\$ 325,230.00	\$ 325,230.00

REF. NO.	SPEC NO.	DESCRIPTION	UNIT OF MEAS	UNIT PRICE	ORIGINAL CONTRACT		INSTALLED PREVIOUS EST.		INSTALLED THIS ESTIMATE		STORED MATERIAL		COMPLETED TO DATE	
					QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL	QTY.	TOTAL
71	690E501	SPECIAL - WORK INVOLVING PETROLEUM-CONTAMINATED SOIL	TON	\$ 165.00	50.00	\$ 8,250.00	8.67	\$ 1,430.55	-	\$ -	-	\$ -	8.67	\$ 1,430.55
72	690E502	SPECIAL - WORK INVOLVING REGULATED WATER	GAL.	\$ 0.35	10,000.00	\$ 3,500.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
73	690E502	SPECIAL - WORK INVOLVING NON-REGULATED WATER	GAL.	\$ 0.27	20,000.00	\$ 5,400.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
74	815E3000	SPREAD SPECTRUM RADIO INTERCONNECT, AS PER PLAN	EA.	\$ 2,375.00	7.00	\$ 16,625.00	7.00	\$ 16,625.00	-	\$ -	-	\$ -	7.00	\$ 16,625.00
75	816E3000	VIDEO DETECTION SYSTEM, AS PER PLAN	EA.	\$ 18,275.00	5.00	\$ 91,375.00	5.00	\$ 91,375.00	-	\$ -	-	\$ -	5.00	\$ 91,375.00

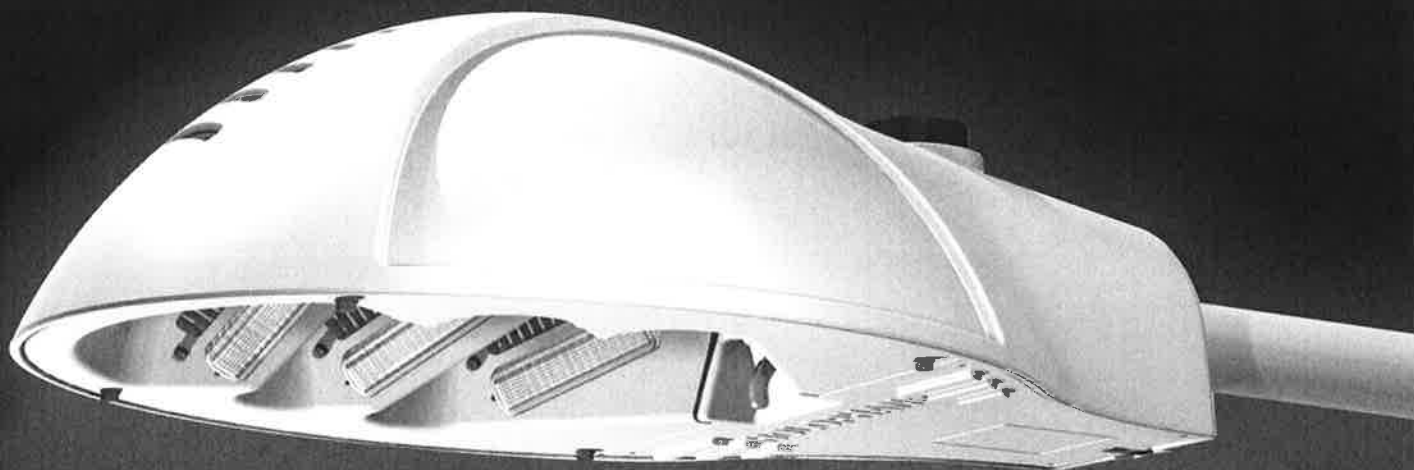
TRAFFIC SIGNALS SUBTOTAL PAGE 4 \$ 125,150.00 \$ 109,430.55 \$ - \$ - \$ 109,430.55

