

PUBLIC WORKS CONTRACT (Formal Bid)

Lighthouse Avenue Adaptive Traffic Signal Control System Project (37n1225, 37n1444, 35c1428)

THIS AGREEMENT, hereinafter referred to as the "Agreement", made and entered into this 19 day of September 2016, by and between the CITY OF MONTEREY, a municipal corporation, hereinafter referred to as the "City", and SIEMENS INDUSTRY, INC., ITS hereinafter referred to as the "Contractor";

WITNESSETH:

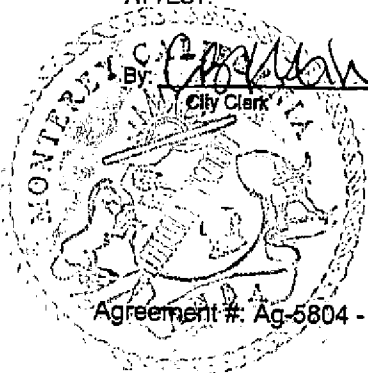
WHEREAS, the Council of the City has awarded a contract to the Contractor for performing the work hereinafter described in accordance with the City's Plans and Specifications and Contractor's sealed proposal;

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

- 1. SCOPE OF WORK. The Contractor shall perform all of the work and furnish all labor, materials, equipment and transportation necessary for Lighthouse Avenue Adaptive Traffic Signal Control System Project. Work is to be as set out in the Plans and Specifications on file in the Office of the City Engineer and as in the Contractor's Proposal attached hereto, dated July 12, 2016, for the Base Bid only (Items 1 through 11) in an amount not to exceed Five Hundred and Nine Thousand and Twenty Nine dollars (\$509,029.00) plus a sum of up to 10% for such contingencies as the City Manager, or his designee, deems appropriate.
2. TIME OF PERFORMANCE. The work under this contract shall commence within fourteen (14) calendar days from the effective date of the Notice to Proceed and shall be completed on or before the expiration of Two Hundred and Fifty (250) calendar days from the effective date of the Notice to Proceed.
3. If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force without being impaired or invalidated in any way.
4. Contractor agrees that in the performance of this Agreement, it will comply with all applicable state, federal and local laws, codes and regulations. This Agreement shall be governed by and construed in accordance with the laws of the State of California and the City of Monterey.
5. In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1735.5 at the time the contract is awarded.
6. The Monterey City Council awarded this contract on August 16, 2016 by Resolution 16-148 C.S.
7. This Agreement shall consist of this Public Works Contract document and the following items, all of which are on file in the office of the City Clerk and are incorporated herein and made a part hereof by reference:
A. Plans and Specifications
B. Accepted Proposal
C. Performance Bond
D. Payment Bond (labor and materials)
E. Non-Collusion Declaration
F. Debarment and Suspension Certification
G. Certification(s) of Good Faith Effort to Hire Local Residents

IN WITNESS WHEREOF, said Contractor and said City have hereunto set their hands, all on the day and year first above written.

ATTEST:

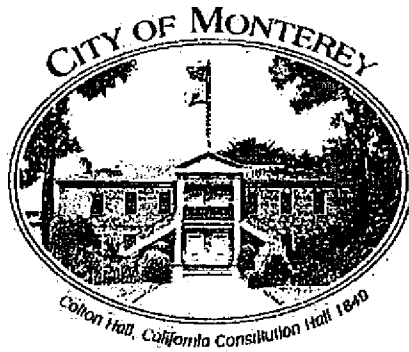


By: [Signature] City Clerk

CITY OF MONTEREY: By: [Signature] City Manager, or his designee Hans Uslar Assistant City Manager

SIEMENS INDUSTRY, INC., ITS: By: [Signature] Authorized Signatory STEVEN TEAL, DIRECTOR OF SERVICE





CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS

SPECIFICATIONS

FOR

**LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM
(37N1225, 37N1444)**

FORMAL BID

This is a Neighborhood Improvement Project

TECHNICAL SPECIFICATIONS APPROVED BY:

Kevin Agulqui, PE
ENGINEER

DATE: 06/13/2016

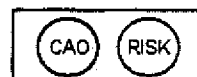
APPROVED FOR PROFESSIONAL
STEVE J. WITTRIP
CITY ENGINEER
DATE: 6/13/16
NO. 61820
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA



Master Specification Revision: 06/21/2015
Project Specification Revision: 05/25/2016



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LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

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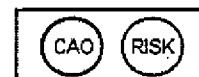
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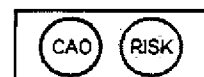
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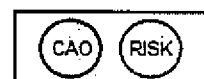
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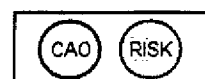
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**CITY OF MONTEREY
DEPARTMENT OF PUBLIC WORKS
MONTEREY, CALIFORNIA**

PART I: NOTICE TO CONTRACTORS

Sealed unbound bid proposals will be received in the office of the City Clerk, attention Finance Director, 580 Pacific Street, Room 6, City of Monterey, California, until 2:00 p.m., July 12, 2016, at which time they will be publicly opened and read in the City Council Chambers, for furnishing all labor, materials, tools, equipment and incidentals for the construction of **Lighthouse Avenue Adaptive Traffic Control System (37n1225, 37n1444)** in Monterey, California, in accordance with these plans and specifications.

In general, the work consists of, but is not limited to, furnishing and installing an adaptive traffic control system along the Lighthouse Avenue corridor consisting of vehicle detection, including wireless pavement sensors, video detection cameras, equipment in controller cabinets, associated equipment cabling in existing conduits; installing City-furnished traffic controller cabinets and controllers; removing and salvaging existing cabinets and foundations, furnishing, installing and integrating central computers and servers including all hardware, software, cabling and licenses for a complete adaptive traffic control system.

At the time of the bid opening, the successful Bidder must be legally entitled to perform contracts requiring a Class C-10 Contractor's license. Any Bidder or contractor not so licensed shall be subject to all penalties imposed by law including, but not limited to, any appropriate disciplinary action by the Contractors' State License Board.

All electricians performing work under this contract, as defined as making electrical connections at or above 100 volt-amperes, shall be certified pursuant to Section 3099 et seq. of the California Labor Code. Contractor shall submit proof of certification, or proof that the requirements of Section 3099.4 (a) of the California Labor Code have been met, prior to electricians commencing work under this contract.

SPECIFICATIONS AND BID FORMS

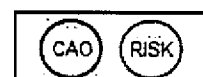
Specifications, including instructions to Bidders and all necessary contract documents and forms, are available on-line from the City's website located at <http://monterey.org/en-us/Business/Bids-and-RFPs>. In order to download project documents, you must register as a document (plan) holder on EbidBoard at no cost through the City web site. Potential bidders, subcontractors and suppliers are responsible for reviewing the complete bidding documents, including all addenda, prior to submitting their bid. They are also advised to check the City's web site noted above periodically and prior to submitting their bid. Submit **unbound** bid proposals (see Appendix A) in sealed envelopes clearly marked on the exterior with the project name, bid opening date and bid opening time for which the bid proposal is being submitted. When submitting a bid in a sealed envelope within another sealed envelope, such as an envelope provided by an overnight carrier, be sure to also mark the exterior of the outermost envelope or overnight carrier's envelope clearly with the project name, bid opening date and bid opening time.

NON-MANDATORY PRE-BID CONFERENCE

A non mandatory pre-bid conference is scheduled for 10:00 on June 23, 2016 at City Hall, 580 Pacific Street, Monterey, CA 93940. This conference will allow bidders to review and inspect project conditions.

PREVAILING WAGES

Local prevailing wage rates shall be paid in accordance with Sections 1770, 1773, and 1782, as amended, of the California Labor Code, and Section 28-20(e) of the Monterey City Code, on all public works construction contracts exceeding twenty-five thousand dollars (\$25,000) and all public works contracts for alteration, demolition, repair or maintenance work exceeding fifteen thousand dollars (\$15,000). Local wage rates may be obtained from City of Monterey, Engineering Division Office, City Hall, Monterey, CA, (831-646-3921) or the Director, Department of Industrial Relations, State of California, 455 Golden Gate Avenue, San Francisco, California (415-703-4774). Any Bidder contractor awarded a public works contract that uses a craft or classification not in the general prevailing wage determinations may be required to pay the wage rate most closely related in the general determinations, effective at the time of the call for bids.



In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code. **See Part III of these Specifications for additional requirements.**

In accordance with the provisions of Section 1773.3 of the Labor Code, the City of Monterey shall provide notice to the Department of Industrial Relations (DIR) of the award of any public works contract subject to the requirements of Chapter 1 of the Labor Code, within five days of the award. The notice shall be transmitted electronically in a format specified by the DIR (see <https://www.dir.ca.gov/pwc100ext/>) and shall include the name of the contractor, any subcontractor listed on the successful bid, the bid and contract award dates, the contract amount, the estimated start and completion dates, job site location, and any additional information the DIR specifies that aids in the administration and enforcement of this chapter.

BID BOND

Cash, a certified check or cashier's check, payable to the order of the City of Monterey, or a satisfactory bid bond, in original form (no fax or photocopy shall be accepted), executed by the Bidder and an acceptable surety in an amount equal to ten percent (10%) of the bid amount shall be submitted with each bid.

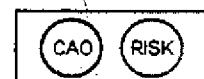
BID VALIDITY

No Bidder may withdraw their bid for a period of **ninety (90) days** from the date of opening of the bids for the purpose of reviewing the bids and investigating the qualifications of Bidders, prior to awarding of the contract. Any bid withdrawal before the expiration of such time period shall result in the forfeiture of Bidder's Bid Bond. In the event of a bid mistake resulting from a clerical error made by the Bidder, withdrawal of such bid without forfeiture of the Bid Bond may only be allowed if the criteria set forth in California Public Contracts Code Sec. 5103 are met and the procedures set forth therein are followed; any such approval by City of bidders request to withdraw bid shall be at the sole discretion of the City.

RESPONSIBLE BIDDER

Responsible bidder as it pertains to this contract shall be as follows:

1. **Standards of Responsibility:** The City may reject bids on the basis of non-responsibility. A responsible bidder is one that has the capacity in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance of the contract. Factors to be considered in determining whether the standard of responsibility has been met include whether a bidder has:
 - a. The appropriate financial, material, equipment, facility, capacity (adequate workforce to complete the job in a timely fashion) and personnel resources, including all required certifications, licenses, and expertise necessary to indicate its capacity to meet all contractual requirements, including the following specific requirements:
 - i. Adequate workforce to meet multiple critical work schedules at once;
 - ii. Ability to start projects on the commencement dates set forth by the City and satisfactorily complete them within the City's stated time limits;
 - b. A satisfactory record of performance, including but not limited to any prior work performed by bidder for the City or other agency;
 - c. Evidence of bidder's ability to provide the required bonding and insurance capacity. Apparent low bidder with cash or cashier's check as bid bond is required to submit a pre-qualification letter from an acceptable surety or cashier's check as performance bond within fourteen (14) calendar days of the bid opening;
 - d. A satisfactory record of integrity, diligence, and professionalism in the specific contract work;



- e. The legal qualifications to contract with the City; and
 - f. Supplied all information requested by the City in connection with the inquiry concerning responsibility.
2. Information Pertaining to Responsibility. The prospective contractor shall supply any information requested by the City concerning the responsibility of such contractor, including the qualifications and performance records of contractor's employees and proposed subcontractors. If the prospective contractor fails to supply the requested information, the City shall base the determination of responsibility in award of the Contract upon any available information, or may find the prospective contractor non-responsible on the basis of its failure to provide the requested information to the City.
 3. The City's Duty Concerning Responsibility. Before awarding a contract, the City must be satisfied that the prospective contractor is responsible. The City may use the information provided by prospective contractor as well as information obtained from other legitimate sources, including City staff's own experience with the prospective contractor and prospective contractor's employees.
 4. Written Determination of Non-responsibility Requirements. If a bidder or offeror who otherwise would have been awarded the Contract is found non-responsible, a written determination of non-responsibility setting forth the basis determination shall be prepared by the City and sent to the non-responsible bidder or offeror. The bidder or offeror shall have an opportunity to appeal the City's determination on non-responsibility.

BID REJECTION

The City reserves the right to reject any or all bids as the best interests of the City may dictate and, to the extent permitted by law, waive any irregularity in any bid. If there is any reason for believing that collusion exists among the bidders, the City may reject any or all bids.

UNBALANCED BID

Bids which are obviously unbalanced may be rejected. For the purposes of this section, an unbalanced bid is one that (a) has unit prices based on nominal prices for some items of work and enhanced unit prices for other items of work, and (b) the amount and manner in which the unit prices are distributed is not reflective of the true cost to perform the work. Any unbalanced bid may be rejected by the City whether or not the result of the unbalanced bid increases the cost of the project to the City.

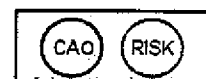
BIDDER PROTEST

All bid protests shall follow the procedures set forth in Monterey City Code §28-26 et seq., and the City's Purchasing Manual, both of which are available on-line on the City's website located at <http://monterey.org>. Payment of a bid protest filing fee in the amount set forth in the City Code and Purchasing Manual shall be prerequisite to the filing of any such protest.

INTERPRETATION OF SPECIFICATIONS

Should a Bidder be in doubt as to the true meaning of any item in the Plans or Specifications or should Bidder discover items containing discrepancies or omissions, the Engineer shall be immediately notified. All requests for interpretations must be submitted ninety-six (96) hours before bid opening. All questions must be directed to the Project Manager Andrea Renny, Associate Civil Engineer, by emailing engineering-admin@monterey.org. The project name must be referenced in all communication.

If found necessary, interpretation or correction will be made by written addendum, a copy of which will be sent to each plan holder. Such addenda are to be considered as part of the contract documents, and the Bidder shall acknowledge this condition by listing each addendum by number in his bid proposal. The Engineer shall not be held responsible for any oral interpretations or instructions. No addenda can be issued less than forty-eight (48) hours before bid opening without an accompanying bid time extension. The Engineer reserves the right to make decisions on extending the bid period.



DEFINITIONS

For the purposes of this document, the following definitions shall apply:

CITY: The term City refers to and indicates the City of Monterey, Monterey County, State of California.

ENGINEER OR CITY ENGINEER The term Engineer or City Engineer refers to and indicates the Public Works Director of the City of Monterey or his duly authorized representative.

BIDDER: Party submitting a bid for consideration by the City of Monterey.

CONTRACTOR: The term Contractor refers to and indicates the party or parties contracting to perform the work to be done in pursuance of this contract and specifications.

COUNCIL OR CITY COUNCIL: The City Council of the City of Monterey.

PLANS: The project plans referred to herein.

SPECIAL PROVISIONS: Part IV of these Specifications.

SPECIFICATIONS: This document, in its entirety.

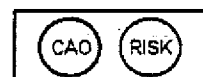
STANDARD SPECIFICATIONS: Specifications entitled "State of California, Department of Transportation, Standard Specifications" of latest publication on file in the office of the City Clerk of the City of Monterey.

STANDARD PLANS: Plans entitled "State of California, Department of Transportation, Standard Plans" of latest publication.

ADA: Americans with Disabilities Act of 1990, Titles II and III, revised September 15, 2013.

CBC: California Building Codes, latest edition as adopted by the City of Monterey.

IBC: International Building Codes, latest edition.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

CITY OF MONTEREY

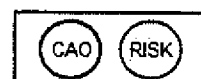
PART II: PROPOSAL

To the Honorable City Council
 City of Monterey
 City Hall
 Monterey, California

The undersigned declares to have carefully examined the location of the proposed work, that the Plans and Specifications as set forth herein have been examined, and hereby proposes to furnish all materials and equipment and do all the work required to complete the said work in accordance with said Plans and Specifications for the lump sums and unit prices set forth in the following schedule:

BASE BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
1	Mobilization and Demobilization	1	LS		
2	Storm Water Compliance	1	LS		
3	Traffic Control	1	LS		
4	Furnish and Install Split, Cycle and Offset Optimization Technique SCOOT Adaptive System	1	LS		
5	Lighthouse Avenue and Hoffman Avenue	1	LS		
6	Lighthouse Avenue and McClellan Avenue	1	LS		
7	Lighthouse Avenue and Drake Avenue	1	LS		
8	Lighthouse Avenue and Dickman Avenue	1	LS		
9	Lighthouse Avenue and Reeside Avenue	1	LS		
10	Lighthouse Avenue and Del Monte Avenue	1	LS		
11	Record Drawings	1	LS		
TOTAL BASE BID (ITEMS 1 THROUGH 11) (In words) <hr/> <hr/>					(In Figures) \$



ADDITIVE ALTERNATIVE 1 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
12	Lighthouse Avenue and David Avenue	1	LS		
TOTAL ALTERNATIVE 1 BID (ITEM 12) (In Words)					(In Figures)
_____					\$

ADDITIVE ALTERNATIVE 2 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
13	Lighthouse Avenue and Irving Avenue	1	LS		
TOTAL ALTERNATIVE 2 BID (ITEM 13) (In Words)					(In Figures)
_____					\$

ADDITIVE ALTERNATIVE 3 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
14	Lighthouse Avenue and Prescott Avenue	1	LS		
TOTAL ALTERNATIVE 3 BID (ITEM 14) (In Words)					(In Figures)
_____					\$

GRAND TOTAL BID (BASE BID PLUS ADDITIVE ALTERNATIVES 1-3 (ITEMS 1-14)) (In Words)					(In Figures)
_____					\$

BASIS OF AWARD

Award of contract, if any be made, shall be made to the Contractor with the lowest responsive responsible bid based on the Grand Total Bid (Base Bid plus Additive Alternatives 1-3 (Items 1 through 14)).



