RFP EXHIBIT "A"

1.0 BACKGROUND

The City of Emeryville (City) desires to contract for the maintenance and repair of the City's traffic signal systems, streetlight and safety lighting systems.

The Contractor will provide this service for all streetlights, soffit lighting beneath bridge structures, park lighting, and lighting at the Amtrak Station platform and pedestrian overcrossing. The City has a total of 1806 light fixtures to be covered under this service. The locations of the various light fixtures are as shown on the attached Exhibit "C".

The Contractor will also provide maintenance service for 26 City owned traffic signal systems. The locations of the various traffic signals are as listed in Exhibit "D".

The City reserves the right to award any portion or all of the work specified in this Exhibit to one or more Contractor(s).

2.0 STANDARDS

Applicable standards in the performance of any and all work attended in the contract includes, but not limited to:

- Caltrans Standard Plans, May 2006
- Caltrans Standard Specifications, May 2006
- Chapter K of Caltrans Maintenance Manual
- National Electric Code (NEC) 2008 with California Electric Code Amendments, 2010
- California Manual of Uniform Traffic Control Devices (MUTCD), 2006 Edition

3.0 DEFINITIONS

Wherever in this exhibit and other contract documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

- **3.1 Accident:** An event or happening that is not expected, foreseen or intended, including but not limited to traffic accidents.
- 3.2 City: The City of Emeryville
- **3.3 Contractor**: The person, firm, partnership or corporation to whom this contract is awarded by owner and who is subject to the terms thereof.

- **3.4 Emergency:** When used in conjunction with the contract, shall mean an accident, malfunction, or occurrence that renders the light system inoperable or hazardous to public safety. Service rendered to emergencies shall have priority over all other services or maintenance repairs.
- **3.5 Public Works Director:** The Public Works Director of the City of Emeryville
- **3.6 Equipment**: The equipment, machinery and/or vehicles required to perform the work described in this RFP.
- **3.7 Municipal Parking Lots**: Stand alone City owned parking lots, which are not adjacent to a city owned and/or operated park, community center, tennis court, athletic field or building.
- **3.8 Proposal:** The written offer of the bidder to perform the proposed work made upon the approved form on which the City required to be submitted.
- **3.9 Safety Lights**: Exterior lights at all City owned and/or operated parks and facilities covered under this contract
- **3.10 Response Time**: Response time is the time elapsed between receipt of notification by the Contractor that service or repairs are required and the time the Contractor arrives at the location with the necessary tools, personnel, and equipment to effect such service repair.
- 3.11 Service: When used in connection with the contract, shall mean that the Contractor shall proceed without undue delay and within the response time to the location for light system which has been reported inoperative and shall service, repair, replace parts, or place in temporary operating condition, or otherwise activate damaged or inoperative equipment when notified either orally or in writing by the City's Maintenance Division, City's Police Department or any other recognized City authority.

4.0 STATEMENT OF WORK

a. Traffic Signal Maintenance

Contractor shall perform the following routine preventative maintenance at the signalized intersections listed in Exhibit "D":

Bi-Monthly Routine (Every 60 Days)

Visually inspect controller for proper operation.

Visually inspect all vehicular and pedestrian signals for proper operation.

Visually inspect all LED signals units for proper operation, replace outages found and return to City for replacement by manufacturer to Contractor or reimbursement by City to Contractor.

Check and actuate each pedestrian push button for proper operation.

Visually inspect roadway along loop detectors for possible exposed wires, cracks and potholes.

Check detector amplifiers and tune if needed.

Check controller cabinet filter.

Check wire schematics and records to make sure they are in the cabinet.

Check operation of the fan.

Check operation of ground fault receptacle.

Visually check for bent visors and backplates.

Visually check integrity of splices.

Check the time setting and match with time sheet on controllers.

Manually record inspection date and time in controller cabinet and send written confirmation of inspection with recommendations to City by intersection.