TRAFFIC SIGNALS TOTAL														
						\$ 907,804.75		\$ 818,165.90		\$ 34,628.80		\$ -		\$ 852,793.90
		ROADWAY/CURB RAMPS												
76	202E30	TRAFFIC ISLAND REMOVED, AS PER PLAN	SQ YD	\$ 57.00	78.00	\$ 4,446.00	78.00	\$ 4,446.00	-	\$ -	-	\$ -	78.00	\$ 4,446.00
77	448E91	ASPHALT CONCRETE MISC.: ASPHALT PAVEMENT TEXTURING	SQ YD	\$ 85.85	1,035.00	\$ 88,854.75	-	\$ -	-	\$ -	-	\$ -	-	\$ 58,737.50
78	608E12	5' CONCRETE WALK, AS PER PLAN	SQ FT	\$ 11.50	325.00	\$ 3,737.50	566.00	\$ 6,509.00	-	\$ -	-	\$ -	566.00	\$ 6,509.00
79	608E13	7' CONCRETE WALK, AS PER PLAN	SQ FT	\$ 12.00	2,130.00	\$ 25,560.00	2,407.00	\$ 28,884.00	-	\$ -	-	\$ -	2,407.00	\$ 28,884.00
80	608E52	CURB RAMP, TYPE A1, AS PER PLAN	EA	\$ 325.00	15.00	\$ 4,875.00	16.00	\$ 5,200.00	-	\$ -	-	\$ -	16.00	\$ 5,200.00
81	608E52	CURB RAMP, TYPE B1	EA	\$ 325.00	1.00	\$ 325.00	1.00	\$ 325.00	-	\$ -	-	\$ -	1.00	\$ 325.00
82	608E52	CURB RAMP, TYPE B2, AS PER PLAN	EA	\$ 325.00	7.00	\$ 2,275.00	7.00	\$ 2,275.00	-	\$ -	-	\$ -	7.00	\$ 2,275.00
83	608E52	CURB RAMP, TYPE D, AS PER PLAN	EA	\$ 325.00	7.00	\$ 2,275.00	7.00	\$ 2,275.00	-	\$ -	-	\$ -	7.00	\$ 2,275.00
84	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVEMENT	SQ FT	\$ 15.00	70.00	\$ 1,050.00	70.00	\$ 1,050.00	-	\$ -	-	\$ -	70.00	\$ 1,050.00
85	608E98	WALKWAY, MISC.: REMOVE AND REPLACE BRICK PAVEMENT	SQ FT	\$ 11.00	4,685.00	\$ 51,348.00	4,688.00	\$ 51,348.00	-	\$ -	-	\$ -	4,688.00	\$ 51,348.00
86	608E98	WALKWAY, MISC.: PROPOSED BRICK PAVEMENT - MATERIAL ONLY	SQ FT	\$ 2.25	500.00	\$ 1,125.00	-	\$ -	-	\$ -	-	\$ -	-	\$ -
87	608E12	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	FT	\$ 41.00	540.00	\$ 22,140.00	526.00	\$ 21,566.00	-	\$ -	-	\$ -	526.00	\$ 21,566.00
88	609E26	CURB, TYPE 6, AS PER PLAN	FT	\$ 27.00	370.00	\$ 9,990.00	471.00	\$ 12,717.00	-	\$ -	-	\$ -	471.00	\$ 12,717.00
89	630E06	GROUND MOUNTED SUPPORT, 54X7.7 BEAM	FT	\$ 15.00	28.00	\$ 420.00	-	\$ -	56.00	\$ 840.00	-	\$ -	56.00	\$ 840.00
90	630E09	BREAKAWAY BEAM CONNECTION	EA	\$ 225.00	4.00	\$ 900.00	-	\$ -	4.00	\$ 900.00	-	\$ -	4.00	\$ 900.00
91	630E84	GROUND MOUNTED BEAM SUPPORT FOUNDATION	EA	\$ 350.00	4.00	\$ 1,400.00	-	\$ -	4.00	\$ 1,400.00	-	\$ -	4.00	\$ 1,400.00
92	632E10	RELAMP EXISTING SIGNAL SECTION WITH LED LAMP UNIT, CIRCULAR YELLOW, AS PER PLAN	EA	\$ 145.00	2.00	\$ 290.00	1.00	\$ 145.00	1.00	\$ 145.00	-	\$ -	2.00	\$ 290.00
93	642E30	REMOVAL OF PAVEMENT MARKING	FT	\$ 2.00	2,915.00	\$ 5,830.00	-	\$ -	610.00	\$ 1,220.00	-	\$ -	610.00	\$ 1,220.00
94	642E30	REMOVAL OF PAVEMENT MARKING	SQ FT	\$ 2.60	40.00	\$ 104.00	-	\$ -	40.00	\$ 104.00	-	\$ -	40.00	\$ 104.00