BID ITEM DESCRIPTIONS: BASE BID

This section covers details of individual items of the Bid Schedule to insure that it is clear as to what is to be included in each item. The costs submitted with each item are to reflect the work to be completed under that bid item only. Payment of all the following items shall be for actual materials installed on the job and for actual work accomplished.

1. Mobilization and Demobilization

Measurement and payment for this item shall be on a lump sum (LS) basis. The lump sum cost shall pay for all the costs of mobilization and demobilization for items awarded. The work shall include, but not be limited to, preparatory and cleanup work necessary for performance of the work in accordance with the Standard Specifications, Plans and Specifications, and as directed by the Engineer. This item also includes the movement of construction personnel, equipment, supplies and incidentals to and from the project site, and all other work and operations, which must be incurred prior to the beginning of and after the end of construction work. This item shall also include obtaining bonds, insurance policies, licenses, and permits required by the contract documents, project meetings, coordination and all related administrative costs for this Project. Partial payment of this bid item shall be based on percent of this item completed and shall be contingent upon the Contractor's furnishing and the City's acceptance of: 1) the schedule of values, 2) the construction schedule, 3) Traffic Control Plans, 4) Quality Control Plan, 5) all submittals and shop drawings, 6) electrician certifications, 7) subcontractor's Certificate of Good Faith Effort to hire local, and 8) fringe benefit summary statement. Also included in this bid item is maintaining the project site, regular cleanup and final cleanup, temporary fencing and staging area, if any.

2. Storm Water Compliance

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment and incidentals necessary for the implementation of the requirements under "Environmental/Pollution Prevention Requirements" of these Specifications, the General Construction Notes of the Plans, and as directed by the City. This work also includes compliance with all applicable rules, regulations, ordinances and statutes. Also included is providing and installing BMPs, proper maintenance and inspection of all BMPs installed for the project, removal of BMPs, and clean up and proper disposal of any environmental pollutants due to construction related activities.

3. Traffic Control

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals necessary to maintain vehicular traffic for public use during performance of the work, including all related construction area sign placement and maintenance. This work also includes the preparation, submittal and implementation of the traffic control plan(s), establishing traffic detour(s), traffic control device placement and maintenance, flagging, barriers, temporary drainage facilities, temporary access, temporary asphalt tapers, protection of adjacent existing improvements from damage or staining, removal of the detour(s) upon direction of the Engineer, and restoration of all areas affected by construction, maintenance, use, and removal of the detour in accordance with the Standard Specifications, Plans and Specifications, and as directed by the Engineer.

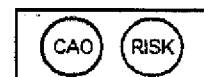
4. Furnish and Install Split, Cycle and Offset Optimization Technique (SCOOT) Adaptive System

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in furnishing and installing all SCOOT servers (hardware and software), system integration, validation and testing, warranties, coordination and correspondence between the Contractor and the System Vendor, training and licenses for a complete and fully operational adaptive systems at all adaptive system intersections along the Lighthouse Avenue corridor.

5. Lighthouse Avenue and Hoffman Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and



incidentals for all the work including the installation of new detector lead-in cables, fabric innerduct, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational loop detection system.

6. Lighthouse Avenue and McClellan Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of the SCOOT adaptive system at this intersection.

7. Lighthouse Avenue and Drake Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

8. Lighthouse Avenue and Dickman Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

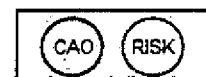
The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the integration, configuration, and testing of the existing video detection system including adjustment of the existing video detection cameras, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

9. Lighthouse Avenue and Reeside Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video



detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

10. Lighthouse Avenue and Del Monte Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing and new conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the removal and salvaging of the existing City controller cabinet.

The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of the City furnished Type P cabinet and controller, conduits, cabling, re-wiring, splicing, terminations, cabinet equipment relocation, and any and all connections and terminations from the existing cabinet to the new cabinet complete and in place for a fully operational cabinet and controller system.

This work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of new conduit complete and in place and as shown on the plans and as directed by the Engineer.

This work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of new pull boxes complete and in place and as shown on the plans and as directed by the Engineer.

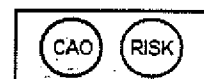
11. Record Drawings

Measurement and payment for this item shall be on a lump sum (LS) basis for furnishing to the City a complete set of Record (As-Built) Drawings.

BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 1

12. Lighthouse Avenue and David Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including



the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 2

13. Lighthouse Avenue and Irving Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of the City furnished Type M (stretch) cabinet and controller on existing foundation, conduits, cabling, re-wiring, splicing, terminations, cabinet equipment relocation, and any and all connections and terminations from the existing cabinet to the new cabinet complete and in place for a fully operational cabinet and controller system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the salvaging of the existing City controller cabinet.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric inner duct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

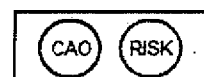
BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 3

14. Lighthouse Avenue and Prescott Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.



The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

ANCILLARY ITEMS

Payment for any items that do not have instruction indicating where expenses for said items are to be accounted for are to be considered ancillary to the work and accounted for in every one of the lump sum or unit price items and no additional compensation will be allowed therefor.

LUMP SUM PRICE BREAKDOWN

Immediately after award of the contract, the contractor shall submit a cost breakdown list to the Engineer for all Lump Sum Bid items. The list shall consist of major elements of work that make up the item and shall be used for determining progress pay estimates.

BID CLARIFICATION

Pursuant to the provisions of the California Public Contract Code Section 20103.8, City reserves the option to award any or all the additive bid items in addition to the original contract after the lowest responsive responsible Bidder has been determined, should the City later obtain additional funding for additive alternatives not awarded with the original contract.

For responsible bidder as it pertains to this contract, see Part I, Responsible Bidder.

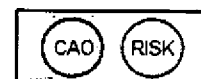
Unit and lump sum prices shall be for items in place, as shown on the Plans, including all labor, materials, equipment, taxes, and incidentals necessary for a complete job.

Whenever unit prices are required and there is an incorrect extension thereof, the unit price correctly extended shall prevail and the total bid shall be corrected to reflect the correct extension. If a bid item amount is zero, enter zero. If a bid item is included elsewhere, enter "included". Do not enter "N/A" into the Bid Schedule.

The foregoing quantities are approximate only, being given as a basis for comparison of bids, and the City of Monterey does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of work by twenty-five percent (25%) or to omit portions of the work as may be deemed necessary by the Engineer.

Bidders may withdraw or revise their bid personally, or upon a written or telegraphic request, or by FAX (the City's FAX number is 646-3702), at any time prior to the hour set for the opening of bids, but not thereafter; however, the City shall not accept faxed copies of bid bonds, affidavits or any other documents where an original document or signature is required by these Specifications. Bids may not be withdrawn for the time period specified in **BID VALIDITY** of Part I.

The **Noncollusion Declaration** included in this document shall be executed and submitted with each bid. The **Local Hire Certification** included in this document shall be executed and submitted with each bid, except in the following cases: 1) informal bids (i.e., under \$65,000); 2) whenever a state or federal law or regulation applicable to a particular contract prohibits the provision of a local hire requirement; or 3) whenever the City, in accordance with the requirements of the City Code or state law, determines that the contract is necessary to respond to an emergency which endangers the public health, safety, or welfare; or 4) whenever the City determines that a suitable pool of persons providing specialized skills does not exist locally for a specific public works project.



DECLARATION OF BIDDER RE: LICENSE QUALIFICATIONS

Bidder certifies he/she possesses a license in accordance with a State Act providing for the registration of Contractors. License No.: _____, Class: _____, Expiration date: _____.

In accordance with California Labor Code (SB 854), bidder certifies that he/she is registered with the Department of Industrial Relations. Registration No.: _____.

ALL OF THE INFORMATION CONTAINED IN THIS BID PROPOSAL IS TRUE AND CORRECT AND IS EXECUTED UNDER PENALTY OF PERJURY IN

_____ COUNTY, CALIFORNIA, ON _____, 201_____.

Name of Firm: _____

Address: _____

Telephone: _____

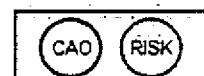
Email: _____

(If firm is an individual, so state. If a firm or co-partnership, state the firm name and give the names of person authorized to execute the declaration on its behalf.)

FAILURE TO PROVIDE ANY OF THE INFORMATION REQUIRED HEREIN INCLUDING CONTRACTOR SIGNATURES MAY RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE

Signature

Printed Name and Title



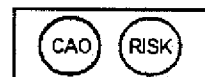
ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall list below any and all addenda issued for this project. Failure to list issued addenda will result in a non-responsive bid:

ADDENDA (Please acknowledge with Initials)

DATE RECEIVED

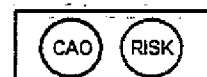
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____



BIDDER'S STATEMENT OF QUALIFICATIONS

The Bidder shall list below a minimum of three (3) jobs of a similar nature recently completed by Bidder's organization:

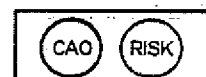
Project Name	Owner Name	Address	Telephone Number/Email	Contact Name



SUBCONTRACTOR'S LIST

The Bidder shall list below the name, the location of the place of business, and the California contractor license number of any subcontractors proposed to perform work or labor or render service on this project, or a subcontractor licensed by the State of California who will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications of this project, whose work is in excess of one-half of 1 percent of the Bidder's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater:

Name of Subcontractor	California Contractor License Number	California DIR Registration Number	Location of Place of Business	Trade or Portion of Work



**NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID**

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, disqualification, or determination of ineligibility by any state, federal, or local agency;
- Has not been suspended, debarred, voluntarily excluded, disqualified or determined ineligible by any state, federal, or local agency within the past 3 years;
- Does not have a proposed debarment or disqualification pending; and
- Has not be indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

I declare under penalty of perjury that the foregoing is true and correct and that this certification is signed this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



LOCAL HIRING REQUIREMENT

All Contractors who submit bids, or proposals, to construct or provide work on any City of Monterey Public Works project, or for any other Public Works construction, or improvement, on City property must comply with Monterey City Code Article 2 of Chapter 28, which sets forth the requirements regarding the Local Hiring Requirement for Public Works Projects. A copy of Monterey's Local Hiring Requirement Ordinance is available at the City Clerk's Office; Bidders are responsible for familiarizing themselves with the contents thereof before signing the certifications required below.

Among other requirements, this ordinance requires the Contractor to promise to make a good-faith effort to hire qualified individuals who are residents of the Monterey Bay Area (Monterey, Santa Cruz and San Benito Counties), in sufficient numbers so that no less than fifty percent (50%) of the Contractor's total construction work force, including subcontractor work force, measured in labor work hours, is comprised of Monterey Bay area residents. This same requirement applies to all subcontractors.

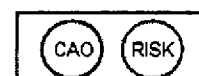
Every Bidder must complete and sign under penalty of perjury a Certification of Good-Faith effort to Hire Monterey Bay Area Residents, on the form provided, and submit said Certification with the sealed bid no later than the date and time of the bid opening. Bidder shall attach to the Certification documentary evidence supporting Bidder's promise to meet, or to make a good-faith effort to meet, the local hiring goal.

Contractor shall include in each and every subcontract relating to the project the requirement that the subcontractor promises to make a good faith effort to hire qualified individuals who are residents of the Monterey Bay Area. Contractor shall be responsible for subcontractor's compliance.

Prior to submitting bids, Bidders shall ensure that any and all subcontractors listed in their bids are not disqualified at that time pursuant to Section 28-78 of the City ordinance referenced above. Prospective contractors may consult the list, available from the City Clerk, of contractors and subcontractors, if any, who are currently disqualified.

The local hiring requirement shall not apply under the following circumstances:

- (a) Informal Bids, or
- (b) Whenever a state or federal law or regulation applicable to a particular contract prohibits the provision of a local hire requirement; or
- (c) Whenever the City, in accordance with the requirements of the Code or state law, determines that the contract is necessary to respond to an emergency which endangers the public health, safety, or welfare; or
- (d) Whenever the City determines that a suitable pool of persons providing specialized skills does not exist locally for a specific public works project. An example would be marine-related pile drivers.



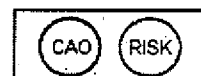
**CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Prime Contractor – To be Submitted with Bid)**

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the company on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



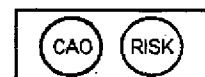
**CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Subcontractor – To be Completed by Subcontractor After Bid is Awarded)**

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place of residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the contractor on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



BID BOND
(To be Submitted with Bid)

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto the City of Monterey ("the Obligee") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as: **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**

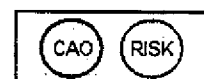
WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the Basis of Award or grand total of the base bid.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for ninety (90) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and fees incurred by the Obligee in connection therewith, including without limitation, attorney's fees.

[CONTINUED NEXT PAGE]



IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20____ by their duly authorized agents or representatives.

(Bidder/Principal Name)

By: _____
(Signature)

(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

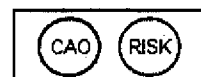
(Contact Name)

(Street Address)

(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

(Email address)



CERTIFICATION OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

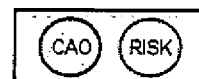
"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- a. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- b. By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

2. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

(Contractor Name)

By: _____
(Signature)



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PART III: GENERAL PROVISIONS
FORMAL BID (\$65,000 and over)

BIDDING**JOB SITE AND DOCUMENT EXAMINATION**

The bidder is required to thoroughly examine the job site, Plans and Specifications including Contract Form (See Part III, Page 2) for the work contemplated, and it will be assumed that the bidder has investigated and is satisfied as to the requirements of the plans and specifications, including the contract. It is mutually agreed that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

BID DOCUMENT COMPLETION

Proposals to receive consideration shall be made in accordance with the following instructions:

1. The proposal shall be made upon the form provided therefor with all items filled out (Appendix A of these specifications). The completed form must be without interlineations, alterations, or erasures. All submitted documents must be in original form (no photocopies or faxes).
2. Each bid shall be accompanied by cash, a cashier's check, a certified check, or a bidder's bond executed by the bidder and an acceptable surety in original form, or any negotiable instruments in original form that are not cancelable amounting to ten percent (10%) of the bid, payable to the City of Monterey. The amount so posted shall be forfeited to the municipality if the bidder does not, within fifteen (15) calendar days after written notice that the contract has been awarded to said bidder, enter into a contract with the municipality for the work.

The City shall have the right to hold all bid bonds until award of the contract. However, the Finance Director may order the return of all bid bonds except that of the two (2) lowest bidders prior to the award.

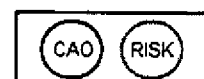
CONTRACT AWARD AND EXECUTION**CONTRACT AWARD**

The contract shall be awarded, if an award is made, to the lowest responsive responsible bidder as defined in Part II, Bid Clarification, of these specifications, within ninety (90) calendar days from the date bids are publicly opened, examined and declared unless a different bid validity period is specified in Part I, Bid Validity. If the award is not made within the specified period, then all of the bids submitted shall be deemed to have been rejected by the legislative body. Bid items included in total contract award will vary depending on available funding.

CONTRACT EXECUTION

A contract shall not be deemed to have been made between the Contractor and the City of Monterey until all of the following steps have been completed:

1. Award of the contract by the City Council,
2. Within fifteen (15) calendar days after written notice that a contract has been awarded to him (Notice of Award), the Contractor shall submit two (2) signed original contracts, required bonds or alternative security, evidence of insurance that conforms to the contract, and City of Monterey Business License or evidence of application for said license.
3. Upon approval of the foregoing documents, the City will execute the contract and return an original to the Contractor.



SAMPLE PUBLIC WORKS CONTRACT (Formal Bid)

LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

THIS AGREEMENT, hereinafter referred to as the "Agreement", made and entered into this ___ day of _____ 201___, by and between the CITY OF MONTEREY, a municipal corporation, hereinafter referred to as the "City", and [INSERT CONTRACTOR NAME] hereinafter referred to as the "Contractor";

WITNESSETH:

WHEREAS, the Council of the City has awarded a contract to the Contractor for performing the work hereinafter described in accordance with the City's *[Plans and]* Specifications and Contractor's sealed proposal;

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

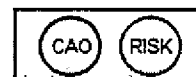
1. **SCOPE OF WORK.** The Contractor shall perform all of the work and furnish all labor, materials, equipment and transportation necessary for **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM**. Work is to be as set out in the *[Plans and]* Specifications on file in the Office of the City Engineer and as in the Contractor's Proposal attached hereto, dated *[Insert Month Day, Year]*, in an amount not to exceed *[insert amount in words]* dollars (\$###,###.00) plus a sum of up to 10% for such contingencies as the City Manager, or his designee, deems appropriate.
2. **TIME OF PERFORMANCE.** The work under this contract shall commence within fourteen (14) calendar days from the effective date of the Notice to Proceed and shall be completed on or before the expiration of *[insert no. of construction days (##)]* calendar days from the effective date of the Notice to Proceed.
3. If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force without being impaired or invalidated in any way.
4. Contractor agrees that in the performance of this Agreement, it will comply with all applicable state, federal and local laws, codes and regulations. This Agreement shall be governed by and construed in accordance with the laws of the State of California and the City of Monterey.
5. In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1735.5 at the time the contract is awarded.
6. The Monterey City Council awarded this contract on *[Month Day, Year]* by Resolution *[##-###]* C.S.
7. This Agreement shall consist of this Public Works Contract document and the following items, all of which are on file in the office of the City Clerk and are incorporated herein and made a part hereof by reference:

A. <i>[Plans and]</i> Specifications	E. Non-Collusion Declaration
B. Accepted Proposal	F. Debarment and Suspension Certification
C. Performance Bond	G. Certification(s) of Good Faith Effort to Hire
D. Payment Bond (Labor and Materials)	Local Residents <i>[Delete if project is federally funded]</i>

IN WITNESS WHEREOF, said Contractor and said City have hereunto set their hands, all on the day and year first above written.