Annual Routine

Vacuum and clean controller cabinet and contents.

Replace cabinet filter.

Check weatherproof gasket seal on controller cabinets.

Lubricate hinges and lock on controller cabinets.

Manually record inspection date and time in controller cabinet and send written confirmation of yearly inspection with recommendations to City by intersection.

Test conflict monitor for proper operation.

b. Streetlight and Safety Light Systems

The purpose of this contract is to maintain the streetlights and safety lights light systems to operate in the manner that they were originally intended, or as later modified, so as to provide safety lighting to the City's streets and public facilities. In general, the work to be performed consists of providing routine preventative streetlight maintenance, as well as emergency maintenance and as-required maintenance work for the streetlights and exterior public facilities lights within the City of Emeryville.

It is imperative that all equipment in the respective systems be serviceable and in operation at all times, 24 hours a day, seven days a week. To insure this continuous and uninterrupted operation of equipment, service calls and emergency calls shall be answered promptly, and extraordinary effort shall be exerted by the Contractor to render this service.

The Contractor shall ensure that all streetlights and safety lights are maintained and in an operable and safe condition. Furthermore, the Contractor shall provide a full range of lighting maintenance services which include a 24 hours/7 days a week toll free call center operation, replacement or service of all lighting components with like or better components, maintain and submit monthly reports of all work performed, insure proper disposal of all materials, and perform monthly inspection and service as needed for all streetlights and safety lights, and respond to all reported lights out on all City streets and facilities covered under this service. The Contractor shall provide support for any modernization or system, equipment or proposed lighting upgrades and maintain a City inventory of all streetlights and poles.

The selected Contractor shall furnish all tools, equipment, workshop facilities, transportation, labor, parts, and materials and perform all work necessary to maintain in good quality and operation all streetlights and safety lights within the City. All work performed or equipment and parts supplied by the Contractor shall be subject to inspection and approval of the Public Works Director or his designee. Failure to pass inspection on any maintenance, repair, or service item shall result in non-payment for that item until such time that the Contractor can present the item to the City in an acceptable form.

1. Routine Preventative Maintenance

Routine Preventative Maintenance for each light fixture shall be performed by the Contractor. Routine preventative maintenance shall include the following items to insure the roadways and parks are properly illuminated:

- Replace lamps that have become inoperative by virtue of burnout. Replacement lamps shall be substantially equivalent to those replaced.
- Replace photoelectric cells, ballasts, fuses, igniters, hf generators, sockets and all other integral parts that have become inoperative from normal deterioration with either a like item or a selected upgrade.
- For LED Fixtures, replace photoelectric cells and fuses that have become
 inoperative from normal deterioration with either a like item or a selected
 upgrade. Where an LED fixture has become inoperable due to a material
 defect, install a replacement LED fixture (supplied by the City) and send
 defective fixture to manufacture for warrantee.
- Cleaning of lenses and shrouds when burned out lamps are replaced or when photocells are replaced on LED fixtures.
- Minor trimming of trees below the light fixture for the purpose of allowing a reasonable amount of light to be let through. Trimming is limited to within three (3) feet of the bottom of the fixture.
- Night checks of streetlights, and safety lights once a month during nondaylight hours to determine the location of unreported outages and/or minor tree trimming needs.
- Maintain and submit a monthly log listing each call received, the name of the caller (if given), the date of the call, the outage or other problem reported by the caller, and the location of the outage or other problem reported by the caller.
- Maintain and submit a monthly log for all night checks including but not limited to date of visit and location of outage or other problem.

Reporting: The need for streetlight and/or public facilities light maintenance will be reported to the Contractor by residents, the public and City staff to the Contractor's call center or online via the Contractor's website.

The Items of Work for Routine Preventative Maintenance are as listed in Exhibit "B", Billing Rates.

The City's streetlight and safety lighting systems are located as shown on the attached plan in Exhibit "C".