ROADWAY/CURB RAMPS SUBTOTAL PAGE 4 \$ 224,712.25 \$ 136,740.00 \$ 4,609.00 \$ 58,737.50 \$ 200,086.50

LEDGEND®

ROADWAY LED LUMINAIRE



Our History of Roadway Lighting is Legendary

- Permanent prismatic glass optics protect LED's, control light, and reduce glare
- Optimized maintained thermal management system for maximum performance and life
- Precise optical control for high application efficacy
- Multiple lumen packages offer design flexibility
- Environmentally friendly design with zero uplight prevents light pollution
- Optional dual driver system extends driver life up to 100,000 hours
- Dimming options reduce energy load



ROADWAY LED LUMINAIRE

PREFERRED SELECTIONS:

Most Frequently Ordered Catalog Numbers

LEDG	120	35	4K	AS	2	K	L1	R	F1
1	2	3	4	5	6	7	8	9	10
LUMINAIRE	LED's	CURRENT	TEMPERATURE	VOLTAGE	MOUNTING	COLOR	OPTICS	OPTIONS	ACCESSORIES
LEDG	120	35	4K	AS	2	G K W	L1 L2	R	F1

CATALOG NUMBERS FOR ENTIRE PRODUCT OFFERING

(Pricing and lead times may be affected)



STEP 1: LUMINAIRE	
LEDG	LEDgend roadway LED luminaire
STEP 2: QUANTITY OF LED's	
036	36
072	72
120	120
STEP 3: DRIVE CURRENT	
35	350mA driver
53 ¹	525mA driver (36 LED's only)
¹ Only available with 36 LED's	

STEP 4: COLOR TEMPERATURE	
4K	4,000K CCT +/- 250K
5K	5,000K CCT +/- 250K
6K	6,000K CCT +/- 500K
STEP 5: VOLTAGE	
12	120 volt
34 ¹	347 volt
48 ¹	480 volt
AS	Auto-sensing (120-277V)
¹ Not available with 36 LED's	
STEP 6: MOUNTING	
1	1-1/2" pipe
2	2" pipe

STEP 7: HOUSING COLOR	
A	As specified
G	Gray
H	Graphite
K	Black
N	Green
W	White
Z	Bronze
<i>*Colors are just a representation. Custom colors are available upon request</i>	
STEP 8: OPTICS	
L1	Type I, narrow asymmetric
L2	Type II, medium asymmetric
L3	Type III, wide asymmetric

STEP 9: OPTIONS	
D	Bi-level dimming
EL	Extended life driver system
PCS	Shorting cap
SP	Single pack for UPS
Photocontrols	
P27	120-270 volt DTL
P34	347 volt DTL
P48	480 volt DTL
R	NEMA twist-off photocontrol receptacle
STEP 10: ACCESSORIES	
F1	Single fusing
F2	Double fusing
BR-1055-XX	P2 tenon adapter



An Acuity Brands Company

Acuity Brands Lighting, Inc.

Holophane Headquarters, 3825 Columbus Road, Granville, OH 43023

Holophane Canada, Inc. 9040 Leslie Street, Suite 208, Richmond Hill, ON L4B 3M4

Holophane Europe Limited, Bond Ave., Milton Keynes MK1 1JG, England

Holophane, S.A. de C.V., Apartado Postal No. 986, Naucalpan de Juarez, 53000 Edo. de Mexico

Contact your local Holophane factory sales representative for application assistance, and computer-aided design and cost studies. For information on other Holophane products and systems, call the Inside Sales Service Department at 866-759-1577. In Canada call 905-707-5830 or fax 905-707-5695.