ATTEST: CITY OF MONTEREY: [INSERT CONTRACTOR NAME]:

By: _____ By: _____ By: _____
City Clerk City Manager, or his designee *[Insert Name, Title]*



PERFORMANCE BOND

BOND NO. _____

PREMIUM: _____

WHEREAS, The _____, (hereinafter designated as "Obligee") and _____ (hereinafter designated as "Principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, and identified as project _____ is hereby referred to and made a part hereof; and

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

NOW, THEREFORE, We, the principal and _____ as surety, are held and firmly bound unto the hereinafter called "The Obligee," in the penal sum of _____ dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by county in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

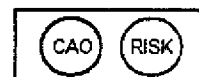
The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named, on

By _____
PRINCIPAL

By: _____
PRINCIPAL

By: _____
ATTORNEY-IN-FACT



PAYMENT (LABOR AND MATERIALS) BOND

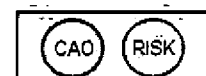
BOND NO.: _____

KNOW ALL MEN/WOMEN BY THESE PRESENT that we, _____ as Principal (also referred to herein as "CONTRACTOR"), and _____ as Surety, are held and firmly bound unto City of Monterey, hereinafter called "OWNER," in the sum of _____ Dollars (\$ _____), for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into the annexed Contract with the City of Monterey for the **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM**, in accordance with OWNER's Call for Bids documents and Principal's Bid Dated _____, and to which reference is hereby made for all particulars, and is required by said City of Monterey to give this bond in connection with the execution of said Contract;

NOW, THEREFORE, if said CONTRACTOR, its Subcontractors, its heirs, executors, administrators, successors, or assigns, shall fail to pay (a) for any materials, provisions, equipment, or other supplies used in, upon, for or about the performance of the WORK contracted to be done under the Contract, or (b) for any work or labor thereon of any kind contracted to be done under the Contract, or (c) for amounts due under the Unemployment Insurance Code with respect to work or labor performed pursuant to the Contract, or (d) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the CONTRACTOR and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to such work and labor, in each case, as required by the provisions of Sections 9550-9566 inclusive, of the Civil Code of the State of California and acts amendatory thereof, and sections of other codes of the State of California referred to therein and acts amendatory thereof, and provided that the persons, companies, corporations or other entities so furnishing said materials, provisions, provender, equipment, or other supplies, appliances, or power used in, upon, for, or about performance of the Work contracted to be executed or performed, or any person, company, corporation or entity renting or hiring implements or machinery or power for or contributing to said Work to be done, or any person who performs work or labor upon the same, or any person, company, corporation or entity who supplies both work and materials therefor, shall have complied with the provisions of said laws, then said Surety will pay in full the same in an amount not exceeding the sum hereinabove set forth and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee, as shall be fixed by the Court. This bond shall inure to the benefit of any and all persons named in Section 9100 of the Civil Code of the State of California so as to give a right of action to them or their assigns in any suit brought upon this bond.

PROVIDED, that any alterations in the WORK to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of said Contract Documents, shall not in any way release said CONTRACTOR or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract Documents release either said CONTRACTOR or said Surety, and notice of such alterations or extensions of the Agreement is hereby waived by said Surety.



IN WITNESS WHEREOF, the Principal and the Surety have executed this instrument in duplicate this

_____ day of _____, 20_____.

Surety

Principal

By: _____

By: _____

Print Name

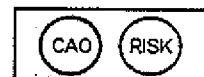
Print Name/Title

Address

(_____) _____
Telephone Number

(_____) _____
FAX Telephone Number

NOTARIAL CERTIFICATE OF ATTORNEY IN FACT AND SEAL OF SURETY MUST BE ATTACHED.



SCOPE OF WORK

INTENT

The work to be done consists of furnishing all labor, materials, methods and processes, implements, tools, equipment, incidentals and machinery except as otherwise specified, which are necessary and required to complete the contract in a satisfactory and workmanlike manner.

The intent of the plans and specifications is to prescribe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the contract. Where the plans or specifications describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the best quality are to be used.

CHANGES AND EXTRA WORK

Changes and extra work shall be in accordance with Section 4-1.05, Changes and Extra Work, of the Standard Specifications.

The Engineer reserves the right to make such alterations, deviations, additions to or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any items or portion of the work, as may be deemed by the Engineer to be necessary or advisable, and to require such extra work as may be determined by the Engineer to be necessary for the proper completion or construction of the whole work contemplated.

When special conditions arise, such as mitigation of unforeseen conditions or additional work, the work shall be negotiated as "extra work" in accordance with the Standard Specifications. Approved Change Orders shall describe the changes or extra work; contract time adjustments and payment basis for such work as applicable. Change Orders are valid contract amendments when approved and signed by the City and Contractor. All changes and extra work must be negotiated and approved before the work is performed.

The City may require the Contractor to work outside approved construction hours noted in Part IV, Construction Procedure. For work done during these times, when required by the City, payment to the Contractor may be adjusted per General Prevailing Wage Rate provisions.

CLEANUP

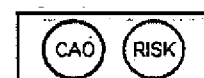
All work sites shall be kept as clear of equipment, material and waste material as is practicable at all times. The City of Monterey and/or government Representative shall make the determination that this requirement is being complied with.

If the City is required to provide cleanup of the work sites due to failure of the Contractor to so provide, or in case of emergency, the City shall charge the Contractor the actual cost of labor and materials and may deduct said costs from any monies due and owing the Contractor.

Upon completion and before making application for acceptance of the work, the Contractor shall clean the street and/or other areas of work, and all ground occupied by him in connection with the work, of all rubbish, excess materials, temporary structures, and equipment, and all parts of the work shall be left in a neat and presentable condition.

CONTROL OF WORK

CONTRACT COMPONENTS



These specifications, the plans and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all; they are intended to be cooperative, to describe, and to provide for a complete job.

Shop drawings required by the plans, specifications or the Engineer shall be furnished by the Contractor and approved by the Engineer before any work relating to the shop drawings is performed unless approval is waived in writing by the Engineer.

It is mutually agreed that shop drawing approval by the Engineer does not relieve the Contractor of any responsibility for accuracy of dimensions and details, and that the Contractor shall be responsible for agreement and conformity of the shop drawings with the approved plans, specifications and site conditions.

Submittal review and approval by the Engineer does not relieve the Contractor from compliance with the requirements and intentions of the plans and specifications.

All authorized alterations affecting the requirements and information given on the approved plans and specifications shall be in writing. No changes shall be made on any plan, specification or drawing after the same has been approved by the Engineer, except by direction of the Engineer.

In the event of discrepancy, written dimensions shall take precedence over scaled dimensions.

ENGINEER'S AUTHORITY

The Engineer shall respond to any and all inquiries as to the quality or acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all inquiries as to the interpretation of the plans and specifications; all inquiries as to the acceptable fulfillment of the contract on the part of the Contractor; and all inquiries as to claims and compensation. The Engineer's response shall be final and the Engineer shall have executive authority to enforce and make effective such responses.

Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained in the plans and specifications, the Contractor shall submit a written Request for Information (RFI) to the Engineer. Responses to RFI's shall be in writing and deemed part of the contract documents. Contractor shall comply with response explanation or interpretation so far as may be consistent with the intent of the plans, specifications and amendments thereto.

In the event of doubt or question relative to the true meaning of the plans and specifications, reference shall be made to the City Manager, or his designee, whose decision thereon shall be final.

ASSIGNMENT

The contract may be assigned only upon the written consent of the City Council.

SUBCONTRACTING

Any Proposed substitution of subcontractors must comply with the requirements of the Subletting and Subcontracting Fair Practices Act, California Public Contract Code §4100, et seq.

The Contractor shall give his personal attention to the fulfillment of the contract and shall keep the work under his control.

Subcontractors will not be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor, and their work shall be subject to the provisions of the contract, plans and specifications.



Where a portion of the work sublet by the Contractor is not being prosecuted in a manner satisfactory to the Engineer, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work.

REPRESENTATIVE

The Contractor shall assign a representative per Section 5-1.16, Representative, of the Standard Specifications and submit contact information (name, telephone number) to the City of Monterey Engineering Division. If the after-hours representative is different than the on-site representative, provide contact information for both.

The Contractor shall be constantly on the work during its progress or shall be represented by a foreman who is competent to receive and carry out instructions which may be given by the proper authorities, and the Contractor shall be held liable for the faithful observance of any lawful instructions of the Engineer not in conflict with the contract, and which may be delivered to the Contractor, contractor's superintendent, foreman, or other representatives on the work. If the Contractor believes the Engineer's instructions are in conflict with the contract, the Contractor shall immediately bring it to the attention of the Engineer in writing.

The Contractor shall provide and maintain an office in the City of Monterey near the site of the work and shall allot such space to the Engineer or his representative as is required for proper keeping of records and plans of work, if required by the plans or specifications.

EQUIPMENT

While certain sections of these specifications may provide that equipment of a particular size and type is to be used to perform portions of the work, it is to be understood that the development and use of new or improved equipment is to be encouraged.

The Contractor may request, in writing, permission from the Engineer to use equipment of a different size or type in place of the equipment specified.

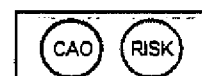
The Engineer, before considering or granting such request, may require the Contractor to furnish, at Contractor's expense, evidence satisfactory to the Engineer that the equipment proposed for use by the Contractor is capable of producing work equal to, or better than, that which can be produced by the equipment specified.

PROPERTY AND FACILITY PRESERVATION

Attention is directed to Section 5-1.36, Property and Facility Preservation, Section 7-1.05, Indemnification and Section 7-1.06, Insurance, of the Standard Specifications. Due care shall be exercised to avoid injury to existing street improvements or facilities, utility facilities, adjacent property, roadside trees and shrubbery that are not to be removed.

The Contractor shall be held responsible for any damages to existing streets, highways, roads, driveways, sidewalks, curbs, gutters, utilities, other public facilities or private property caused by Contractor's operations. Where the work calls for cutting into or disturbing existing materials, the Contractor shall patch or repair the existing area to a neat, finished product. This shall include touch up or repair of the existing which was disturbed, and repair to the same structural capacity as the existing facility or better.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in protecting or repairing property, shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefor.



POTENTIAL CLAIMS AND DISPUTE RESOLUTION

Potential claims and dispute resolution shall be in accordance with Section 5-1.43, Potential Claims and Dispute Resolution, of the Standard Specifications.

CONTRACTOR'S RESPONSIBILITY FOR WORK

All work which is defective in its construction or deficient in any of the requirements of the plans and specifications shall be remedied or removed and replaced by the Contractor in an acceptable manner, and no compensation will be allowed for such correction.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and unsuitable materials may be rejected, notwithstanding the fact that such defective work and unsuitable materials have been previously overlooked or approved by the Engineer and accepted or estimated for payment.

All work done beyond the lines and grades shown on plans or established by the Engineer, or any extra work done without written authority, will be considered as unauthorized and will not be paid for.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to cause defective work to be remedied, or removed and replaced, and unauthorized work to be removed. The cost of removing, replacing, or repairing said defective or unauthorized work may be deducted from any monies due and owing the Contractor but said right of set-off shall be an alternative and not the sole remedy of the City.

Until the formal acceptance of the work by the City (as constituted by the filing of the Notice of Completion), the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by the acts of the federal government or the public enemy.

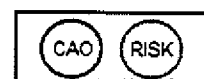
Should the City elect to occupy a project before acceptance, the City will issue a Notice of Substantial Completion designating those portions of the work that will be occupied or utilized. Contractor shall be relieved from maintenance and from the responsibility of injury and damage to this work. However, any guarantees will not begin until acceptance of the entire project, and the Contractor shall retain responsibility for making good defective work or materials.

EMPLOYEES

All workmanship shall be fully up to the highest standard of modern construction and practice. The employment of labor shall comply with the prevailing local labor conditions and the Contractor shall employ only competent, careful, orderly persons upon the work. If at any time it shall appear to the Engineer that any person employed upon the work is incompetent, careless, reckless, or disorderly, or disobeys or evades orders and instructions, such person shall be immediately discharged and not again employed upon the work.

CONTROL OF MATERIALSGENERAL

The Contractor shall furnish without charge such samples of materials and tests of materials as are required by the plans, specifications or the Engineer. No material shall be used until it has been approved by the



Engineer.

All tests of materials ordered by the Engineer and made by the Contractor shall be made in accordance with commonly recognized standards of national organizations, and such special methods of tests as are prescribed in the plans and specifications.

All materials not conforming to the requirements of the plans and specifications shall be considered defective, and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Engineer. No rejected materials, the defects of which have been subsequently corrected, shall be used until approved in writing by the Engineer.

Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to remove and replace defective material. The cost of removing, replacing or repairing said defective or unauthorized material may be deducted from any monies due and owing the Contractor but said right of set-off shall be an alternative and not the sole remedy of the City.

For convenience in designation on the plans or in the specifications, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and his catalog information. The use of an alternative article or material which is of equal quality and of the required characteristics for the purpose intended will be permitted, provided that the burden of proof as to the quality and suitability of alternatives shall be upon the Contractor who shall furnish, at the contractor's expense, all information necessary as required by the Engineer. The Engineer shall be the sole judge as to the quality and suitability of alternative articles or materials and that decision shall be final.

MATERIAL SOURCE

At the option of the Engineer, the source of supply of each of the materials shall be approved by the Engineer before delivery is started and before such material is used in the work. Representative preliminary samples of the character and quality prescribed shall be submitted by the Contractor or producer of all materials to be used in the work, for testing or examination by the Engineer.

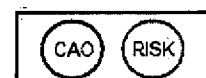
QUALITY

Except as otherwise provided, sampling and testing of all materials, and the laboratory methods and testing equipment required under the plans and specifications shall be in accordance with the latest requirements of the State of California, Department of Transportation, Office of Materials Engineering and Testing Services. Sampling and testing of materials not covered by CalTrans specifications and not otherwise provided for, shall be in accordance with the latest Test Methods and Standards of the American Society for Testing and Materials (ASTM).

GUARANTEE

All materials supplied and all work done under this contract shall be guaranteed by the Contractor for a period of one (1) year from the date of formal acceptance by the City of Monterey. Upon receipt of notice from the Engineer of failure of any part of the guaranteed materials during the guarantee period, the affected parts shall be replaced promptly and at the expense of the Contractor.

The Contractor shall maintain the performance bond (See Part IV, Contract Bonds) in full force and effect during the guarantee period for the purpose of insuring that said repairs or replacements will be made, or may, at the Contractor's option, replace said performance bond for a similar bond in the amount of twenty (20) percent of the total contract amount including adjustments or the original performance bond, whichever is greater.



LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

LAWS

The Contractor shall keep fully informed of all existing and future state and federal laws and all municipal ordinances and regulations of the City of Monterey which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

All work shall comply in every respect with all the governing laws, regulations, and ordinances of the City of Monterey, which shall be considered for the purpose of contract to which the plans and specifications refer, a part thereof. The Contractor shall give to the proper authorities all necessary notices relative to the work, and shall obtain and pay for all such permits, licenses, notices, inspections, or tests required as part of the contract price. All permits issued by the City for work done under this contract shall be issued at no charge.

All bidders and contractors shall be licensed in accordance with the laws of this State, specifically the provisions the Business and Professions Code, Division 3, Chapter 9. Any bidder or contractor not so licensed is subject to the penalties imposed by such laws. In accordance with the requirements in Public Contract Code Section 10164, in all contracts where Federal funds are involved, the Contractor shall be properly licensed at the time the Contract is awarded.

NONDISCRIMINATION

The Contractor shall comply with Section 1735 of the Labor Code, which reads as follows:

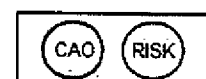
"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform Work under the contract.

LABOR CODE

In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code.

An inadvertent error in listing a subcontractor that is not registered shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any one of Section 1771.(c)(1)-(3) applies. Failure of a listed subcontractor to be registered shall be grounds for the contractor to substitute a registered subcontractor for the unregistered subcontractor. The City shall not accept any bid, nor shall the City or bidder enter any contract or subcontract, without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5 of the Labor Code. The prime contractor shall post job site notices, as required by Section 1771.4(a) (2) of the Labor Code and regulations. The prime contractor shall submit records to the Labor Commissioner, as required by Sections 1771.4(a) (3), 1771.4(c) (2), and 1776 of the Labor Code.



WAGES

Local prevailing wage rates shall be paid in accordance with Sections 1770, 1773, and 1782, as amended, of the California Labor Code, and Section 28-20(e) of the Monterey City Code, on all public works construction contracts exceeding twenty-five thousand dollars (\$25,000) and all public works contracts for alteration, demolition, repair or maintenance work exceeding fifteen thousand dollars (\$15,000).

The Contractor and any subcontractor under the Contractor shall comply with Labor Code Sections 1774 and 1775. Pursuant to Section 1775, the Contractor and any subcontractor under the Contractor shall forfeit to the State or political subdivision on whose behalf a contract is awarded a penalty of not more than two hundred dollars (\$200), or such other amount as may be amended from time to time by the Department of Industrial Relations, for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for the Work or craft in which the worker is employed for any public (City) Work done under the contract by the Contractor or by any subcontractor under the Contractor in violation of the requirements of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. The amount of this forfeiture shall be determined by the Labor Commissioner and shall be based on consideration of the mistake, inadvertence, or neglect of the Contractor or subcontractor in failing to pay the correct rate of prevailing wages, or the previous record of the Contractor or subcontractor in meeting their respective prevailing wage obligations, or the willful failure by the Contractor or subcontractor to pay the correct rates of prevailing wages. A mistake, inadvertence, or neglect in failing to pay the correct rate of prevailing wages is not excusable if the Contractor or subcontractor had knowledge of the obligations under the Labor Code. In addition to the penalty and pursuant to Labor Code Section 1775, the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor or subcontractor. If a worker employed by a subcontractor on a public works (City) project is not paid the general prevailing per diem wages by the subcontractor, the prime contractor of the project is not liable for the penalties described above unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

1. The contract executed between the contractor and the subcontractor for the performance of Work on the public works (City) project shall include a copy of the requirements in Sections 1771, 1775, 1776, 1777.5, 1813 and 1815 of the Labor Code.
2. The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.
3. Upon becoming aware of the subcontractor's failure to pay the specified prevailing rate of wages to the subcontractor's workers, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for Work performed on the public works (City) project.
4. Prior to making final payment to the subcontractor for Work performed on the public works (City) project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to the subcontractor's employees on the public works (City) project and any amounts due pursuant to Section 1813 of the Labor Code.