The City's Safety Lights include all fixtures located at the following facilities:

- Stanford Avenue Park
- Doyle Hollis Park
- The Emeryville Greenway Park Segments
- Marina Parking Lot west on west side of Powell Street
- Christie Avenue Park
- Civic Center Parking Lot
- Amtrak Station Platform
- Amtrak Station Pedestrian Bridge
- Powell Street Bridge Soffit Lighting
- 40th Street Bridge Soffit Lighting

c. <u>Additional Work</u>

Additional Work is comprised of Emergency Maintenance, Scheduled/As-Required Maintenance and Extra Work, and shall be performed by the Contractor. All costs for labor and equipment for Additional Work shall be as specified in Exhibit "B", Additional Work. The City may also seek additional quotes for this work and use other Contractors for this work.

All materials removed are the property of the City and may be recycled back into service after defective components are replaced and/or refurbished. Specific procedures for knockdowns are to be coordinated by the Contractor with the City and utility provider that owns the pole. The utility provider may choose to replace joint use poles and electrical service, while the Contractor will replace the streetlight or public facility light and bracket. If coordination with the utility provider is necessary to complete this work, at the City's direction the Contractor will provide this coordination.

Specialized equipment other than those items listed by the City in Exhibit "B", Additional Work may be priced separately on a per hour basis. Materials to be used are to be billed as a separate item. Indicate any standard markup percentage for supplied materials. Describe pricing application so it is clear how these prices are applied. For example, is it a single installation or service for work in conjunction with other work, work performed on an overtime basis, etc.

The Contractor agrees to the following Additional Work for traffic signals, streetlights and safety lights to be paid at the rates identified in Exhibit "B", Additional Work Hourly Rates and Standard Material Markup Rate:

1. Unscheduled On-Call / Emergency Maintenance

Emergency Maintenance, which is comprised of regular maintenance and emergency response, shall be performed by the Contractor selected as a result of this proposal. Work in this category is considered to be a safety concern. Responsive maintenance and emergency repairs to damaged or malfunctioning traffic signals, streetlights and exterior public facilities

lights shall be performed by the Contractor at the direction of the Public Works Director or his designee and shall constitute work made necessary due to malfunctioning systems, collision, acts of nature, or vandalism. Example of situations that would require an emergency response include, but are not limited to streetlight knockdowns, a block of streetlights out-of-service, malfunctioning traffic signal, or other repairs designated as an emergency response or call out by the City.

Occasionally, the Contractor may be called to respond to accident sites, disconnect power, secure the site for public safety, take down damaged poles or pick up a knocked down light. The Contractor shall furnish a price for performing this work both during normal working hours and during weekends, holidays, or other off-hours. The Contractor shall also furnish a price for reinstalling knockdowns with like materials.

The Contractor shall make immediate maintenance calls when notified by the City and informed that the call is an emergency. In no instance shall the response time to an emergency exceed one (1) hour from the time of notification.

Emergency Maintenance includes, but is not limited to, the following items of work that shall be performed when necessary and charged as "Additional Work" after written approval from the Public Works Director:

- Rewiring and cable pulling
- Concrete and foundation repairs
- Streetlight pole or equipment replacement
- Replacement of lamps and/or photoelectric cells
- Other streetlight and/or exterior public facilities lights related work

2 Scheduled/As-Required Maintenance

Scheduled/As-Required Maintenance consists of regular maintenance work. Maintenance and repair requests made by the City that are not critical, or the work involved is of such a nature as to require advance scheduling, shall be completed on an "as needed" basis. Examples of Scheduled/As-Required Maintenance include, but are not limited to major equipment repair/replacement, permanent replacement of knockdowns, major rewiring, and general maintenance of streetlights and exterior public facilities lights.

3 Extra Work

The City may request extra work within certain total contract expenditure limits by the selected Contractor. Extra Work includes any special work not covered above as routine maintenance.