Limited Warranty and Limitation of Liability

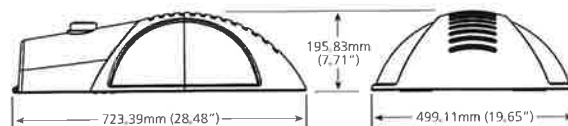
Refer to the Holophane limited material warranty and limitation of liability on this product, which are published in the "Terms and Conditions" section of the current Buyers Guide, and is available from your local Holophane sales representative.

Visit our web site at www.holophane.com

DIMENSIONAL DETAILS



Maximum Weight: 12.7 kg (28 lbs)
Maximum E.P.A.: 0.62 sq. ft.



OPERATING CHARACTERISTICS

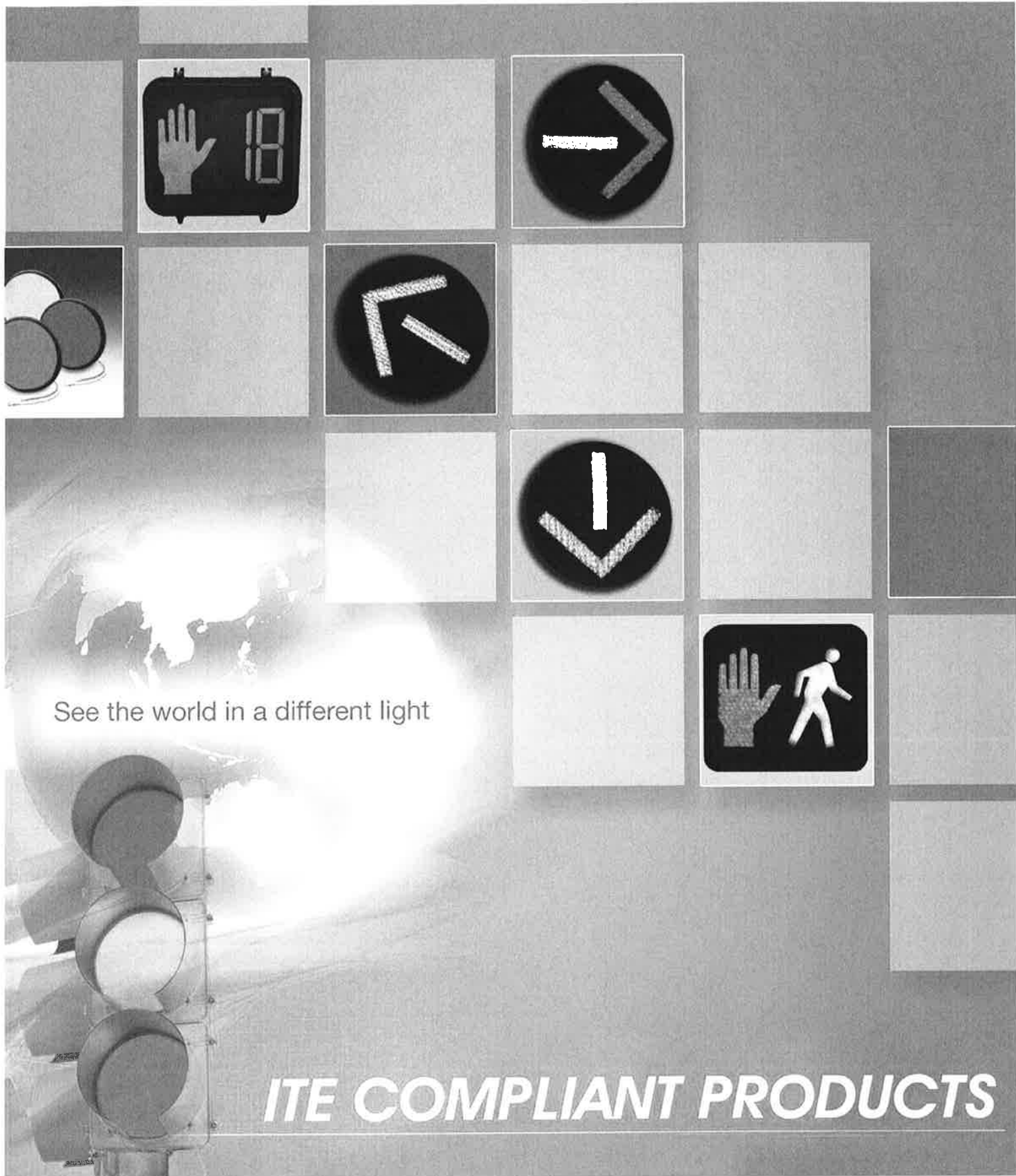
Number of LED's	CCT ¹	Drive Current	Minimum Delivered Lumens ¹	Wattage	LPW	L70 @ 25°C	L70 @ 40°C
120	5000K, 6000K	350mA	9652	129	75	105,000	80,000
72	5000K, 6000K	350mA	6005	81	74	135,000	98,000
36	5000K, 6000K	525mA	4241	62	68	115,000	87,000
36	5000K, 6000K	350mA	3060	42	73	170,000	120,000