Pursuant to Section 1775 of the Labor Code, the Division of Labor Standards Enforcement shall notify the Contractor on a public works (City) project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works (City) project to pay workers the general prevailing rate of per diem wages. If the Division of Labor Standards Enforcement determines that employees of a subcontractor were not paid the general prevailing rate of per diem wages and if the City did not



retain sufficient money under the contract to pay those employees the balance of wages owed under the general prevailing rate of per diem wages, the contractor shall withhold an amount of moneys due the subcontractor sufficient to pay those employees the general prevailing rate of per diem wages if requested by the Division of Labor Standards Enforcement. The Contractor shall pay any money retained from and owed to a subcontractor upon receipt of notification by the Division of Labor Standards Enforcement that the wage complaint has been resolved. If notice of the resolution of the wage complaint has not been received by the Contractor within 180 days of the filing of a valid notice of completion or acceptance of the public works (City) project, whichever occurs later, the Contractor shall pay all moneys retained from the subcontractor to the City. These moneys shall be retained by the City pending the final decision of an enforcement action.

Pursuant to the requirements in Section 1773 of the Labor Code, the City has obtained the general prevailing rate of wages (which rate includes employer payments for health and welfare, pension, vacation, travel time and subsistence pay as provided for in Section 1773.8 of the Labor Code, apprenticeship or other training programs authorized by Section 3093 of the Labor Code, and similar purposes) applicable to the Work to be done, for straight time, overtime, Saturday, Sunday and holiday Work. The holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of the particular craft, classification or type of workmen concerned.

The general prevailing wage rates and any applicable changes to these wage rates are available at the City of Monterey, Engineering Division Office, City Hall, Monterey, CA, (831-646-3921). General prevailing wage rates are also available from the California Department of Industrial Relations' Internet Web Site at: <http://www.dir.ca.gov>.

The wage rates determined by the Director of Industrial Relations for the project refer to expiration dates. Prevailing wage determinations with a single asterisk after the expiration date are in effect on the date of advertisement for bids and are good for the life of the contract. Prevailing wage determinations with double asterisks after the expiration date indicate that the wage rate to be paid for Work performed after this date has been determined. If Work is to extend past this date, the new rate shall be paid and incorporated in the contract. The Contractor shall contact the Department of Industrial Relations as indicated in the wage rate determinations to obtain predetermined wage changes. Pursuant to Section 1773.2 of the Labor Code, general prevailing wage rates shall be posted by the Contractor at a prominent place at the site of the Work.

Changes in general prevailing wage determinations which conform to Labor Code Section 1773.6 and Title 8 California Code of Regulations Section 16204 shall apply to the project when issued by the Director of Industrial Relations at least ten (10) days prior to the date of the Notice Inviting Bids for the project.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining the bid, and will not under any circumstances be considered as the basis of a claim against the City on the contract. The Contractor shall make travel and subsistence payments to each workman, needed to execute the Work, in conformance with the requirements in Labor Code Section 1773.8.

CERTIFIED PAYROLL RECORDS

The Contractor shall conform to the requirements in Labor Code Section 1776 concerning payroll records. Regulations implementing Labor Code Section 1776 are located in Sections 16016 through 16019 and Sections 16207.10 through 16207.19 of Title 8, California Code of Regulations. The Contractor and each subcontractor shall preserve their payroll records for a period of 3 years from the date of completion of the contract.



APPRENTICES

The Contractor and subcontractors shall comply with the provisions in Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Code of Regulations Section 200 et seq. To ensure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, the Contractor and each subcontractor should, where some question exists, contact the Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, CA 94102, or one of its branch offices prior to commencement of Work on the contract. Responsibility for compliance with this section lies with the Contractor. It is State and City policy to encourage the employment and training of apprentices on public works contracts as may be permitted under local apprenticeship standards.

WORKING HOURS

Eight hours labor constitutes a legal day's Work. The Contractor or any subcontractor under the Contractor shall forfeit, as a penalty to the State of California, twenty five dollars (\$25) or such other amount as may be amended by the Department of Industrial Relations from time to time for each worker employed in the execution of the contract by the respective Contractor or subcontractor for each calendar day during which that worker is required or permitted to Work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the requirements of the Labor Code, and in particular, Section 1810 to Section 1815, thereof, inclusive, except that Work performed by employees of Contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay, as provided in Section 1815 thereof.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS

The Contractor shall conform to all local, state and federal rules and regulations pertaining to safety. Furnished equipment, material and services shall comply with all OSHA Standards and regulations and all applicable governmental laws and orders. The Contractor shall post an OSHA poster in a conspicuous location as required by law.

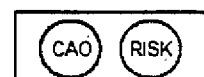
EXCAVATION SAFETY

Per California Labor Code Section 6500, Contractor shall possess a valid Construction Activity Permit for construction of trenches or excavations which are five (5) feet or deeper and into which a person is required to descend. When trenches or excavations five (5) feet or deeper are anticipated as part of the contract, Contractor shall possess a valid permit at the time of bidding and for the life of the contract. Contractor shall furnish copies of valid permits to the City of Monterey Engineering Division office. When required in Part I, Notice to Contractors, Contractor must provide evidence of a current T1 Annual Trench/ Excavation Permit at the time of bidding.

Contractor shall comply with California Labor Code Section 6705 which provides that prior to the commencement of excavation of any trench or trenches five (5) feet or more in depth, Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer.

Plans must be submitted to the Engineer at least five (5) working days prior to the commencement of excavation. If said plans are not submitted five (5) days prior to the commencement of said excavation, the City shall not be liable to Contractor for any delay in work caused by delinquent submission of said plans.

Trenching of more than four (4) feet below the surface shall require the Contractor to promptly notify the Engineer if unknown hazardous wastes, subsurface or latent physical site conditions different from those indicated or



unusual site conditions are encountered, and inform the City as to its duty to investigate those conditions. The Contractor may file for a change order for any conditions different from those indicated.

PUBLIC CONVENIENCE AND PUBLIC SAFETY

Attention is directed to Section 7-1.03, Public Convenience, and Section 7-1.04, Public Safety, of the Standard Specifications for the provisions relating to the Contractor's responsibility for providing for the convenience and safety of the public in connection with his operations. Standard Specifications are on file in the office of the City Engineer.

Contractor is to notify the Engineer of the start date and construction schedule at least nine (9) calendar days prior to the planned start of construction unless otherwise noted in Part IV.

The Contractor shall conduct his operations as to cause the least possible inconvenience to public traffic. The Contractor shall provide traffic control devices or personnel where necessary in conformance with good traffic safety standards. The Contractor shall provide sufficient warning signs or devices to give adequate notice to the public of dangerous or changed conditions existing during construction.

The City Engineer shall determine the adequacy of said devices and, in cases of dispute, his determination shall be final.

If the City is required to provide traffic direction, signs or devices, due either to failure of the Contractor to so provide or in case of emergency, the City shall charge Contractor the actual cost of labor and materials and may deduct said costs from any monies due and owing the Contractor.

WORKER'S COMPENSATION

Pursuant to the requirements in Section 1860 of the Labor Code, the Contractor will be required to secure the payment of workers' compensation to the Contractor's employees in conformance with the requirements in Section 3700 of the Labor Code.

PATENTS

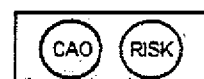
If any material, composition, process, method of construction or any other thing called for or required by the plans and specifications or used in the work is covered by letter patent, all royalties and expenses thereof, all litigation thereupon, or anything whatsoever which may develop as a cost from the use of such materials, composition, process, method, or any other thing which is covered by letter patent, shall be borne by the Contractor.

RIGHT OF PROPERTY

Nothing in the contract shall be construed as vesting the Contractor with any right of property in the materials furnished and used in the work herein provided for after they have been attached to the work and have become an integral portion of the work herein provided. All such materials shall, upon their becoming an integral part of the work herein provided, be, and remain, the property of the City of Monterey.

INCREASED FORCE

In case of emergency involving danger to life or property, continuous work with increased force may be required by the Engineer.



LIABILITIES

Right of general supervision by the City shall not make the Contractor an agent of the City, and the liability of the Contractor for all damages to persons or to public or private property arising from the Contractor's execution of the work shall not be lessened because of such general supervision.

PROSECUTION AND PROGRESS**GENERAL**

If at any time in the opinion of the Engineer, the Contractor has failed to supply an adequate working force, or material of proper quality, or has failed in any other respect to prosecute the work with the diligence and force specified and intended in and by the terms of the contract, notice thereof in writing shall be served upon the Contractor. Should the Contractor neglect or refuse to provide means for a satisfactory compliance with the contract, as directed by the Engineer, within the time specified in such notice, the Engineer in any such case shall have the power to suspend the operation of the contract. Upon receiving notice of such suspension, the Contractor shall discontinue said work, or such parts of it as the City may designate.

Upon such suspension, the Contractor's control shall terminate, and thereupon the Engineer or duly authorized representative may take possession of all or any part of the Contractor's materials, tools, equipment, and appliances upon the premises, and use the same for the purpose of completing said contract, and hire such force and buy or rent such additional machinery and appliances, tools, and equipment and buy or rent such additional materials and supplies at the Contractor's expense as may be necessary for the proper construction of the work and for the completion thereof; or may employ other parties to carry the contract to completion, employ the necessary workers, substitute other machinery or materials and purchase the materials contracted for in such manner as the City may deem proper, or the City may annul and cancel the contract and relet the work or any part thereof.

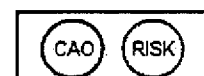
Any excess of cost arising therefrom over and above the contract price will be charged against the Contractor and his sureties, who will be liable therefor. In the event of such suspension, all money due the Contractor or retained under the terms of this contract shall be forfeited to the City, but such forfeiture will not release the Contractor or his sureties from liability for failure to fulfill the contract. The Contractor and his sureties will be credited with the amount of money so forfeited toward any excess of cost over and above the contract price, arising from the suspension of the operations of the contract and the completion of the work by the City as above provided, and the Contractor will be so credited with any surplus remaining after all just claims for such completion have been paid.

In the determination of the question whether there has been any such noncompliance with the contract as to warrant the suspension or annulment thereof, the decision of the City Manager shall be binding on all parties to the contract.

SUSPENSIONS AND DELAYS

Suspensions of work and delays shall be in accordance with Section 8-1.06, Suspensions, and Section 8- 1.07, Delays, of the Standard Specifications.

The Engineer shall have the authority to suspend the work wholly or in part, for such period as the Engineer may deem necessary due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as the Engineer may deem necessary due to the failure on the part of the Contractor to carry out Engineer's orders given or to perform any provisions of the work. The Contractor shall immediately obey such order of the Engineer and shall not resume work until ordered in writing by the Engineer.



Any act of, or any omission of anything required to be done by the City, its officers, agents or employees which shall cause the Contractor delay in the completion of the work shall be a ground for extension of time on the part of the Contractor to complete the work but shall not grant the Contractor any monetary damages for such delay.

RIGHTS OF WAY

Rights-of-way or easements for work to be constructed will be provided by the City. The Contractor shall make his own arrangements and pay all expenses for additional area required by him outside of the limits of rights-of-way or easements unless otherwise especially provided. In the event of delay on the part of the City, its officers, agents or employees in obtaining any such rights-of-way or easements for the work to be constructed, then the Contractor shall have time for the completion of his contract for the period or periods caused by such delay or delays but shall have no damages against the local entity, its officers, agents or employees.

PAYMENT

GENERAL

Attention is directed to Section 9, Payment, of the Standard Specifications on file in the office of the City Engineer, the provisions of which shall govern unless other and conflicting provisions are set forth in these specifications and/or the plans.

The City pays for the Contractor furnishing the resources and activities to complete the work. The Contractor shall accept the City's payment as full compensation for furnishing the resources and activities, including, but not limited to all labor, materials, tools, equipment, taxes and incidentals necessary to complete the work and for performing all work contemplated, and embraced under the contract; also for loss or damage arising from the nature of the work or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the formal acceptance by the City, and for all risks of every description connected with the prosecution of the work; also for all expenses incurred in consequence of the suspension or discontinuance of the work as herein specified, and for completing the work according to the plans and specifications.

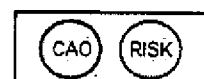
The City shall not be obligated to process any payment request until thirty (30) calendar days after receipt of a correct, complete and undisputed progress payment request or sixty (60) calendar days after receipt of a correct, complete and undisputed final payment request. Payments not made within the specified time periods are subject to an interest rate of two percent (2%) per month. A payment request shall not be deemed complete unless all related documentation has been supplied and verified, and all related contract requirements have been satisfactorily met.

PROGRESS PAYMENTS

The Contractor may, once each month, make an estimate in writing of the total amount of work done to the time of such estimate and the value thereof, and request payment for that work.

Upon approval of the progress payment request, the Engineer shall cause to be paid to the Contractor the balance not retained as aforesaid, after deducting therefrom all previous payments and all sums to be withheld or retained under the provisions of the contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the contract, or when in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than one thousand dollars (\$1,000.00).

Except as set forth in the following paragraph, the Engineer shall retain five percent (5%) of the value of the materials so estimated to have been furnished and delivered and unused, or furnished and stored as aforesaid, as



part security for the fulfillment of the contract by the Contractor. The Engineer shall also retain five percent (5%) of the value of all work done.

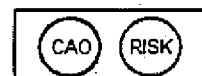
The Contractor may elect to receive 100% of payments due under the contract from time to time, without retention of any portion of the payment by the City, by depositing approved securities of equivalent value with the City or in an escrow account with an approved bank in accordance with the provisions of Section 4590 of the Government Code. Such securities, if deposited by the Contractor, shall be valued by the City's Finance Director, whose decision on valuation of the securities shall be final.

No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

PAYMENT AFTER CONTRACT ACCEPTANCE

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Engineer shall promptly make such inspection, and when the work is found to be acceptable under the contract and the contract fully performed, the Engineer shall file a Notice of Completion.

Final payment, including all sums withheld or retained as herein before specified as partial security for the fulfillment of the contract, shall be paid promptly by the City after expiration of the lien period (see California Civil Code § 3179 et seq.), providing there are no disputes arising from the performance of the contract or the amount due.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

PART IV: SPECIAL PROVISIONS

GENERAL

The work, in general, consists of furnishing and installing an adaptive traffic control system along the Lighthouse Avenue corridor. The work shall include, but not be limited to, furnishing and installing vehicle detection including wireless payment sensors, video detection cameras, equipment in controller cabinets, associated equipment cabling in existing conduits; installing City-furnished traffic controller cabinets and controllers; removing and salvaging existing cabinets and foundations; furnishing, installing and integrating central computers and servers including all hardware, software, cabling and licenses for a complete adaptive traffic control system.

PLANS AND SPECIFICATIONS

A component in one Contract part applies as if appearing in each. The parts are complementary and describe and provide for a complete work. The work embraced herein shall be done in accordance with the appropriate provisions of the Standard Specifications insofar as the same may apply, and in accordance with the specifications and plans. In case of conflict between the Standard Specifications, Standard Plans, and these Special Provisions and the Plans, the order of precedence shall be as follows:

Special Provisions shall take precedence over Plans and the Plans shall take precedence over Standard Specifications and Standard Plans. These Special Provisions shall also take precedence over conflicting portions of the "General Provisions, Part III" of these project specifications.

CONTRACT BONDS

For Bid Bond requirements, see Part I, Bid Bond, of these Specifications.

The Contractor, at the time of signing and executing the contract, shall execute and file with the City a performance bond to the satisfaction and approval of said City, in a sum of not less than one hundred percent (100%) of the amount of the contract conditional upon the faithful performance of the contract. For additional information, see Guarantees elsewhere in these specifications.

The Contractor, at the time of signing and executing any contract in excess of twenty-five thousand dollars (\$25,000), shall execute and file with the City a payment bond (public works labor and materials bond) to the satisfaction and approval of said City, in a sum of one hundred percent (100%) of the amount of the contract in accordance with Public Contract Code §9550 et seq.

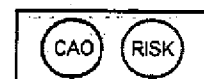
Please refer to Part III, Page 3, for sample bond forms.

The surety shall be an admitted carrier in California with a valid surety license and possess a minimum rating from A. M. Best Company of A-VII. The Surety and /or co-sureties must be listed as an acceptable surety on federal bonds by the United States Department of the Treasury, subject to the maximum amount shown in the listing. If co-sureties are used, their bonds shall be on a joint and several basis.

Notwithstanding the above, the Contractor may substitute adequate securities for any bond called for under the provisions of these Specifications as set forth in Public Contracts Code Section 22300. Alternate security substitutions shall be submitted to the City no later than ten (10) days after written notice that a contract has been awarded to the contractor to allow processing and escrow agreement for in lieu security.

The Contractor shall submit the contract with his signature affixed thereto, required bonds or alternate security and evidence of insurance that conforms to the contract within fifteen (15) calendar days after written notice that a contract has been awarded to him.

The Contractor shall maintain the performance bond in full force and effect during the guarantee period for the purpose of insuring that said repairs or replacements will be made, or may, at the Contractor's option, replace said



performance bond for a similar bond in the amount of twenty percent (20%) of the total contract amount, including adjustments, or the original performance bond, whichever is greater.