During the course of the agreement, the City may also solicit quotes from other Contractors for Extra Work and employ their services for said work.

4. Additional Work Item: Lumec Candela Photocell Modification

When existing side pole mounted photocells require replacement, new Lumec Candela pole top photocell cap conversion kits shall be utilized. The Contractor shall provide all replacement parts and material and rewire the pole as necessary. The existing side pole mounted photocell shall be abandoned in place.

d. Required Response Times

i. Emergency Response (one hour maximum response time).

This item is considered to be an immediate safety concern. When notified by the City to respond to an emergency situation, the Contractor shall be at the site in one (1) hour or less from the time of notification. Examples of a situation that would require an emergency response include but are not limited to streetlight, safety light, or traffic signal knockdown, block of streetlights or traffic signal out-of-service, or other repairs designated emergency response by the City. The Contractor shall provide a twentyfour (24) hour per day emergency service for the replacement of burned out lamps and for traffic signal call outs. The Contractor shall maintain a local telephone number where he can be reached twenty-four (24) hours per day. This telephone number shall be made available to the Public Works Department and the City of Emeryville Police Department. The Contractor shall make immediate service calls when notified by the City and informed that the call is an emergency. In no instance shall the response time to an emergency call exceed one (1) hour from the time of notification.

ii. Standard Response

This item is considered important but not an immediate safety concern. Maintenance and repair requests made on a regular basis shall be responded to within seven (7) calendar days of notification. In no event will regular response work be considered overtime without prior approval of the Public Works Director or his designee. An example of work that would require a regular response includes but is not limited to streetlight and safety light outages.

iii. <u>Scheduled/As-Required Response</u> Maintenance and repair requests made by the City that are not critical or the work involved is of such nature as to require advance scheduling shall be completed on an "As-Required" basis at a schedule that is mutually agreed upon. Work authorization of this type shall include but not be limited to major equipment repair/replacement, permanent replacement of knockdowns, major rewiring, and general maintenance of streetlights and safety lights.

5 PROGRAM REQUIREMENTS

- a Contractor shall have adequate shop and storage facilities within thirty (30) miles of the City limits of Emeryville, with staff, material and equipment necessary to perform all routine maintenance and perform temporary repair of accident damage. Shop and storage facilities, if located in Emeryville, must be located in an area appropriately zoned for this use. Contractor to provide location address with RFP response submittal.
- b. Contractor shall provide all equipment, trained personnel and supplies necessary to provide the services specified in this RFP.
- c. The Contractor shall provide an experienced, competent Superintendent who will be responsible for effectively supervising all work in progress. In addition to supervision or work in progress, the Superintendent must be capable of instructing his subordinates in correct and proper maintenance and safety techniques.
- d. The Contractor shall employ competent, experienced streetlight and traffic signal technicians qualified in repair or trouble detection of the City's lighting equipment. If any subcontractor, Superintendent, Foreman, laborer, or other person employed or associated with the Contractor appears to City staff to be intemperate, incompetent, troublesome, or otherwise undesirable to be employed on the work site, the employee shall be immediately removed from the work site at the request of the Public Works Director or his designee.
- e. The Contractor shall be responsible for providing all necessary traffic control equipment in all construction or maintenance zones per Part 6 of the California MUTCD most recent edition, or as determined by the Public Works Director or his designee to be required to give adequate warning of any dangerous conditions that may be encountered, prevent accidents, and avoid damage or injury to the public. In addition, whenever it is necessary to block any traffic lanes to complete any portion of the work, at least one (1) lane of traffic shall be kept open in each direction at all times. On major arterials, lane closures shall be avoided on weekdays between 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m., unless approved in advance by the Public Works Director or his designee.

Emergency repairs shall be made whenever required and are not subject to the aforementioned time restrictions.

f. The Contractor shall conduct his operations in order to minimize obstruction and inconvenience to public travel. At no time shall the Contractor be allowed to stop work for the purposes of a "coffee break" when the public right-of-way is impeded unless the work being done requires more than four (4) hours to complete.