¹ Minimum lumen values, reference photometric test for delivered lumens for each distribution

² For 4000K use .94 multiplier X 5000, 6000 K lumen value

Product specifications may change without notice.
Please contact your local Holophane factory sales representative for the latest product information.

experience
lighting's
best



See the world in a different light

ITE COMPLIANT PRODUCTS

Dialight

ITE COMPLIANT LED TRAFFIC SIGNAL MODULE PERFORMANCE SPECIFICATIONS

All LED Ball Signal Modules (8 inch (200mm) and 12 inch (300mm)) shall be fully compliant to the ITE VTC SH LED Circular Supplement specifications dated and adopted June 27, 2005. Compliance to the ITE VTC SH-2 Interim Purchase Specification is not sufficient, and will not substitute for compliance to the ITE VTC SH LED Circular Supplement specifications. Additionally, prior to bid award, the manufacturer shall submit to purchaser, reports from ETL/Intertek, that certify full compliance of all LED ball signal modules to the entire ITE specification. These tests should include but not be limited to the luminous intensity measurements and requirements outlined in the ITE specification sections 6.4.4 through 6.4.4.4.2 (25°C and 74°C / 49°C). Evidence of full compliance to all required testing methods, procedures and sections as outlined in the above ITE document Figure 2, Design Qualification Testing Flow Chart must be included without any exceptions, changes or omissions. The manufacturer must also submit a data sheet showing the exact catalog number of the items submitted on the bid and the Independent Lab report must show full qualification of this catalog number.

To ensure optimal quality of illumination; uniformity; reliability; and appearance, all ball traffic signal modules shall utilize Hi-flux LEDs rated at 1-watt or higher, as their source of illumination. To ensure competency of design and manufacturing, manufacturers of ball, arrow, and pedestrian signal modules shall have a minimum of 7 years of experience in utilizing Hi-flux LEDs rated at 1-watt or higher, as the source of illumination in their ball traffic signal modules. Additionally, manufacturers must have utilized in excess of 20 million Hi-flux LEDs in their LED traffic signal modules during the most recent 10 year period.

All LED 12 inch (300 mm) Arrow Signal Modules shall be fully compliant to the “Omni-directional” specifications of the ITE VTC SH - LED Vehicle Arrow Traffic Signal Supplement adopted July 1, 2007. Additionally, prior to bid award, the manufacturer shall submit to purchaser, reports from ETL/Intertek that certify full compliance of all LED Arrow signal modules. These tests should include but not be limited to the luminous intensity measurements and requirements outlined in the ITE specification sections 6.4.4 through 6.4.4.4.2 (25°C and 74°C / 49°C). Evidence of full compliance to all required testing methods, procedures and sections as outlined in the above ITE document Attachment 1, “Design Qualification Testing Flow Chart” must be included without any exceptions, changes or omissions. The manufacturer must also submit a data sheet showing the exact catalog number of the items submitted on the bid and the Independent Lab report must show full qualification of this catalog number.