TIME LIMITS

Within fifteen (15) calendar days after written notice that a contract has been awarded (Notice of Award), the Contractor shall submit two (2) signed original contracts, required bonds or alternative security, evidence of insurance that conforms to the contract, and City of Monterey Business License or evidence of application for said license.

A Notice to Proceed will be issued upon receipt of the foregoing documents. The Contractor shall begin work within **fourteen (14) calendar days** after the effective date of the Notice to Proceed.

The Contractor shall diligently prosecute the contract to completion on or before the expiration of **eighty (80) calendar days** from the effective date of the Notice to Proceed.

LICENSES AND PERMITS

Prior to the execution of any contractual agreements, the successful Bidder shall obtain a City of Monterey Business License, and all applicable permits (except Coastal Zone Conservation permits) for construction.

City permits shall be issued at no charge, except for construction parking permits. Construction parking permits are as follows for dashboard permits (commercial vehicles only):

\$10 per vehicle/space per day (meter space):

Cannery Row Area
Wharf Area
Waterfront Area
Foam Street
Scott/Oliver Streets

\$5 per vehicle/space per day (non meter space):

Lighthouse Avenue
Downtown Area
All other restricted/enforced area on-street.

Paper construction parking permits may be obtained at the Parking Division office, 340 Tyler Street, Monterey, CA 93940 (831.646.3953).

Contractor shall be required to obtain and hold a Public Works Permit (Encroachment Permit) and/or Building Permit from the Building Permit and Inspection Division. Contractor shall provide a copy of the completed permit(s) to the Engineering Division no later than three (3) days prior to the start of construction. The permit application fee(s) shall be waived. Where applicable, the City shall submit permit applications.

SITE INSPECTION

It shall be the Contractor's responsibility to inspect the site and become thoroughly familiar with all aspects of the work to be done.

The submission of a bid shall be conclusive evidence that the Bidder has investigated the site and is thoroughly satisfied as to the conditions to be encountered, as to the character, quality, and scope of the work to be performed; the quantity of materials to be furnished; and as to all the requirements of these specifications.

It shall be the Contractor's responsibility to be aware of surface and subsurface drainage conditions that may exist at the site. The Contractor is further responsible for work necessary to rectify any resulting drainage problems; labor, materials, equipment, and incidentals necessary to achieve the solution shall be borne by the Contractor.



SUBMITTALS

The review of submittals and approval thereof by the City does not relieve the Contractor from compliance with the requirements and intentions of the plans and specifications to which the submittals pertain.

Submittal Format:

1. Contractor shall submit individually bound copies of all submittals and revised submittals to the City's construction manager. A minimum of two (2) copies shall be submitted unless otherwise directed. Submittal submission may be done in pdf form via email.
2. All submittals shall have a cover sheet containing the following:
 - a. Submittal date, submittal number and submittal revision number (as applicable),
 - b. City project name,
3. Each submittal item shall clearly identify the specification section(s) and paragraph(s) for which the submittal item pertains to.
4. Contractor is not guaranteed a specific review time period. If Contractor requires a quick submittal turnaround of specific submittal items, Contractor must indicate which submittal items require a quick turnaround by attaching a memo to the submittal indicating such and the requested turnaround period. The City shall make every effort to meet the requested review period.
5. Contractor shall place orders for all materials or equipment in time to prevent any delays to the construction schedule or project completion. If any materials or equipment are not ordered in a timely fashion, any additional charges made by equipment manufacturers and/or suppliers to complete the manufacturer and/or delivery in time to meet the construction schedule or project completion, together with any special handling charges shall be borne by the Contractor.

Submittal Content and Product Data:

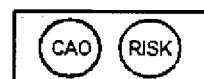
1. Contractor shall review and accept submittals prior to submission.
2. Submittals shall contain all required information such as shop drawings, product data, etc.
3. Each submittal item shall be identified by manufacturer, brand name, trade name, model number, size, rating and additional information as is necessary to properly identify and verify the materials and equipment. The phrase "as specified" is not considered sufficient.
4. Where possible, submittal information shall be limited to the specific item being submitted. In the event multiple materials or equipment are described in one submittal, Contractor shall clearly identify the pertinent information being submitted on.
5. Accessories, controls, finish, etc. not required to be submitted or identified with the submittal shall be furnished and installed as specified.

CONSTRUCTION SURVEYS

Construction surveys, when required, shall be provided by and paid for by the contractor and no additional compensation shall be made.

The Contractor shall preserve all stakes and points set for lines, grades, or measurement of the work in their proper places until authorized to remove them by the Engineer. All expenses incurred in replacing stakes that have been removed without proper authority shall be paid by the Contractor.

The City shall be given the opportunity to check forms for line and grade prior to any concrete being placed.



PROTECTION OF PRIVATE PROPERTY

Private property grounds and facilities, if damaged or removed because of the Contractor's operations, shall be restored or replaced to same or better than the original condition and located in the same position and alignment as is reasonably possible. Contractor shall comply with the applicable portions of Section 5-1.36, "Property and Facility Preservation", Section 7-1.05, "Indemnification", and Section 7-1.06, "Insurance" of the Standard Specifications.

CONSTRUCTION QUALITY CONTROL

Definitions

Quality Management (QM) - All control and assurance activities instituted to achieve the product quality established by the contract requirements.

Contractor Quality Control (CQC) - The construction contractor's system to manage, control, and document contractor's, suppliers', and subcontractor's activities to comply with contract requirements.

Contractor Responsibility

General: The Contractor shall establish and maintain an effective quality control system in compliance with the Plans and Specifications. The quality control system shall consist of plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction, and operations which comply with contract requirements. The system shall cover construction operations both onsite and offsite, and shall be keyed to the proposed construction sequence.

The Quality Control Plan

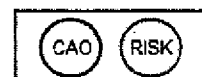
Quality Control Plans and Procedures.

The Contractor will be required to prepare a Quality Control Plan. This plan shall include, as a minimum, the following:

1. A description of the quality control procedures, including a chart showing lines of authority and acknowledgement that the Contractor shall implement the control system for all aspects of the work specified and shall report to the project manager or someone higher in the Contractor's organization.
2. The name, qualifications, duties, responsibilities, and authorities of each person assigned a QC function.
3. A copy of the letter to the Engineer signed by an authorized official of the firm which describes the responsibilities and delegates the authority to implement the QC plan shall be furnished.
4. Procedure for scheduling and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents.
5. Control testing procedures for each specific case. Note that in the case of federally-funded projects, QA/QC testing must be performed by the city by a Caltrans-certified lab.
6. Reporting procedures including proposed reporting formats.

QC Plan Implementation

1. **Preconstruction Conference.** During the pre-construction conference, a mutual understanding of the CQC system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management with the Engineer's inspection. Minutes of the conference shall be prepared by City staff, and be signed by both the Contractor and the Engineer. The minutes shall become a part of the



contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understandings.

2. General. After issuance of the Notice to Proceed, and prior to the start of construction, the Contractor shall furnish, for acceptance by the Engineer, the Contractor Quality Control (CQC) Plan with which he proposes to implement the requirements of Contract Clause entitled "Construction Quality Control". The plan shall identify personnel, procedures, instructions, records, and forms to be used. If the Contractor fails to submit an acceptable QC plan within the time herein prescribed, the Engineer may refuse to allow construction to start if an acceptable interim plan is not furnished.
3. Control of Materials, Tests, and Inspections. As listed below, and noted elsewhere in the specifications but not limited to the following items, the Quality Control Plan will include the dates for the Contractor to furnish certificates for product, or product test compliance, shop drawings or catalog cuts and requests for inspection or review.

a. Tests and Inspections (if applicable):

Sub-grade compaction
Aggregate placement and compaction
Forms Placement
Trench backfill and bedding
Reinforcing bar placement
Fill Material
Pipe placement
Lateral Connections
Welding
High Strength Fasteners and Bolts
Epoxy

b. Materials and Materials Certification (if applicable):

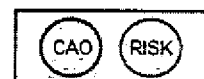
Aggregate Base
Hot Mix Asphalt/Asphalt Concrete
Concrete
Catch Basin and Manhole Casting
Reinforcing Bar
Pipe Material
Trench backfill material
Lumber
RC pipe
Slurry backfill

c. Daily Reports

The Contractor shall provide copies of daily reports which describe the work performed, weather conditions, personnel and equipment on site, and quality control activities performed.

The Contractor will not be paid for work prior to Engineer reviewing and accepting daily reports for the period of time payment is requested.

4. Acceptance of Plan. Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Engineer reserves the right to require the Contractor to make changes in the CQC plan and operations as necessary to obtain the quality specified.
5. Notification of Changes. After acceptance of the QC plan, the Contractor shall notify the Engineer in writing of any proposed change. Proposed changes are subject to acceptance by the Engineer.
6. Testing and Certification. The Contractor shall pay for all tests and inspections as required by the Plans



and Specifications. The Contractor shall furnish certification of materials being used, upon request of the Engineer, without additional charge.

GUARANTEE

Materials and labor guarantees shall be per Part III of these specifications. All warranty shall be to the satisfaction of the City. Final payment will not be released without submission of warranties. Any materials installed in Army Buildings (with City of Monterey approval) shall issue warranty (if exists) to the United States Army prior to formal acceptance of work, and deliver to the City of Monterey, Engineering Division Office.

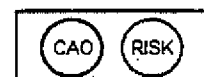
REGULATIONS

The Contractor and all subcontractors shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work, safety and hiring/employment practices. Nothing in the Plans and Specifications shall be construed to permit work not conforming to the regulations and codes set forth herein which include, but are not limited to the following:

1. Americans with Disabilities Act (ADA) accessibility and employment standards. In the event of conflicting federal and state standards, the standard that provides greater access will take precedence.
2. Monterey City Code, as amended,
3. California Building Code, latest edition as adopted by the City of Monterey (2013 Edition),
4. California Electrical Code, latest edition as adopted by the City of Monterey (2013 Edition),
5. California Mechanical Code, latest edition as adopted by the City of Monterey (2013 Edition),
6. California Plumbing Code, latest edition as adopted by the City of Monterey (2013 Edition),
7. California Green Building Standards Code, latest edition as adopted by the City of Monterey,
8. California Historic Building Code, latest edition as adopted by the City of Monterey,
9. California Occupational Safety and Health Administrative Code, latest edition,
10. California Government Code Section 4216, Protection of Underground Infrastructure,
11. National Fire Protection Associations NFPA 1 Fire Code, latest edition,
12. The California Labor Code,
13. Federal Water Pollution Control Act (Clean Water Act), and,
14. Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.).

PUBLIC SAFETY AND PROTECTION OF THE WORK

The Contractor shall furnish, erect and maintain such fences, barricades, guards, lights and other devices as are necessary to prevent accidents and avoid damage to the construction work or injury to the public. No separate payment shall be made for such work. If in the opinion of the Engineer, adequate barricades or warning devices are not maintained by the Contractor, the City may furnish and erect same and charge the Contractor therefor. Attention is directed to Sections 7-1.03 "Public Convenience" and 7-1.04, "Public Safety", of the Standard Specifications published by the State of California Department of Transportation.



INDEMNIFICATION AND HOLD HARMLESS

To the fullest extent permitted by law, Contractor agrees to indemnify, investigate, defend (at Contractor's sole cost and expense and with legal counsel reasonably approved by City), protect and hold harmless, the City of Monterey, its officials, officers, employees, agents, and representatives from and against any and all claims [including, without limitation, claims for bodily injury or death (including but not limited to Contractor, persons employed by Contractor, persons acting on behalf of Contractor, and third parties) or damage to property], demands, obligations, losses, damages, actions, causes of action, suits, judgments, fines, penalties, liabilities, defense costs, and expenses (including, without limitation, reasonable attorneys' fees, disbursements, and court costs, and all other professional, expert, or Contractors' fees and costs) of every kind or nature arising out of or in connection with or relating to any work or activities of Contractor (or Contractor's contractors or subcontractors, if any) conducted under this Agreement or arising out of the failure on Contractor's part to perform their obligations under this agreement. Except as provided by law, the indemnification provisions stated above shall apply regardless of the existence or degree of fault of the City, except for those claims which arise out of the active negligence, sole negligence, or willful misconduct of the City of Monterey.

Notwithstanding the provisions of the above paragraph, Contractor agrees to assume all risk and to indemnify and hold harmless the City from and against any and all claims, demands, defense costs, liability, expense, or damages of any kind or nature arising out of or in connection with damage to or loss of any property belonging to Contractor or Contractor's employees, contractors, representatives, patrons, guests, or invitees.

Contractor further agrees to indemnify City for damage to or loss of City property arising out of or in connection with Contractor's work associated with this Agreement or arising out of any act or omission of Contractor or any of Contractor's employees, agents, contractors, representatives, patrons, guests, or invitees; excepting such damage or loss arising out of the negligence of the City.

INSURANCE

Contractor shall procure and maintain for the duration of the contract, *and for 2 years thereafter*, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.

MINIMUM SCOPE AND LIMITS OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$5,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (**ISO CG 25 03 or 25 04**) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than **\$5,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Surety Bonds** as described in Part III.
5. **Professional Liability** (if Design/Build), with limits no less than **\$1,000,000** per occurrence or claim, and **\$2,000,000** policy aggregate.

If the contractor maintains **broader coverage and/or** higher limits than the minimums shown above, the Entity requires and shall be entitled to the **broader coverage and/or** higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Entity.



SELF-INSURED RETENTIONS

Self-insured retentions must be declared to and approved by the Entity. At the option of the Entity, either: the contractor shall cause the insurer shall reduce or eliminate such self-insured retentions as respects the Entity, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses. **The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Entity.**

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **The Entity, its officers, officials, employees, and volunteers are to be covered as additional insureds** on the CGL policy with respect to liability arising out of with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or **both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37** forms if later revisions used).
2. For any claims related to this project, the **Contractor's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13** as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the Entity, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the Entity.

CLAIMS MADE POLICIES

If any coverage required is written on a claims-made coverage form:

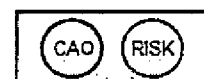
1. The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor must purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements must be submitted to the Entity for review.
5. If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the Entity.

WAIVER OF SUBROGATION

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the Entity for all work performed by the Contractor, its employees, agents and



subcontractors.

VERIFICATION OF COVERAGE

Contractor shall furnish the Entity with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the Entity before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

SUBCONTRACTORS

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that Entity is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

SPECIAL RISKS OR CIRCUMSTANCES

Entity reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

PRE-CONSTRUCTION CONFERENCE

Prior to the beginning of any work on this project, a pre-construction conference shall be held at the City's Engineering Division Office, City Hall, Monterey, CA. The date and time of this conference shall be established by the Contractor contacting that office at 831-646-3997 not less than forty-eight (48) hours in advance of the meeting date and time.

An itemized list of materials and equipment the Contractor proposes to use on the project shall be submitted to the City prior to or during the preconstruction conference.

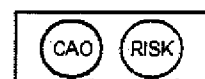
A preliminary project timeline shall be submitted to the City prior to or during the preconstruction conference.

LIQUIDATED DAMAGES

Unless stated otherwise in the Specifications, it is agreed by the parties to the contract that in case all the work called for under the contract is not completed before or upon the expiration or the time limit as set forth in these specifications, damage will be sustained by the City of Monterey and that it is and will be difficult or impossible to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is therefore agreed that the Contractor will pay to the City of Monterey the sum of **\$1,200 (One Thousand Two Hundred Dollars)** per day for each and every day's delay beyond the time prescribed to complete the work or the actual damages ascertained, whichever will be greater; and the Contractor agrees to pay such liquidated damages as herein provided; and in case the same are not paid, agrees that the City of Monterey may deduct the amount thereof from any money due or that may become due the Contractor under the contract.

It is further agreed that, in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the City shall have the right to extend the time for completion of the contract or not, as may seem best to serve the interest of the City; and if it decides to extend the time limit for the completion of the contract, it shall further have the right to charge to the Contractor, his heirs, assigns or sureties, and to deduct from the final payment of the work, all or any part, as it may deem proper, of the actual cost of engineering, inspection, superintendence and other overhead expenses during the period of such extension, except that the cost of final measurements and preparation of final estimate shall not be included in such charges.

The contractor shall not be assessed with liquidated damages nor the cost of engineering and inspection during any delay in the completion of the work caused by Acts of God or of the public enemy, fire, floods, epidemics,



quarantine restrictions, strikes, freight embargoes and unusually severe weather or delays of subcontractors due to such causes; provided that the Contractor shall within ten (10) days from the beginning of any such delay notify the Engineer in writing of the causes of delay, who shall ascertain the facts and the extent of delay, and his findings of the facts thereon shall be final and conclusive. "Unusually severe weather" means that which is considered outside the normal average for the Monterey area as determined by historical weather records. The Contractor will not receive a time extension for normal or below normal precipitation.

CONSTRUCTION PROCEDURE

An outline of the proposed construction procedure shall be submitted by the Contractor to the Engineer for review and shall obtain his approval before beginning work. The Engineer will be especially interested in:

1. Minimizing any interruption to use of driveways (no more than 4 hour interruption). Any interruption more than 4 hours shall be prearranged with the Engineer. Residence occupant shall be notified with a written notice a minimum of three (3) business days in advance.
2. Adjacent property owners shall be notified with a written notice a minimum of three (3) business days in advance of any construction impacts.
3. Minimizing any interruption to building operations and parking lots. Contractor shall notify the Engineer a minimum of one week in advance of any interruptions to building operations and parking lots.
4. Minimizing any hazard to the general public.
5. Proper handling of hazardous materials.
6. All work will occur between 7 am and 7 pm unless otherwise approved in writing.
7. Contractor shall notify the Engineer a minimum of twenty-four (24) hours in advance of concrete placement for checking and acceptance of forms by the Engineer prior to concrete placement. Mitigation of concrete placement done without acceptance of forms by the Engineer prior to concrete placement shall be the sole responsibility of the Contractor. The costs of such mitigation shall be borne by the Contractor.