Whenever the Contractor's operations create a condition hazardous to traffic or to the public, he shall furnish and maintain, as necessary, fences, barricades, lights, signs, safety cones, and other devices per Part 6 of the California MUTCD most recent edition, or as determined by the Public Works Director or his designee to be required to give adequate warning of any dangerous conditions that may be encountered, prevent accidents, and avoid damage or injury to the public.

Failure on the part of the Contractor to provide adequate signing and barricading will be the authority for the City to provide such protection as is necessary by City forces or independent contractor. All work shall be stopped and the job site shall be vacated until the situation is remedied. All costs of protection so provided shall be deducted from the routine maintenance charges of the Contractor until the bill is satisfied. Repetitive failure shall be sufficient cause for the City to cancel the Agreement.

- g. The Contractor shall possess an active, valid Class C-10, and Class A Contractor's license from the State of California.
- h. The Contractor shall be knowledgeable of matters pertaining to streetlights and public facility lighting such as energy efficiency, light pollutions and applicable ordinances, types of lighting and their applications and the latest technology as well as applicable municipal and financial processes in the State of California.
- i. The Contractor shall be established and in place to perform this contract with a minimum of three (3) years related experience.
- j. Should construction be underway by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be underway by other forces within or adjacent to the said limits, the Contractor shall cooperate with all other contractor's or other forces to the end that any delay, duplication, or hindrance to their work shall be avoided.
- k. The Public Works Director or his designee shall have access at all times to work completed or in progress and shall be furnished with all reasonable means and facilities for ascertaining the progress of work and the quality of the materials used. All work performed and all materials furnished shall be subject to the Public Works Director or his designee's

inspection and approval. Any item not meeting the Public Works Director or his designee's complete satisfaction shall be replaced immediately.

Inspection of work shall not relieve the Contractor of any obligation to fulfill the contract as prescribed. Defective work or materials shall be made good, and unsuitable material may be rejected notwithstanding the fact that such defective work and unsuitable materials have been previously inspected by the Public Works Director or his designee and accepted.

- All work, which is determined by the Public Works Director or his designee to be defective in its construction or is deficient in any way, shall be remedied or removed by the Contractor at his expense in a manner acceptable to the City.
- m. The Public Works Director or his designee shall decide all questions that may arise regarding the quality or acceptability of materials furnished or work performed, the manner of performance and rate of progress of the work, and the acceptable fulfillment of the contract. The Public Works Director's decision shall be final.
- n. City's Right to Cure Contractor's Defaults. If the Contractor shall default or neglect to carry out any of his obligations under this contract and fail within fifteen (15) days after receipt of written notice from the City to the Contractor to commence and continue correction of such default or neglect to remedy Contractor's deficiencies with diligence and promptness, the City may, without prejudice to any other remedy or right it may have, make good such deficiencies. In such case, the cost of correcting such deficiencies shall be paid by the Contractor to the City within fifteen (15) days of receipt of an invoice.
- o. Call Center Operation. The selected Contractor shall have a dedicated call center that maintains a computer based record of all safety lights including pole number, nearest address, lamp type, and service history and logs all service requests and provides status reports of service requests. The selected Contractor will inform customers of the status of service requests any time they are not able to meet the minimum response times for that particular service. The contractor shall provide a website that includes the phone number for the call center, provides the ability to report outages and other issues online, and that links to the City's internet site. The public and City staff shall be able to report lighting outages and other issues via the Contractor's call center phone number and electronically via the internet 24/7.