All LED Pedestrian Signal Modules shall be fully compliant to the ITE PTCSI Part-2: LED Pedestrian Traffic Signal Modules specifications adopted March 19, 2004 or the latest adopted version as listed on the ITE website at time of bid. Additionally, prior to bid award, the manufacturer shall submit to purchaser, reports from ETL/Intertek that certify full compliance of LED signal modules, to these specifications. Evidence of full compliance to all required testing methods, procedures and sections as outlined in the above ITE document Attachment 2, “Design Qualification Testing Flow Chart” must be included without any exceptions, changes or omissions. The manufacturer must also submit a data sheet showing the exact catalog number of the items submitted on the bid and the Independent Lab report must show full qualification of this catalog number. Combination hand/person pedestrian signal modules shall incorporate separate power supplies for the hand and the person icons.

In addition to, and in excess of the above applicable ITE specification compliance, the on-board circuitry of all LED traffic signal modules shall include voltage surge protection, to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.8, NEMA Standard TS 2-2003. In addition, the module shall comply with the following standards: IEC 1000-4-5 at 3kV with a 2 ohm source impedance, ANSI/IEEE C62, 41-2002; IEC 61000-4-12 (6kV, 200A, 100kHz ring wave).

Warranty- Manufacturer shall provide at time of bid, a written warranty which provides for repair or replacement of modules that fail to function as intended due to workmanship or material defects within the first 60 months from date of delivery. Modules which exhibit luminous intensities less than the minimum as specified in the ITE specifications as indicated above, within the first 60 months from date of delivery shall be replaced or repaired.

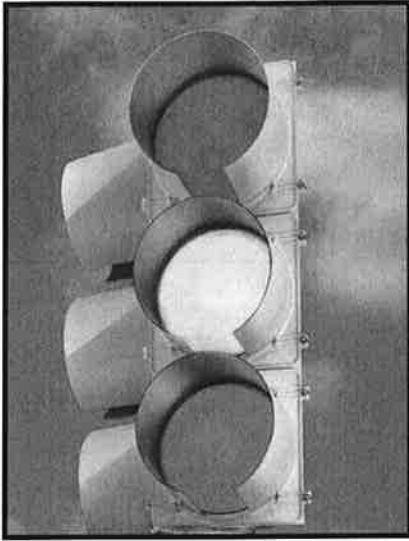
Notes:

- * CSA approved to the following applicable requirements:
 - CSA Standard C22.2 No. 9.0-96 General Requirements for Luminaires
 - CSA Std. No. C22.2 No. 250.0-04 Luminaires
 - UL Std. No. 1598-2004 (May 2006) Luminaires



rev E - 7/07/08

UNIFORM APPEARANCE LED TRAFFIC SIGNAL MODULES

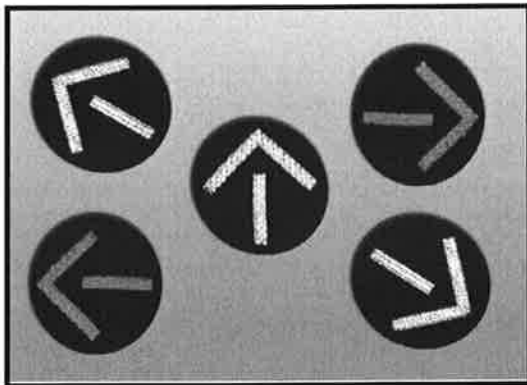


- ▲ **Fully compliant to ITE VTCSH-LED Circular Signal Supplement dated 6/27/2005
- ▲ Industry's lowest power for all colors
- ▲ Meets or exceeds ITE intensity, color and uniformity specification, including 49°C / 74°C requirements
- ▲ State-of-the-art LED technology utilized
- ▲ Temperature compensated power supplies for longer LED life
- ▲ Uniform appearance
- ▲ Expanded view radiation pattern suitable for span wire and steep grade applications
- ▲ Transient suppression exceeds ITE and NEMA specifications (Up to 6KV)
- ▲ Meets or exceeds ITE moisture resistance testing per MIL-STD-810F, method 506.4, I for rain & blowing rain
- ▲ Meets or exceeds ITE failed state impedance specifications, > 250K ohm within 300ms
- ▲ Abrasion resistance lens coating
- ▲ EPACT 2005 compliant
- ▲ Patent No. 7,281,818 and other patents pending
- ▲ 3rd party qualification testing