Traffic control requirements cited elsewhere in these Specifications must be considered in the construction procedure submitted to the Engineer.

TRAFFIC CONTROL

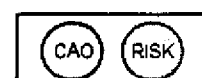
Pursuant to the authority contained in Vehicle Code Section 591, the City has determined that within those areas that are within the limits of the project and are open to traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. In accordance with the statement in Vehicle Code Section 591, this section shall not relieve the Contractor or any person from the duty of exercising due care. The Contractor shall take all necessary precautions for safe operation of the Contractor's equipment and the protection of the public from injury and damage from the Contractor's equipment.

Traffic control shall conform to the provisions of Section 12, "Temporary Traffic Control" of the Standard Specifications and the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD) as adopted by Caltrans.

A Traffic Control Plan (TCP) shall be submitted to the Engineer for approval prior to construction and must be applicable to existing site conditions. Contractor shall notify all emergency services, affected residences, affected businesses, and the Engineering Division Office (831) 646-3921 a minimum of three (3) business days in advance as to proposed closures and alternate routes available.

The following shall be incorporated into the Traffic Control Plan:

1. Two (2) travel lanes shall be open during non-working hours.



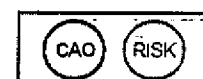
2. At least one (1) travel lane shall remain open during working hours. Flag persons or other appropriate traffic control devices as approved by the Engineer shall be used during periods of one-way travel.
3. Access to driveways shall be left open unless work is actually being performed in areas fronting the driveway. All driveways shall be accessible during non-working hours. See Construction Procedure elsewhere in these specifications.
4. No trench shall be left open during non-working hours.
5. Parking restrictions will be acceptable when and where needed. (All require prior approval of the Engineer).

The following requirements apply to Traffic Control Plans:

1. All Traffic Control Plans shall follow the CA MUTCD Chapter 6. Examples may be found at: <http://www.dot.ca.gov/hq/traffops/engineering/mutcd/pdf/camutcd2014/Part6.pdf>
2. The contractor shall submit a TCP using legible lettering. Show location and dimensions of the work zone, lanes, tapers, parking and any staging areas.
3. Label streets and proposed traffic control area. Show all nearby streets with street names to assure proper orientation.
4. Show all affected sidewalks, crosswalks, bike lanes, driveways and intersections in the construction work zone including areas affected by taper transition.
5. If a sidewalk or path is obstructed, contractor must then submit an ADA compliant pedestrian detour plan in accordance with the CA MUTCD chapter 6D and the Public Rights-of-Way Accessibility Guidelines (PROWAG). Please refer to: <http://dot.ca.gov/hq/traffops/engineering/control-devices/pdf/PedBrochure.pdf>
6. Label all taper lengths and widths, delineator spacing and sign spacing. Indicate location of construction signs, barricades and delineators.
7. Show all parking restriction zones and signs, as appropriate. Telephone the Parking Division Office (831.646.3953) if restricting parking in time-limit or metered zones. Temporary "NO PARKING" signs shall be posted seventy-two (72) hours prior to commencing work.
8. Indicate on the TCP the duration of the construction work, including dates and times.
9. Indicate on the TCP the Contractor's name, address and telephone number. Include the Contractor's during and after hours Representative's contact information (name, telephone number).
10. It is the Contractor's responsibility to assure that all Traffic Control Plans (TCP) and traffic control devices are in compliance with the 2014 CA MUTCD as adopted by Caltrans.

Traffic Control Plans shall contain the following notes:

1. Minimum width of temporary traffic lanes is ten (10) feet clear (from delineator or cone base, not center).
2. The City Traffic Engineer or his representative has the authority to make any field changes to assure public safety.
3. All traffic control devices shall be removed from view when not in use. Signs shall not be facing traffic when not in use.
4. Spacing of channelizing devices shall not exceed twenty-five (25) feet.



5. Any road closure also requires notification be provided to the City of Monterey Fire Department and Police Department. Notifications may be made at the non-emergency telephone number, 831.646.3914.
6. All temporary traffic delineation (delineators and cones) used shall be a minimum of thirty-six (36) inches tall. Retroreflective bands are required for night time traffic.
7. Any work that disturbs normal traffic signal operations shall be coordinated with the Signal Traffic Technician.
8. The Contractor is responsible for restoring the road back to satisfactory condition including, but not limited to, paving, striping, markings, signs and traffic signal loop detectors within five (5) calendar days of completion of work at affected intersections or road segments.
9. Any work that created an undue safety risk or creates severe congestion may be shut down by the City Traffic Engineer, his representative, Field Inspector or Police Department personnel.

The Contractor is to notify residences and/or businesses a minimum of three (3) business days in advance of closing access to any driveways or providing any detours or changes in on-street parking. Notifications shall be in writing.

Contractor shall provide all labor and facilities required for safe and expeditious handling of traffic during the course of construction. Contractor shall provide all flaggers, signs, delineators, and barricades required for traffic control and shall modify or remove same at appropriate times. The Engineer shall be the sole judge as to the adequacy of the Contractor's traffic control measures. If such measures are found to be inadequate by the Engineer, the City may furnish and install same and charge the Contractor therefor.

The Contractor shall, at his own expense, construct and maintain in good condition, such detours, detour bridges and temporary crossings for use by the public as deemed necessary or expedient by the Engineer for the proper execution of the work.

The Contractor shall designate a representative who can be reached immediately (24 hours per day) in the event of traffic control device failures.

CONSTRUCTION PROJECT SIGNS

For Neighborhood Improvement Projects (NIP), the Contractor shall post temporary Neighborhood Improvement Project signs, one at each end of the blocks or at entrances to project sites, in a manner approved by the Engineer. Sign panels shall be provided by the City and mounted on stakes. Sign panels and posts, if provided by the City, shall be returned to the City in good condition.

REMOVAL OF OBSTRUCTIONS

The Contractor shall remove and dispose of all structures, debris or other obstructions of any character to the construction called for in the plans, specifications, and as required by the Engineer.

If archeological items or hazardous wastes are discovered during construction operations, the Contractor shall cease operations in those areas and the Contractor shall immediately notify the Engineer.

The Contractor shall remove and dispose of all trees designated for removal as shown on the plans, designated by the specifications and as required by the Engineer for the proper completion of the work. See Tree Protection Requirements elsewhere in these specifications.

UNDERGROUND UTILITIES

Contractor shall locate all underground obstructions and utilities, (electric, gas, water lines, etc.). Prior to any trenching operation, Contractor shall pothole underground obstructions and utilities that appear to be in conflict with the new construction. The Plans show the approximate location of underground facilities in the project area as they



have been provided to the City. Repair of damage to any utility line shown on the Plans with reasonable accuracy shall be made at the Contractor's expense. However, the City shall fairly compensate the Contractor for costs of locating and repairing damage not due to failure of the Contractor to exercise reasonable care, and removing or relocating such facilities not indicated or in a location different from that indicated on the Plans and Specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay in completion of the project when such delay was caused by the failure of the City or utility company to provide for removal or relocation of such utility facilities. Contractor shall notify all utility companies of trenching operations forty-eight (48) hours in advance to enable the utility companies to take any action they deem appropriate.

UTILITY COMPANY COORDINATION

Contractor shall coordinate construction activities with the utility companies as required and shall adjust the construction schedule to accommodate utility relocation as necessary.

CONTRACT PLANS AND SPECIFICATIONS

The Contractor will be supplied with five sets of plans and specifications at no expense. One of these sets of plans is to be used for the purpose of recording record (as-built) conditions. Additional sets will be furnished on request at the cost of reproduction. The work shall conform to the contract plans and specifications, all of which form a part of the contract documents and are available in the office of the City Engineer, City Hall, Monterey, California.

DUST CONTROL

The Contractor shall minimize dust generation from the jobsite and shall spray the site with water or dust palliative as required, in accordance with Section 14-9, "Air Quality", of the Standard Specifications.

CONNECTION TO EXISTING UTILITIES

The City shall permit the Contractor to use available existing utilities at the City's expense, excluding telephone; however, if the Contractor chooses to make use of said utilities, Contractor shall assume full responsibility for any changes made by Contractor related thereto, and for any consequences caused thereby. Upon completion of the work, Contractor shall remove any modifications to existing utilities made by Contractor, and shall restore existing utilities to conditions existing at time of award.

SANITARY FACILITIES

Contractor may provide his/her own portable sanitary facilities on-site, for the duration of the work. Coordinate location(s) with the Engineer. Existing City-owned sanitary facilities may be used.

INSPECTION OF WORK

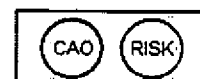
It is the responsibility of the contractor to call for all required inspections within the required time lines. The City of Monterey reserves the right to perform random inspections at any time.

The Engineer shall at all times have access to the work during construction, and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship and character of materials used and employed in the work.

Whenever the work provided and contemplated by the contract shall have been satisfactorily completed and the final cleanup performed, the Engineer will make the final inspection.

RECORD DRAWINGS

A set of marked-up prints, clear, legible, and made with standard drafting tools and indicating all changes, added work, and deviations from the design and reflecting the record (As-Built) condition of the work must be received before the work is considered complete. Existing utilities exposed during construction are to be located, including



invert or top elevation, and shown on the Record (As-Built) drawings.

The Record (As-Built) Drawings shall be completed for the Engineer's acceptance before final payment and Notice of Completion on this contract will be made.

ENVIRONMENTAL/POLLUTION PREVENTION REQUIREMENTS

Contractor shall comply with all air pollution and environmental control rules, regulations, ordinances and statutes that apply to the project and any work performed pursuant to the contract. Additionally, City Code Chapter 31.5 Storm Water Management Section 31.5-12. Prohibition of Illegal Discharges, states,

"No person or entity shall discharge or cause to be discharged into the municipal Storm Drain System or waters of the state any materials, including but not limited to Pollutants or waters containing any Pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water..."

Regardless of project size, the Contractor shall submit a site-specific Erosion and Sediment Control Plan or Storm Water Pollution Prevention Plan for City review and approval prior to start of work. The Contractor shall effectively implement and properly maintain storm water best management practices (BMPs) during construction to prevent discharges of pollutants, and including trash, to local drainages and waterways. Contractor shall comply with all water quality regulations in Monterey Municipal Code Chapter 31.5 Storm Water Management, and City Phase II Storm Water Permit requirements as prescribed by the State Water Resources Control Board (SWRCB) and Central Coast Regional Water Quality Control Board (RWQCB) regulations for the prevention of construction site discharges of pollutants, illicit discharges, and enforcement of prohibited and illicit discharges. The contractor shall employ at all times storm water runoff controls and BMPs at the site, including but not limited to erosion prevention, sediment controls, site stabilization, good housekeeping practices, proper materials storage, handling, and waste management, and similar pollution prevention measures to prevent dumping or illegal discharges during construction into the street and/or storm drain system. Storm water management and control practices shall result in the following outcomes on all construction sites, regardless of size:

- Protection of storm drain inlets and adjacent waterways must be implemented at all times to prevent illicit discharges of sediment, construction debris and fluids, and waste of any kind;
- No release of hazardous substances, such as oils, paints, thinners, fuels, and other chemicals; if such a spill occurs that may threaten local water quality, contractor must call 911 immediately and notify City Public Works staff;
- Minimization of site disturbance shall be kept to that portion necessary for construction only, and perimeter controls shall be implemented at all times during all weather conditions;
- Soil stabilization of graded areas shall be in place at all times where construction activities have temporarily and/or permanently ceased;
- No deposit of mud, soil, sediment, concrete washout, trash, dewatering, or other similar construction-related material or waste shall occur on or into public rights of way, private streets, or into the City's storm water system and related natural resources, either by direct deposit, dropping, discharge, erosion, or tracking by construction vehicles. Any such discharge shall be cleaned-up promptly if an immediate threat to water quality exists, or if not immediate, at the end of the current work shift or workday in which the deposit occurred, whichever comes first;
- No runoff from graded areas or stockpile areas shall contain sediments and/or pollutants. Stockpiles shall be adequately and securely covered to avoid contact with rainfall and wind to prevent soil and stockpile movement by water and/or wind;
- Runoff containing sediments shall be captured in secondary containment structures and either treated to remove sediments prior to discharge or infiltrated in the soil on-site;



- No exposure of graded areas and stockpile areas to storm water run-on shall occur. Run-on shall be controlled by diversion structures such as dikes, secondary containment, or stockpile covers; and,
- All hard-surfaced areas are to be swept regularly and free of dirt and construction debris such that the surface of the pavement is clearly visible at all locations, and construction entrance/exist(s) shall be adequately stabilized to prevent tracking of soil/sediment from reaching streets/paved surfaces and drainage pathways.

Best management practices (BMPs) are required to be illustrated in construction Plans and employed on all construction sites as applicable to the construction activity and shall provide for, and not be limited to: inlet protections, perimeter protections, erosion prevention and soil control measures, soil stabilization measures, spill prevention and discharge control measures; solid waste containment; concrete waste management; proper vehicle and equipment cleaning, fueling, and maintenance; and proper materials management and storage. Detailed procedures to accomplish these protections can be found through the California Storm Water Quality Association's *Construction BMP Handbook Portal*, U.S. EPA *Construction BMP Database and Factsheets*, *Caltrans Storm Water Quality Manuals and Handbooks*, and the *Erosion and Sediment Control Field Manual* by San Francisco Bay Regional Water Quality Control Board. Referenced documents are available for viewing at the City of Monterey Public Works Office at City Hall.

Activities to be performed by Contractor include, but are not limited to:

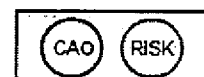
- Development and submittal of an Erosion and Sediment Control Plan or Storm Water Pollution Prevention Plan for City review and approval prior to construction start.
- At all times, Contractor shall implement and maintain the temporary and permanent vegetation (if any), erosion and sediment control measures, and other protective BMP measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness of BMPs, restoration needs for destroyed vegetative cover, and by repair of erosion, sediment, and other protective measures.
- Contractor shall inspect the following areas at least once every seven (7) calendar days, unless otherwise necessary based on current weather conditions or as directed by City inspector, and always within 24 hours prior to and after any predicted storm:
 - Inlet protections and perimeter controls;
 - Vehicle entry and exist locations;
 - Vehicle parking and storage areas;
 - Disturbed areas of the construction site,
 - Areas that have not been finally stabilized,
 - Areas used for storage of materials that are exposed to wind or precipitation,
 - Equipment and staging areas that are exposed to wind or precipitation; and,
 - All waste storage and handling devices and areas.

Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

- Areas noted above shall be inspected for proper BMP implementation and necessary BMP maintenance, as well as evidence of, or the potential for:
 - Erosion, or
 - Sediments entering waterways or the drainage system, or
 - Pollutants entering waterways or the drainage system.

Erosion and sediment control measures shall be observed and maintained to ensure that they are operating correctly. Discharge locations or points shall be inspected regularly to ascertain whether erosion control measures are effective in preventing sedimentation and subsequent degradation of receiving water quality in violation of receiving water quality standards. Vehicle entry and exist locations shall be inspected for evidence of offsite sediment and pollutant tracking and need for cleanup and improved BMP protection measures

- Deficiencies observed during inspections shall be noted and rectified before the end of the workday.



Additionally, the Contractor shall comply with the State Water Resources Control Board's Construction General Permit (CGP), as applicable to the project. Projects subject to the CGP include those that disturb one or more acres of soil, are less than one acre and are part of a common plan of development or sale, or applicable Linear Underground/Overhead Projects, and are required to obtain coverage under the State's CGP for Discharges of Storm Water associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, and subsequent amendments thereto. Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Application for CGP coverage is made by the Contractor through a Notice of Intent (NOI) to the SWRCB and involves much interaction with the applicable RWQCB as CGP regulator. The Contractor shall develop and supply the City with NOI and associated Storm Water Pollution Prevention Plan (SWPPP) for review and records purposes.

CGP coverage requires the development and implementation of a SWPPP. The SWPPP contents are mandated by the SWRCB and are subject to change, and typically contain site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must illustrate the placement of BMPs for the construction project and list pollution prevention BMPs the discharger will use to protect storm water runoff. Additionally, applicable SWPPPs must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented. All SWPPPs must be developed by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP), and supplied to the City for review and comment. Additional CGP information can be found at the State Water Resources Control Board CGP website:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Construction site storm water management and control measures shall be implemented year-round regardless of "season". All construction site BMPs shall be implemented at the appropriate level for the construction activity at hand and in a proactive manner during all seasons while construction is ongoing.

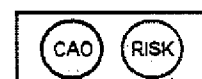
In addition to inspections performed by the City, the City's Environmental Compliance Division representative may perform periodic site monitoring visits to ensure the contractor complies with the requirements specified herein. The City shall provide copies of the completed site monitoring reports to the Contractor. In the event work is found non-compliant, a follow up site monitoring visit will be conducted to ensure non-compliant items have been corrected to the satisfaction of the City. If non-compliant items are not properly addressed prior to the follow up site monitoring visit, the costs associated with additional follow up site monitoring visits shall be deducted from the Contractor's final payment.

TREE PROTECTION REQUIREMENTS

The following guidelines are established pursuant to Section 37-2.5 of the Monterey City Code, which states:

All public or private construction projects requiring acquisition of a building permit shall comply with the tree protection guidelines established by the City in order to safeguard and protect any trees affected by said construction.

1. These Tree Protection Guidelines apply to all "Protected Trees" in the City of Monterey, defined as:
 - a. trees located on a vacant private parcel that are more than two inches (2") in diameter when measured at a point four feet six inches (4' - 6") above the tree's natural grade; and,
 - b. trees located on a private, developed parcel that are more than six inches (6") in diameter when measured at a point four feet six inches (4' - 6") above the tree's natural grade.
2. These standards do not apply to unprotected trees or trees previously approved for removal.
3. All cut, fill, and/or building foundations shall be located a minimum of 4.0 times the diameter of the tree away from the outside edge of the trunk of all trees scheduled for preservation. However, the minimum distance permitted shall be 6' - 0", away from the outside edge of the trunk for all trees of a trunk diameter

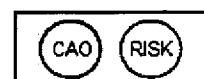


less than 2' - 0". The diameter of a tree shall be measured at four feet six inches (4' - 6") above the surrounding grade [Diameter at Standard Height (DSH)].