The City will provide the Contractor with GIS shape files of the City streetlight/safety light inventory.

p. Waste Disposal. The Contractor is responsible for the proper disposal of all waste materials generated in the performance of this contract. All hazardous material will be disposed of in accordance with applicable laws

- and regulations. Appropriate records shall be maintained and available for inspection by the City within two (2) business days.
- q. Unauthorized Work. The Contractor shall promptly report to the Public Works Director or his designee observations of any unauthorized work being done by others upon the City's equipment being maintained by the Contractor. The Contractor shall also report observations or any work in progress which may endanger or damage the equipment of the lighting system.
- r. Prevailing wage. The successful bidder will be required to pay the prevailing wage rates in effect on the date this Request for Proposals was first published, pursuant to California law, including California Labor Code sections 1720 through 1861. General prevailing wage rates in Alameda County are on file with the Department of Industrial Relations, and shall be made available to any interested party upon request.
- s. Maintain Inventory of Spare Materials. The Contractor shall be equipped with the spare parts in sufficient quantities to maintain streetlight and exterior public facilities light operations. The City will maintain an inventory of spare replacement parts for those items not covered under the routine preventive maintenance for the Lumec poles and fixtures only. All other material will be provided by the contractor.

RFP EXHIBIT "B"

BILLING RATES, FY 2017/2018

The proposal prices are to include and cover the furnishing of all labor, materials, equipment, incidentals, Toll Free Emergency Call Center, Website for on-line reporting, and overhead necessary to perform the work described in the "Specifications" section of Exhibit "A" of this proposal document. The proposer affirms that in the event they are selected as the successful proposer the Contractor assures that all work will be performed in the specified manner and under the terms and conditions specified at the prices listed below:

A. ROUTINE PREVENTIVE MAINTENANCE STREETLIGHT AND SAFETY LIGHT ITEMS									
	Monthly Streetlight and Safety Light Maintenance	Estimated Quantity per month	Unit	Ţ	Unit Price		Total		
1a	Lumec Candela and Transit Fixtures, Metal Halide	159	fixtures	\$	3.30	\$	524.70		
1b	Lumec Candela LED	809	fixtures	\$	1.00	\$	\$809.00		
2	Holophane Acorn Head Fixtures, Induction lamps	102	fixtures	\$	2.79	\$	284.58		
3	Cobra Head Fixtures, High Pressure Sodium	31	fixtures	\$	1.97	\$	61.07		
3a	Cobra Head LED Fixtures	442	fixture	\$	0.84	\$	371.28		
4a	Miscellaneous Style Fixtures, High Pressure Sodium or Metal Halide	157	fixtures	\$	2.79	\$	438.03		
4b	Miscellaneous Style LED Fixtures	7	fixture	\$.84	\$	5.88		
5	Lighting System Night Checks	1	each	·	35.36	\$	335.36		
	Total Monthly Cost: \$ 2,829.90								

Annual Cost of Streetlight and Safety Light Routine Preventative Maintenance: 12 x Total Monthly Cost = \$33,958.80

Traffic Signal Maintenance

Bi-Monthly and Annual Routine Preventive Maintenance \$\frac{111.79}{2}\$ per Intersection per Visit

Total Bi- Monthly Cost of Traffic Signal Routine Preventive Maintenance:

 $26 \times \frac{$111.79}{}$ per Intersection per visit = $$\frac{2906.54}{}$

B. ADDITIONAL WORK HOURLY RATES FY 2017/2018							
	Equipment / Personnel	Regular Time	Over-Time				
1	Traffic Signal Electrician (Regular Time)	\$ 108.44					
2	Traffic Signal Electrician (Overtime)		\$ 192.28				
3	Traffic Signal Electrician Forman (Regular Time)	\$ 115.14					
4	Traffic Signal Electrician Forman (Overtime)		\$ 198.98				
5	Streetlight Electrician (Regular Time)	\$ 108.44					
6	Streetlight Electrician (Overtime)		\$ 192.28				
7	Streetlight Electrician Forman (Regular Time)	\$ 115.14					
8	Streetlight Electrician Forman (Overtime)		\$ 198.98				
9	Night Check Technician	\$ 39.13	\$ 39.13				
10	Laborer	\$ 74.90	\$ 125.21				
11.	Bucket Truck	\$ 31.30	\$ 31.30				
12.	Mobile Crane	\$ 95.02	\$ 167.68				
13.	Crane truck	\$ 95.02	\$ 167.68				