Part Number	Color	Lens Type	Dominant Wavelength (nm)	Typical Wattage at 25°C	Peak Minimum Maintained Luminous Intensity (cd)	**Meets ITE VTCSH LED Circular Signal Supplement	*CSA Approved	Size (in)
433-1110-003XL	Red	Tinted	625	6	165	✓	✓	8
433-3130-001XL	Yellow	Tinted	590	11	410	✓	✓	8
433-3130-901XL	Yellow	Tinted	590	7	410	✓		8
433-3170-901XL	Yellow	Clear	590	7	410	✓		8
433-2120-001XL	Green	Tinted	500	8	215	✓	✓	8
433-2170-001XL	Green	Clear	500	8	215	✓	✓	8
433-1210-003XL	Red	Tinted	625	8	365	✓	✓	12
433-3230-001XL	Yellow	Tinted	590	19	910	✓	✓	12
433-3230-901XL	Yellow	Tinted	590	12	910	✓		12
433-3270-901XL	Yellow	Clear	590	12	910	✓		12
433-2220-001XL	Green	Tinted	500	9	475	✓	✓	12
433-2270-001XL	Green	Clear	500	9	475	✓	✓	12

Red modules also available with clear lens. Insert "7" into the 6th position of the part number to designate clear lens. Ex: 433-1170-003XL

OMNI-DIRECTIONAL, UNIFORM APPEARANCE LED ARROWS



- ▲ **Fully compliant to ITE VTCSH-LED Vehicle Arrow Supplement dated 7/01/2007
- ▲ Allows for mounting in any orientation in the signal head
- ▲ Industry's lowest power for all colors
- ▲ Meets or exceeds ITE intensity, color and uniformity specification, including 49°C / 74°C requirements
- ▲ Temperature compensated power supplies for longer LED life
- ▲ Uniform appearance
- ▲ Transient suppression exceeds ITE and NEMA specifications (Up to 6KV)
- ▲ Meets or exceeds ITE moisture resistance testing per MIL-STD-810F, method 506.4, I for rain & blowing rain
- ▲ Meets or exceeds ITE failed state impedance specifications, > 250K ohm within 300ms
- ▲ Abrasion resistance lens coating
- ▲ EPACT 2005 compliant
- ▲ Clear and tinted lenses available
- ▲ 3rd party qualification testing

Part Number	Color	Lens Type	Typical Wattage at 25°C	Dominant Wavelength (nm)	Peak Minimum Maintained Luminous Intensity (cd)	**Meets ITE Spec	*CSA Approved
432-1314-001XOD	Red	Tinted	6	628	56.8	✓	✓
431-3334-001XOD	Yellow	Tinted	9	590	141.6	✓	✓
431-3334-901XOD	Yellow	Tinted	6	590	141.6	✓	
432-2324-001XOD	Green	Tinted	6	500	73.9	✓	✓
432-2374-001XOD	Green	Clear	6	500	73.9	✓	✓

Red & yellow modules also available with clear lens. Insert "7" into the 6th position of the part number to designate clear lens. Ex: 432-1374-001XOD

UNIFORM APPEARANCE HAND and PERSON PEDESTRIAN SIGNALS



- ▲ **Fully compliant to ITE PTCSI Part 2 LED Pedestrian Traffic Signal Module Specification adopted 3/9/04
- ▲ Meets / exceeds ITE uniformity ratio of not more than 1 to 5 between the max and min luminance values as measured in (.5") dia spots
- ▲ Meets or exceeds ITE moisture resistance testing per MIL-STD-810F, method 506.4, I for rain & blowing rain
- ▲ Fuse and transient suppressor incorporated for superior line and load protection
- ▲ Modules fully meet maintained luminous requirements of the ITE Specification sections (6.4.4 - 6.4.4.3.1)
- ▲ Fully meets ITE chromaticity and color uniformity specifications (6.4.4.4 - 6.4.4.6)
- ▲ Independent dedicated power supplies
- ▲ EPACT 2005 compliant
- ▲ 3rd party qualification testing