4. All Protected Trees shall be marked with a spot of paint, or flagging and temporarily fenced during construction. The marking serves to notify City inspectors and workers that the tree is to be fenced at all times during construction. Fencing and marking shall be installed prior to the issuance of building or grading permits and shall be located at the edge of the root zone. The root zone is determined to be that area located out a distance 15 times the trunk diameter in all directions. At no time shall the fencing be located closer than 3' - 0" from the outside edge of the trunk or further than 3' - 0" away from the approved building wall line, foundation, retaining wall, or grade cut, whichever provides the greater distance from the tree trunk. Tree Protection Fencing (TPF) shall consist of 6' tall chain link on all commercial projects and four (4) feet tall plastic snow fencing on residential projects and shall be rigidly supported and maintained during all phases of construction. Fenced areas shall not be used for material stockpile, storage, vehicle parking, or dumping of materials, chemicals, or garbage. Fenced areas shall be maintained in a natural condition and not compacted. Removal of fencing shall only be approved by the City Forester.
5. Prior to the start of construction, all Monterey Pine trees scheduled for preservation shall have the lower 8' - 0", sprayed with Astro or Dragnet and then wrapped with plastic to reduce the potential for infestation by Red Turpentine Beetles. The plastic wrap and spray are used to control beetle attacks and shall remain on the tree throughout the construction period.
6. Utility and drain lines shall be located outside the TPA (Tree Protection Area) root zone of all trees scheduled for preservation. In cases where alternative routes are not available, utility conduit, pipe, wire and drain lines shall be tunneled under major roots. Major roots are determined to be those that exceed two (2) inches in diameter. In no case shall utility lines be permitted within 4.0 times the diameter of the trunk of any trees involved with construction unless the City Forester has approved with specific conditions in advance of work starting.
7. Projects that involve properties with several trees and proposed developments may require the owner or contractor to hire a private Certified Arbonist to inspect and monitor the construction work to guarantee that the tree protection guidelines are enforced and that the trees to remain are not damaged, or negatively impacted during any phases of work.
8. All approved construction work within the root zone of trees scheduled for preservation shall observe the following minimum tree protection practices:
 - a. Hand trenching at point or line of grade cuts closest to the trunk to expose major roots 2" in diameter or larger. In cases where rock or unusually dense soil prevents hand trenching, mechanical equipment may be approved by the City Forester, provided that work is closely supervised to prevent tearing or other damage to major roots.
 - b. Exposed major roots shall be cut with a saw to form a smooth surface and avoid tears or jagged edges.
 - c. Absorbent tarp or heavy cloth fabric shall be placed over new grade cuts where roots are exposed and secured by stakes. 2" to 4" of compost or woodchip mulch shall be spread over the tarp to prevent soil moisture loss. The tarp should be thoroughly wetted at least twice per week to insure constant moisture levels until backfilling occurs. In very dry climate conditions, additional watering may be required to maintain a constant moisture level. This program of watering shall be maintained through all phases of construction including delays and other periods of inactivity.
 - d. Decks located within the root zone of trees scheduled for preservation shall be of post and beam construction to eliminate any need for root pruning or removal.
 - e. On-grade patios or paving that cover more than one-third of the feeder zone of pine trees or oak trees shall be constructed of permeable materials that allow aeration and water penetration. Patios and paving shall be combined with any other non-permeable surface or structure for purposes of calculating the one-third coverage standard. A maximum 80% compaction for permeable surfaces shall be allowed. The paving design shall specify this restriction.



- f. Planting beneath trees scheduled for preservation shall take into consideration watering requirements of the tree to prevent damage from over or under watering. Planting beneath native oak trees are of special concern and should be avoided. At a minimum, all new irrigation should be directed away from the trunks of oak trees. Installing lawn or other planting that requires frequent watering insures a slow death for oak trees due to their sensitivity to over watering and susceptibility to oak root fungus. Over-watering may also damage native pines.
9. Failure to comply with these Tree Protection Standards is punishable by civil penalty, including citation and fines.
10. All Tree Protection devices must be in place prior to issuance of a Building Permit. Please contact Robert Reid, City Forester, at 831.646.3860 for inspection to confirm Tree Protection or with any general tree preservation questions.
11. Chapter 37, Preservation of Trees and Shrubs, is available at www.monterey.org or <http://www.codepublishing.com/ca/monterey>
12. These Tree Protection guidelines shall also apply to the following trees:
 - a. Trees located on a vacant public parcel that are more than two inches (2") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade; and,
 - b. Trees located on a public developed parcel that are more than six inches (6") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade; and,
 - c. Trees located within the public right-of-way that are more than two inches (2") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**TECHNICAL SPECIFICATIONS****SECTION 1 - TRAFFIC SIGNAL AND ELECTRICAL SYSTEMS**

This section describes the electrical work to be completed per the project plans. Work includes, but is not limited to, implementing an adaptive traffic signal control system, installing new wireless detection equipment, video detection equipment, City-furnished controller cabinet, and controller cabinet foundation, and removing an existing controller cabinet and cabinet foundation. The locations of cabinets, poles, conduit, pull boxes, detectors, cameras, and electrical service equipment shown on the plans are approximate and exact locations shall be determined in the field. All systems shall be complete and in operating condition at the time of acceptance of the contract.

FOUNDATIONS

Foundations, as shown on the plans, shall conform to the provisions in Section 86-2.03, "Foundations", of the Caltrans Standard Specifications and these Special Provisions. The contractor shall furnish and install anchor bolts for new controller cabinets. Actual base plate dimensions shall be checked by the Contractor prior to pouring concrete foundations.

REMOVING, REINSTALLING OR SALVAGING ELECTRICAL EQUIPMENT

Removing, reinstalling or salvaging electrical equipment shall conform to the provisions in Section 86-7, "Removing, Reinstalling or Salvaging Electrical Equipment," of the 2010 Caltrans Standard Specifications and these Special Provisions. Deliver equipment to 27 Ryan Ranch Rd., Monterey, CA 93940. Whenever a part of a square or slab of existing concrete sidewalk, curb, gutter, or driveway is broken or damaged, the entire square section, or slab, shall be removed and reconstructed as specified. All landscaping that is damaged by the Contractor's operations shall be replaced in kind.

Removed items shall become the property of the Contractor, unless otherwise specified by the plans or the Engineer, and shall be disposed of as provided in Section 7-1.13 of the 2010 Caltrans Standard Specifications.

CONDUCTORS, SIGNAL CABLES, AND WIRING

Conductors, signal cables, and wiring shall conform to the provisions in Section 86-2.08, "Conductors," and Section 86-2.09, "Wiring," of the 2010 Caltrans Standard Specifications, these Special Provisions, and as shown on the plans.

BONDING AND GROUNDING

Bonding and grounding shall conform to Section 86-2.10, "Bonding and Grounding," of the 2010 Caltrans Standard Specifications and these Special Provisions. Grounding to existing water systems will not be permitted.

CITY-FURNISHED TRAFFIC SIGNAL CONTROLLER CABINETS

The Contractor shall install City-furnished Type 'P' NEMA TS-2, Type 2 and Type 'M' (stretch) NEMA TS-2, Type 2 controller cabinets as shown on the plans. The City-furnished cabinets shall be installed on existing foundations with the doors oriented as shown on the plans. The cabinets will be stored at 27 Ryan Ranch, Monterey, CA 93940.

REMOVE EXISTING CONTROLLER CABINETS

The Contractor shall disconnect existing cabinet equipment and remove and salvage the existing cabinet. Where necessary, the Contractor shall modify the existing conduit risers to enter the bottom of the new cabinet. The risers shall be installed with a waterproof seal.

CONDUIT

Conduit shall conform to the provisions in Section 86-2.05, "Conduit", of the 2010 Caltrans Standard Specifications and these Special Provisions.



All conduits shall be poly vinyl chloride (PVC), Schedule 80 with rigid steel sweeps. IMC conduit is not allowed. With the exception of bends to and from pull boxes and foundations, the conduit shall run straight and true so that cable pulling forces are minimized. There shall be no more than 180 degrees in bends. An intermediate pull box can be installed to relieve the need for additional bends, at the Contractor's cost.

Insulated bonding bushings will be required on metal conduit. All nonmetallic conduits shall have a No. 8 stranded (with green insulation) copper bonded/grounding wire. These bonding/grounding wires shall be connected in the pull box with cable connectors.

Conduits into pull boxes and pole foundations shall be rigid metal and have 90-degree sweeps. Plastic pulling bells shall be installed on all conduit ends before cables or conductors are pulled through the conduits.

After cables and conductors have been installed, the ends of conduits terminating in pull boxes and/or controller cabinets will be sealed with an approved type of sealing compound.

All excavated areas in the street or sidewalk shall be completely backfilled or covered at the end of each working day and approved by the Engineer.

PULL BOXES

Pull boxes shall conform to the provisions in Section 86-2.06, "Pull Boxes" of the 2010 Caltrans Specifications and these Special Provisions.

When a pull box is subjected to vehicular traffic load, the cover shall be steel embossed with a non-skid pattern.

Pull boxes shall be placed at same elevation as adjacent standard base, service cabinet base or signal controller cabinet base if not an existing or future sidewalk area and elevation is not shown on plans. Pull boxes shall be five feet (5') from base or as shown on the plans. Pull boxes in existing or future sidewalk areas shall be placed at sidewalk elevation. The pull box elevation for pull boxes installed in median areas shall match the slope of the two adjacent curbs. The pull box elevation for pull boxes installed in planting areas adjacent to sidewalk or sidewalk area shall be at sidewalk grade. Pull boxes shall not be located within the limits of wheelchair ramps.

When pull boxes are placed in dirt and planting areas, a concrete collar shall be constructed around the pull box. The concrete collar shall be a minimum 12 inch concrete collar by 4 inch thick and at least 4 inches along the sides of the pull box to the bottom edge. The top of the pull box shall match slope of the adjacent top of curb. The surface elevation of the collar shall match the surface elevation of the pull box and slope away from the pull box at a rate of 1:50 (2%) slope.

The Contractor shall clean all existing pull boxes entered for installation of conduit or cable or all dirt and debris. All pull box lids damaged by Contractor operations shall be replaced at his/her expense. The wiring in these pull boxes shall be neatly bundled, recoiled, and reinstalled in the box. Where existing pull boxes are removed and replaced with new larger boxes, the existing conduits shall be cut back. When the conduits are cut, the existing conductors must either be removed or well protected. The ends of the cut conduits must have bushings placed on them.

Grout in bottom of pull boxes will not be required. Pull boxes shall be set on 6 inches of crushed rock for drainage. The conduits in the pull boxes shall be placed 2 inches above the crushed rock.

All new pull boxes shall be No. 5 unless otherwise noted on the plans.

All conduit sweeps into No. 6 pull boxes on fiber optic interconnect runs shall be 45 degrees.

Any surface damaged, asphalt or concrete, as a result of pull box installation shall be repaired at Contractor's expense or paid under various items of work.

FABRIC INNERDUCT

Flexible fabric innerduct shall be installed per the Plans, and shall have a minimum of three cells, each with mule



tape, and shall be installed according to the manufacturer's recommendations. Rigid or semi-rigid innerduct is not allowed.

SCOOT ADAPTIVE TRAFFIC SIGNAL SYSTEM

GENERAL

The work described herein consists of furnishing, installing, configuring, integrating and testing the SCOOT adaptive traffic control system as shown on the plans and described in these special provisions.

For items identified as part of Siemens' SCOOT Adaptive System in the plans and these special provisions, Contractor shall contact the following Western Systems representative:

Stewart J. Wilkerson, Territory Manager
swilkerson@westernsystems-inc.com
 1122 Industry Street, Bldg. B
 Everett, WA 98203
 209-304-3517 (mobile), 425-438-1585 (fax)

ADAPTIVE SYSTEM COMPONENTS

As part of the adaptive system, Contractor shall work with Adaptive System Vendor to configure, integrate and test the controller firmware to operate SCOOT on the existing controller. Both the Contractor and the Adaptive System Vendor shall be responsible for configuration of the controller and controller firmware for a full complete and operational system.

In addition, the adaptive system shall include:

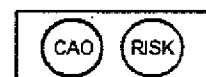
- UTC software license for PC.SCOOT and SCOOT vMC3 (up to 10 intersections)
- Initial configuration of SCOOT
- ASTRID/INGRID licenses
- Detector survey and documentation
- Graphics
- Equipment installation and onsite setup
- Programming SCOOT parameters
- SCOOT system graphics and documentation
- SCOOT validation and onsite field fine-tuning
- 1-year telephone and email support, and remote access support (via VPN), with one week onsite
- 1 week UTC System Managers and Operators training
- Turn-key, operational SCOOT system

ADAPTIVE SYSTEM TESTING

The Adaptive System Vendor shall conduct tests required herein that demonstrate that the equipment and the system furnished and installed under this contract function in full compliance with the requirements of the contract documents. Submit test procedures for all tests to the City for approval. Conduct all tests in the presence of the City using approved test procedures. Submit test results to the City using approved test data forms. The City will review the test results for conformance with the requirements of these contract documents. If the equipment or systems fail any part of the test, the Adaptive System Vendor shall make all necessary corrections and repeat that test.

Prior to conducting any testing, the Adaptive System Vendor shall submit to the City the testing plans documenting the test procedures. The testing plans shall also document the operation and functional requirements to be verified by the tests.

Any Adaptive System Vendor-furnished equipment that fails during testing shall be replaced immediately at no additional cost to City.



INTEGRATION TEST

Adaptive System Vendor shall integrate, configure and test the SCOOT system. The test procedures shall confirm that the SCOOT server is operational and able to communicate with the traffic controllers and detectors in the field. The test procedure shall also include confirmation that the detectors are mapped accurately for the SCOOT system and that the data from each individual intersection as well as the data along the corridor as a whole is being exchanged with the TACTICS and SCOOT servers. This test may require fine-tuning and calibration of some field elements.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

OFFLINE TEST

Once the system is fully configured and calibrated, the Adaptive System Vendor shall test the system's full operational capabilities offline. The testing procedure shall confirm that the system is capable of completing several operational tasks including, but not limited to, the following:

- Time of day operations
- Automatically enabling and disabling SCOOT operation based on user-configurable traffic volume thresholds by intersection and by blocks of intersections
- Ability to continue operations when there is failed communications to one or more intersections up to a user-configured maximum number

This test shall be conducted offline using live real-time data from the intersections. The test shall be conducted for each intersection individually, then for the entire adaptive corridor.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

OPERATIONAL TEST

Adaptive System Vendor shall begin the operational test of the SCOOT system. This test shall constitute a go live test of adaptive control on the corridor for thirty (30) consecutive and uninterrupted calendar days. During the operational test period, Adaptive System Vendor shall allow the system to run and periodically monitor system operations and make adjustments as necessary. Any fatal errors that cause the SCOOT system to stop operating during this period shall be corrected and the test restarted for another thirty (30) consecutive uninterrupted calendar days.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

SYSTEM ACCEPTANCE

Upon satisfactory completion of the tests above, the City will continue the System Acceptance process with the Adaptive System Vendor. This task shall demonstrate that system implementation is complete, all field installation and integration is complete, installation and configuration of system server is complete, and that the system is ready for City to take over responsibility.

WARRANTY AND MAINTENANCE

The system shall include a minimum 1-year warranty on hardware and software. The warranty period shall begin only after the system and all work under the contract has been accepted by the City. Adaptive System Vendor shall replace defective hardware components at no cost to the City (including parts, shipping, labor, and expenses for repairing or replacing equipment). In addition, Adaptive System Vendor shall provide technical support (telephone, email, remote system support, on-site support) during the warranty period.

TRAINING

Adaptive System Vendor shall provide system operator training to facilitate support and administration of the adaptive system by City staff. Training shall give operators working knowledge of Adaptive System Vendor-



furnished hardware, including operational features and maintenance. Training shall give operators working knowledge of operational commands and database modification procedures required to support the system. Training location shall be approved by the City. Training shall be a minimum of 40 hours (5 working days), and include a combination of hands-on training in addition to classroom training. Adaptive System Vendor shall provide City with copies of all training materials, as well as installation manuals, trouble-shooting manuals, etc.

SENSYS NETWORKS WIRELESS VEHICLE DETECTION SYSTEM

The Contractor shall furnish and install Sensys Networks Wireless Vehicle Detection and/or Travel Time System, or City approved equal, at various locations as shown on the Construction Documents. These components include, but are not limited to, Wireless Vehicle Sensor Nodes, Ethernet Access Points, and Repeaters.

Contractor shall furnish and install Sensys VDS240 Wireless Vehicle Detection System as described below.