Additional Work Unit Price for Lumec Candela Photocell Modification: \$_279.47_ EA

C: Traffic Signal Material Pricing FY 2017/18

Audible Ped Signal EA \$ 307.41 Lens 12" Glass Arrow* EA N/A Visor 12" Full Circle EA \$ 22.36 Backplate 12" 3 Section EA \$ 70.42 Lens 8" Glass* EA N/A Visor 12" Full Circle EA \$ 22.36 Backplate 12" 3 Section EA \$ 70.42 Lens 8" Glass* EA N/A Visor 8" Full Circle EA \$ 21.24 Lens TS 150 watt* EA N/A LED 8" Red Ball EA \$ 5.4.77 LED 8" Vellow Ball EA \$ 5.4.77 LED 8" Green Ball EA \$ 5.4.77 LED 12" Red Ball EA \$ 5.58.13 LED 12" Red Ball EA \$ 5.58.13 LED 12" Red Ball EA \$ 5.58.13 LED 12" Green Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 12" Red Barrow EA \$ 5.4.77 LED 12" Red Arrow EA \$ 5.4.77 LED 12" Red Arrow EA \$ 5.4.77 LED 12" Green Arrow* EA \$ 5.4.77 LED 12" Green Arrow* EA \$ 5.4.77 LED 12" Green Arrow EA \$ 5.4.77 LED 12" Fullow Arrow EA \$ 5.4.77	Item Description Unit Price	Unit		Price	
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LED 12" Yellow Ball EA \$ 58.13 LED 12" Green Ball EA \$ 58.13 LED 8" Red Arrow* EA N/A LED 8" Yellow Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 12" Red Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 11.78 Detector 222 EA \$ 11.78	LED 8" Green Ball	EA	\$		54.77
LED 12" Green Ball EA \$ 58.13 LED 8" Red Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 12" Red Arrow EA \$ 54.77 LED 12" Red Arrow EA \$ 54.77 LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 222 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 2.36 Hand Hold Cover Oval EA \$ 2.795	LED 12" Red Ball	EA	\$		58.13
LED 8" Red Arrow* EA N/A LED 8" Yellow Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 12" Red Arrow EA \$ 54.77 LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 33.54 Detector 224 EA \$ 111.78 Detector 222 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 30.18	LED 12" Yellow Ball	EA	\$		58.13
LED 8" Yellow Arrow* EA N/A LED 8" Green Arrow* EA N/A LED 12" Red Arrow EA \$ 54.77 LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 54.77 Flasher 204-170 EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 35.77 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 35.77 PPB Std EA \$ 49.19	LED 12" Green Ball	EA	\$		58.13
LED 8" Green Arrow* EA N/A LED 12" Red Arrow EA \$ 54.77 LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 54.77 Flasher 204-170 EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 224 EA \$ 112.78 Detector 224 EA \$ 63.72 Cabinet Light EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 30.18 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 27.95 PPB Microswitch (Cap/SW) EA \$ 35.77 <td>LED 8" Red Arrow*</td> <td>EA</td> <td></td> <td>N/A</td> <td></td>	LED 8" Red Arrow*	EA		N/A	
LED 12" Red Arrow EA \$ 54.77 LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 54.77 Flasher 204-170 EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 35.77 PPB Std EA \$ 35.77 PPB Std EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail)	LED 8" Yellow Arrow*	EA		N/A	
LED 12" Yellow Arrow EA \$ 54.77 LED 12" Green Arrow EA \$ 54.77 Flasher 204-170 EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 35.77 PPB Std EA \$ 35.77 PPB Std EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail)	LED 8" Green Arrow*	EA		N/A	
LED 12" Green Arrow EA \$ 54.77 Flasher 204-170 EA \$ 33.54 Detector 222 EA \$ 111.78 Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) EA \$ Standard Material Mark-Up Rate (for	LED 12" Red Arrow	EA	\$		54.77
Flasher 204-170	LED 12" Yellow Arrow	EA	\$		54.77
Detector 222 EA \$ 111.78 Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	LED 12" Green Arrow	EA	\$		54.77
Detector 224 EA \$ 184.44 DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 63.72 Socket TS Lamp* EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Flasher 204-170	EA			33.54
DC Isolator 242 EA \$ 63.72 Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 30.18 PPB Directional Plate EA \$ 134.14 PPB Directional Plate EA \$ 49.19 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 63.72 Socket TS Lamp* EA \$ N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Detector 222	EA			111.78
Cabinet Light EA \$ 7.82 GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Detector 224	EA			184.44
GFI Receptacle EA \$ 22.36 Hand Hold Cover Oval EA \$ 27.95 Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	DC Isolator 242	EA			63.72
Hand Hold Cover Oval EA \$ 27.95	Cabinet Light	EA			7.82
Fuse KTK EA \$ 7.82 Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA \$ N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	GFI Receptacle	EA			22.36
Load Switch EA \$ 30.18 PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Hand Hold Cover Oval	EA			27.95
PPB Std Complete Assembly EA \$ 134.14 PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Fuse KTK	EA			7.82
PPB Directional Plate EA \$ 27.95 PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Load Switch	EA			30.18
PPB Framework Side Mount EA \$ 49.19 PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	PPB Std Complete Assembly	EA			134.14
PPB Microswitch (Cap/SW) EA \$ 35.77 PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	PPB Directional Plate	EA			27.95
PPB Std EA \$ 63.72 Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	PPB Framework Side Mount	EA			49.19
Socket TS Lamp* EA N/A Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	PPB Microswitch (Cap/SW)	EA			35.77
Starter EA \$ 49.19 Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	PPB Std	EA	\$		63.72
Pricing includes Tax and Markup (as it appears on Monthly Invoice Detail) Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Socket TS Lamp*	EA		N/A	
Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Starter	EA	\$		49.19
Standard Material Mark-Up Rate (for items not listed above): Cost plus 15 %	Pricing includes Tax and Markup (as it appea	ars on Mo	nthly l	Invoice Deta	nil)
*Item is no longer used	Standard Material Mark-Up Rate (for items n	ot listed	above	e): Cost plus	<u>15</u> %
ream raine rainger dated.	*Item is no longer used.				