Part Number	Size	Description	Typical Wattage @ 25°C		Min. Luminance (cd/m²)		**Meets ITE Spec	*CSA Approved
			Hand	Person	Hand	Person		
430-6450-001X	16 x 18	Side-by-side Hand and Person	8	7	1,400	2,200	✓	✓
430-6472-001X	16 x 18	Overlay Hand and Person	8	6	1,400	2,200	✓	✓
430-5770-001X	12 x 12	Hand only	8	N/A	1,400	N/A	✓	✓
430-7771-001X	12 x 12	Person only	N/A	7	N/A	2,200	✓	✓
430-6772-001X	12 x 12	Overlay Hand and Person	8	6	1,400	2,200	✓	✓
430-5570-001X	9 x 9	Hand only	6	N/A	1,400	N/A	✓	
430-7570-001X	9 x 9	Person only	N/A	6	N/A	2,200	✓	

UNIFORM APPEARANCE COUNTDOWN PEDESTRIAN SIGNALS



- ▲ **Uniform appearance hand and man symbols fully compliant to ITE PTCSI Part 2 LED Pedestrian Traffic Signal Module Specification adopted 3/19/04
- ▲ 9" high 2-row countdown digits are MUTCD compliant for crosswalks over 100 ft
- ▲ Standard part numbers below comply with MUTCD recommendations to countdown clearance interval only
- ▲ Full preemption compatibility... In the cycle following a truncated timing such as preemption call, the countdown shall be capable of displaying the correct time and not be affected by the reduced previous cycle
- ▲ Up to 4 units can be connected in parallel without affecting of the monitoring of the Hand/Person
- ▲ Meets or exceeds ITE moisture resistance testing per MIL-STD-810F, method 506.4, I for rain & blowing rain
- ▲ Independent dedicated power supplies
- ▲ EPACT 2005 compliant
- ▲ 3rd party qualification testing

Part Number	Housing Size	Symbol Color			Typical Wattage @ 25°C			Min. Luminance (cd/m²)			**Meets ITE Spec	*CSA Approved
		Count-down	Hand	Person	Count-down	Hand	Person	Count-down	Hand	Person		
430-6479-001X	16 x 18	Portland Orange	Portland Orange	Lunar White	5	9	7	1,400	1,400	2,200	✓	✓
430-7773-001X	12 x 12	Portland Orange	N/A	N/A	5	N/A	N/A	1,400	N/A	N/A		✓

Special Applications: Upon customer request, above units are available with option to countdown the clearance mode and the walk mode. Add suffix "W" to above part numbers.

IMPORTANT NOTE: MUTCD DOES NOT recommend the use of a countdown timer in the "walk" mode

Reed Hartman/ Cooper

Type of Fixture	Unit Cost	Quantity
3 Head LED Traffic Signal	\$755.00	4
5 Head LED Traffic Signal	\$950.00	4
LED Luminaire	\$1,316.00	4

Luminaires

Red Traffic Signal

Yellow Traffic Signal

Green Traffic Signal

Reed Hartman/ Malsbary

Type of Fixture	Unit Cost	Quantity
3 Head LED Traffic Signal	\$755.00	4
5 Head LED Traffic Signal	\$950.00	4
LED Luminaire		0

Reed Hartman/ Carver

Type of Fixture	Unit Cost	Quantity
3 Head LED Traffic Signal	\$755.00	12
5 Head LED Traffic Signal	\$950.00	3
LED Luminaire		0

Reed Hartman/ Creek

Type of Fixture	Unit Cost	Quantity
3 Head LED Traffic Signal	\$755.00	4
5 Head LED Traffic Signal	\$950.00	4
LED Luminaire		0

Model Number

LEDG120354KAS2GL1RF1

433-1210-000XL

433-3230-900XL

433-2220-000XL

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in

Case No(s). 14-0874-EL-EEC

Summary: Application Application to Commit Energy

Efficiency/Peak Demand

Reduction Programs

(Mercantile Customers Only)- City of Blue Ash electronically filed by Carys Cochern on behalf of City of Blue Ash