CITY OF EMERYVILLE

Location of Traffic Signals to be Maintained, FY 2017--2018

- 1 Powell Street and Watergate Office Towers
- 2 Powell Street and Christie Avenue
- 3 Powell Street and Hollis Street
- 4 Powell Street and Beaudry Street
- 5 Christie Avenue and Powell Street Plaza
- 6 Christie Avenue and Shellmound Way
- 7 Shellmound Street and Shellmound Way
- 8 Shellmound Street and Christie Avenue
- 9 Shellmound Street and Marriot Hotel
- 10 Shellmound Street and Ohlone Way
- 11 Shellmound Street and Ikea Exit
- 12 Shellmound Street and Ikea Entrance
- 13 40th Street and Horton Street
- 14 40th Street and Hollis Street
- 15 40th Street and Emery Street
- 16 40th Street and Adeline Street
- 17 Emery Street, Peralta Avenue and Mac Arthur Blvd.
- 18 Adeline Street and 43rd Street
- 19 Hollis Street and Park Avenue
- 20 Hollis Street and 53rd Street
- 21 Hollis Street and Stanford Avenue
- 22 Hollis Street and 59th Street
- 23 Hollis Street and 64th Street
- 24 Hollis Street and 65th Street
- 25 65th and Shellmound Street/Overland Avenue
- 26 Christie Avenue Pedestrian Signal at PPP

EXHIBIT "D"