VSN240-F WIRELESS SENSOR

Dimensions:

- Length 7.4 cm | 2.9 inches
- Width: 7.4 cm | 2.9 inches
- Height: 4.9 cm | 1.9 inches

RF Specification

- IEEE 802.15.4 Standard Compliant
- Operates in any one of 16 5Mhz channels in the 2.4-2.48 GHz ISM band

Programmable Event Reporting Parameters:

- Transmit Interval in seconds: 0.125, 0.25, 1, 2, 3, 5, 6
- Reporting Latency in seconds: 0.125, 0.25, 0.5, 1, 2, 3, 5, 6, 10, 30
- Latency as low as 50msec in Low-Latency mode
- Presence and Pulse Modes
- RF watchdog timer
- Synchronize event reporting to AP clock or to detection events

Powering:

- Battery powered
- Expected lifetime of 10 years

Environmental:

- NEMA 6P / IP 68
- Temperature: -40F to 185F (-40C to +85C)

AP240-E ACCESS POINT

Host Processor:

- 66 MHz 5272 Coldfire processor
- 4 MB of Flash memory
- 16 MB of DRAM

SNP-based wireless interface to the VSN240 sensors:

- Conforms to Sensys SNP
- IEEE 802.15.4 Standard Compliant
- Distance from AP240-E to sensors: 100ft to 200ft, depending on AP240-E antenna height and terrain.
- Operates in any one of 16 5MHz channels in the 2.4-2.48 GHz ISM band

Ethernet Interface:

- 10/100 BASE-T
- IP address via DHCP or static
- IP67 RJ45 bulkhead connector



- Proprietary Power Over Ethernet (12V to 24V)
- Standard Power Over Ethernet (36V to 60V)

Serial Port A Interface:

- GPRS or CDMA 1xRTT modem (optional)
- UP to 115.2kbps RS232C

Serial Port B Interface:

- GPS (optional)
- External via IP67 RJ45 bulkhead connector (optional)
- Up to 115,200kbps RS232C or RS485
- Proprietary Power over Serial Port (optional)

TCP/IP Support:

- Protocols supported: telnet, ftp, http, ppp, pptp
- Tunneling to VPN allows connection to AP240-E without a static address
- Encryption over Tunnel (optional)

Powering:

- 9VDC to 24VDC or 36V to 60V input
- 1 W to 1.5 W depending on options
- POE injector with 110VAC to 240VAC 50Hz-60Hz DC supply (optional)
- Solar power panel (12V, 10W with battery back-up)(optional)

Environmental:

- NEMA 4X / IP 67 Enclosure, 6 x 5 x 2.5"
- Temperature: -40F to +176F (-40C to +80C)

SNP-TCP/IP Gateway:

- Supports TCP streams to applications
- Transparent access to sensor data
- Multiple applications can ask for SNP packets based on packet type
- Can supply synchronization to applications

Software Download:

- Can store download image locally in host
- Can download new software to one or more sensors simultaneously

Software Applications**SNAP-STAT:**

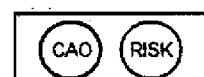
- Computes counts, speed, occupancy, vehicle length, & other statistics per lane over various intervals
- Real-time individual vehicle speed, length and inter-vehicle time gaps
- Data can be pulled via telnet/ftp or pushed via PeMs® Interface
- On-board storage eliminates dropped data

SNAP COUNT:

- Accurate directional count for parking facilities
- Provides event time-stamp, lane id, direction of travel, and duration of vehicle presence over sensing area

SNAP EVENT:

- IP port to access event data
- SNAP-C:
- Interfaces to contact closure interface cards



INSTALLATION

Detector installation and configuration shall be performed in accordance with the requirements of the applicable SSS, City Standard Details, and the Contract Documents. Attention is directed to City Standard Specifications and State Standard Detail. The Sensys Access Point shall be installed on the existing traffic signal pole as shown on the plans.

Access Point Installation Procedure

1. Determine Access Point location position based on RF range limitation.
2. Run Cat 5e outdoor rated cable from power/data source in traffic cabinet to Access Point.
3. Mount Access Point, and attach Cat 5e cable using push/pull bulk head connector.
4. Point front of Access Point towards Repeater.

VDS Installation Procedure

1. Prior to installation, note sensor's ID, lane number, and location in lane.
2. Unless otherwise specified, install the sensor in the middle of the lane.
3. Point the arrow on the sensor's label in the direction of traffic flow
4. Core a hole at least 2.25" deep, so that when installed, the top of the sensor is at least 0.25" below the surface.
5. Make sure the sensor installs flat in the cored hole and is not tilted.
6. Wireless system detection only: If multiple sensors are installed per lane, they should be 20 linear feet apart, unless otherwise specified.
7. Travel Time System only: Five sensors should be installed in number 1 or number 2 lane as shown on Construction Documents unless otherwise specified. Sensors should be installed adjacent to each other with 1 foot spacing, unless otherwise specified on the Construction Documents.
8. Record distances between each sensor pair for wireless system detection.

The Contractor shall provide 15 feet of slack in each pull box for the cat 5 cable. The Contractor shall test all components of the system detection unit including sensors, access point, and repeaters to ensure proper operation.

ITERIS VANTAGE NEXT VIDEO DETECTION SYSTEM**GENERAL**

Video Detection Systems shall be installed at the following locations:

1. Lighthouse Avenue/Irving Avenue
2. Lighthouse Avenue/Prescott Avenue
3. Lighthouse Avenue/Drake Avenue
4. Lighthouse Avenue/Reeside Avenue
5. Lighthouse Avenue/Del Monte Avenue

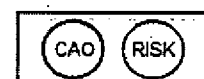
This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle and bicycle traffic.

SYSTEM HARDWARE

The video detection system (VDS) shall accommodate per intersection up to four video cameras, up to four video detection processors (VDP) capable of processing one video source each, one Central Control Unit (CCU), input/output extension modules, video surge suppressors and a pointing device, or any combination thereof.

SYSTEM SOFTWARE

The system shall include software that discriminately detects the presence of individual vehicles and bicycles in a single or multiple lanes using only the video image. Detection zones shall be defined using only an embedded software application. A monitor, a keyboard and a pointing device are used to place the zones on a video image. A minimum of 32 detection zones per camera view shall be available. A separate computer shall not be required to program the detection zones.



VDS HARDWARE

VIDEO DETECTION PROCESSOR SYSTEM INTERFACES

The following interfaces shall be provided on each video detection processor

VIDEO INPUT

Each VDP will be supplied with video from the VDS Camera Sensor. The interface connector shall be an RJ-45 type and shall be located on the back of the CCU unit.

VIDEO LOCK LED

A LED indicator shall be provided to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.

CONTACT CLOSURE OUTPUT

Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the Video Detection Processor rack-mount configuration. Additionally, the VDS shall allow the use of extension modules to provide up to 32 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30mA at 24VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions. The VDP outputs shall be compatible with industry standard detector racks assignments.

LOGIC INPUTS

Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module. For VDPs and extension modules, 4 inputs shall be supported via detector rack interface. The I/O module shall accommodate eight (8) inputs through a 15-pin "D" connector.

DETECTION LEDES

Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. Rack-mounted video processors shall have a minimum of four (4) LEDs. Rack-mounted extension modules shall have two (2), four (4) or eight (8) LEDs (depending upon extension module type) to indicate detection.

TEST SWITCHES

The front panel of the VDP shall have detector test switches to allow the user to manually place vehicle and bicycle calls on each VDP output channel. The test switch shall be able to place a momentary call.

Both the VDP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the VDP or EM in a standard detector rack and no rack rewiring shall not be required.

VDP printed circuit boards (PCBs) shall be conformally coated in accordance with Caltrans and NEMA specifications.

ON-BOARD MEMORY

The VDP shall utilize non-volatile memory technology to store on-board firmware and operational data.

FIRMWARE UPGRADE

The VDP and CCU shall enable the loading of modified or enhanced software through either the Ethernet or front-panel USB port (using a USB thumb drive) and without removing or modifying the VDP or CCU hardware.



VDP AND EM POWER

The VDP and EM shall be powered by 12 or 24 volts DC. VDP and EM modules shall automatically compensate for either 12 or 24 VDC operation. VDP power consumption shall not exceed 7.5 watts. The EM power consumption shall not exceed 3 watts.

OPERATING TEMPERATURE

The VDS shall operate satisfactorily in a temperature range from -30° F to +165° F (-34° C to +74° C) and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

VDS CCU

The VDS CCU sensor shall be supplied by the VDS manufacturer.

HARDWARE

The CCU shall be supplied in a standard one (1) Rack Unit (1U) 19" rack format. There shall be brackets to allow the CCU to be mounted under shelves where a 19" frame is not available.

CCU POWER

The CCU shall be powered from an 110V or 230V, 50Hz or 60Hz supply. CCU power consumption shall not exceed 20 Watts

OPERATING TEMPERATURE

The VDS shall operate satisfactorily in a temperature range from -30° F to +165° F (-34° C to +74° C) and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

ON-BOARD MEMORY

The CCU shall utilize non-volatile memory technology to store on-board firmware and operational data.

VIDEO SURGE SUPPRESSION

The CCU shall incorporate video surge suppression for each video input. The CCU shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.5mm²) minimum.

POWER SURGE SUPPRESSION

The CCU shall incorporate power surge suppression both on the input power and on the power supplied to the cameras. The CCU shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.5mm²) minimum.

POWER MANAGEMENT

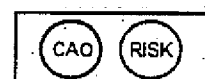
The CCU shall incorporate power management for the various parts of the VDS such that if fault conditions are detected the power supply will safely shut down the power to that peripheral.

INTERFACES**EXTENSION MODULES**

Extension modules (EM) shall be available to eliminate the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The EM shall be available in both 2- and 4-channel configurations. EM configurations shall be programmable from the CCU. A separate I/O module shall also be available having 32 outputs through a 37-pin "D" connector on the front panel and 8 inputs through a 15-pin "D" connector using an external wire harness for expanded flexibility.

The CCU shall provide four ports for connection to VDS camera sensors. The connector shall be an RJ-45 type.

The CCU shall provide four ports for connection to VDPs. The connector shall be an RJ-45 type.



The CCU shall provide 2 USB 'A' ports on the front panel of the rack mount CCU unit. These ports can be utilized for various functions. For example, keyboard and mouse functions during system configuration, USB storage devices can be utilized for bin data and video collection. The USB ports shall not require special mouse software drivers. The USB ports shall be used as part of system setup and configuration.

The CCU shall provide an output to a monitor. The port shall be HDMI.

COMMUNICATIONS

An Ethernet communications port shall be provided on the front panel. The Ethernet port shall be compliant with IEEE 802.3 and shall use a RJ-45 type connector mounted on the front panel of the CCU. The Ethernet communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented or interface software shall be provided. Each VDS shall have the capability to be addressable. The VDP shall support data rates of up to 100Mbps.

The CCU shall provide an SDLC connection to the Traffic Controller. The connector shall be a 'D-15' type, in compliance with NEMA TS-2 specifications.

The CCU shall provide an indicator when the SDLC port is active.

The CCU shall provide an indicator when the unit has power.

The CCU shall provide an indicator when the unit is on line.

The CCU shall provide a Wi-Fi connection. The connection shall be over a standard 2.4GHz connection. The Wi-Fi connection shall be enabled and disabled by a switch on the CCU. The CCU shall provide an indicator when the Wi-Fi connection is active.

The CCU shall provide system status via an on-board Organic Light Emitting Diode display. The display shall indicate various system parameters, such as camera health and VDP health, firmware version and camera air temperature. The display will be enabled and disabled with a switch on the CCU.

VDS CAMERA SENSOR

The VDS camera sensor shall be supplied by the VDS manufacturer.

The VDS camera sensor shall utilize a single shielded CAT5E or CAT6 cable for power and video. Cable termination at the camera shall not require crimping or special tools. The cable termination shall only require a standard wire stripper and a screw driver. No connectors (e.g. BNC) shall be allowed.

The camera sensor shall allow the user to set the focus and field of view via the VDS software. Camera sensor control from the controller cabinet shall communicate over a single Cat-5e or CAT6 cable. No additional wires shall be required.

The camera shall produce a useable video image of the features of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.003 lux to 10,000 lux.

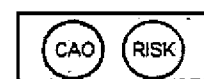
The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night for the VDS algorithms.

The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.

The imager shall employ three dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.

The camera imager shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.

The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 540 TV lines. The color CCD imager shall have a minimum effective area of 811(h) x 508(v) pixels.



The camera shall include an electronic shutter control based upon average scene luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter. The electronic shutter shall operate between the range of 1/60th to 1/90,000th second.

The camera shall utilize automatic white balance.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.

The horizontal field of view shall be adjustable from 4.5 to 48 degrees. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a 12x zoom lens with a focal length of 3.5mm to 35mm.

The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.

The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall allow the camera to be rotated to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view. The camera enclosure with sunshield shall be less than 3.5" (89mm) diameter, less than 5.25" (133mm) long, and shall weigh less than 2.5 pounds (1.14kg) when the camera and lens are mounted inside the enclosure.

The enclosure shall be designed so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.

The camera enclosure shall include a proportionally controlled Indium Tin Oxide (ITO) lens coating for the heating element of the front glass that maximizes heat transfer to the lens. The output power of the heater shall vary with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure. The transparent coating shall not impact the visual acuity and shall be optically clear.

The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -30° F to +140° F (-34 °C to +60 °C) and a humidity range from 0% RH to 100% RH. Measurement of satisfactory video shall be based upon VDP system operation.

The camera shall be powered by 48VDC. Power consumption shall be 5 watts typical and 16 watts or less under worst conditions.

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet (107 meters) for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The video signal shall be fully isolated from the camera enclosure.

Cable terminations at the camera for video and power shall not require crimping tools.

A weather-proof protective cover shall be provided to protect all terminations at the camera. No special tooling shall be required to remove or install the protective cap.

The camera assembly shall include a temperature sensor. The sensor will be polled by the VDS every minute and will supply the current air temperature. The VDS software will display this information on the On-Screen Display for each camera.



VDS SOFTWARE

GENERAL SYSTEM FUNCTIONS

Detection zones shall be programmed via an embedded application displayed on a video monitor and a keyboard and a pointing device connected to the CCU. The menu shall facilitate placement of detection zones and setting of zone parameters or to configure system parameters. A separate computer shall not be required for programming detection zones or to view system operation. All programming function shall occur on live video images, no snapshots or still images are allowed.

The VDS software shall store up to five completely independent detection zone patterns in non-volatile memory.

The VDS can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device. Each configuration shall be uniquely labeled and able to be edited by the user for identification. The currently active configuration indicator shall be displayed on the monitor.

The VDS shall detect vehicles and bicycles in real time as they travel across each detection zone.

The VDS shall accept new detection patterns from an external computer through the Ethernet port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™-based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.

The VDS shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

The VDS shall send its detection patterns to an external computer through the Ethernet port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.

The VDS shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the video signal.

The VDS shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all affected detection zones in a constant call mode. A user-selected alarm output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists. An On-Screen Icon will be displayed while the system is in this mode.

Up to 32 detection zones per camera input shall be supported and each detection zone must be user-sizeable to suit the site and the desired vehicle detection region.

The VDS shall provide up to 32 open collector output channels per camera input using one or more extension modules.

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may instead be AND'ed together to indicate vehicle presence on a single approach of traffic movement.

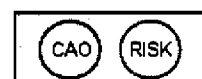
When a vehicle is detected within a detection zone, a visual indication of the detection shall activate on the video overlay display to confirm the detection of the vehicle for the zone.

Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.

The VDS shall provide dynamic zone reconfiguration (DZR). DZR sustains normal operation of existing detection zones when one zone is being added or modified during the setup process. The new zone configuration shall not go into effect until the configuration is saved by the operator.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

The VDS shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.



The VDS shall output a constant call during the background learning period of no longer than 3 minutes.

Detection zone outputs shall be individually configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.

Up to six detection zones per camera view shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the Ethernet port. The zone shall also have the capability to calculate and store average speed and lane occupancy at user-selectable bin intervals of 10 seconds, 20 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes and 60 minutes.

In addition to the count type zone, the VDS shall be able to calculate average speed and lane occupancy for all of the zones independently. These values shall be stored in non-volatile memory for later retrieval.

The VDS shall have an "advance" zone type where raw detection output duration to the traffic controller is compensated for angular occlusion and distance.

The VDS shall employ color overlays on the video output.

The VDS shall have the ability to show controller phase status (green, yellow, or red) for up to 8 phases. These indications shall also be color coded.

The user shall have the ability to enable or disable the display of the phase information on the video output.

The VDS shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state. For example, a zone may be a "count" zone when the phase is green but change to a "presence" zone type when the phase is not green. Another application would be zone type of "extension" when the signal phase is green and then "delay" when red.

The VDS software shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. The additional zone shall utilize geometric extrapolation of the parent zone when creating the child zone. The process shall also automatically accommodate lane marking angles and zone overlaps.

When the user wishes to modify the location of a zone, the VDS software shall allow the user move a single zone, multiple zones or all zones simultaneously.

When the user wishes to modify the geometric shape of the zone, the VDS software shall allow the user to change the shape by moving the zone corner or zone sides.

On screen zone identifiers shall be modifiable by the user. The user shall be allowed to select channel output assignments, zone type, input status, zone labels or zone numbers to be the identifier.

The VDS software shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other.

Bicycle zone types shall only output when a bicycle is detected. Larger motorized vehicles such as cars and trucks that traverse a bicycle zone shall not provide an output.

The VDS software shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing.

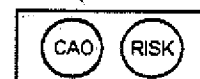
Placement of bicycle type zones in vehicle lanes shall be allowed.

Upon detection of a bicycle, the video output overlay shall indicate active detection as well as providing a unique bicycle detection identifier to visually distinguish bicycle detection versus vehicle detection.

Up to six bicycle detection zones per camera view shall have the capability to count the number of bicycles detected in addition to their normal detection function. The count value shall be internally stored for later retrieval through the Ethernet port.

AUTOMATIC TRAFFIC VOLUME GRAPH

The On-Screen Display shall include an Automatic Traffic Volume graph. This graph will display estimated Vehicles Per Hour (VPH) per movement for each camera view. The graph will display a rolling 24 hour period of VPH.



OCCUPANCY GRAPH

The On-Screen Display shall include an Occupancy Graph. This graph will display estimated approach occupancy for each camera view. The graph will display a rolling 24 hour period of Occupancy.

USER INTERFACES

This section sets forth the minimum requirements for the VDS to provide a single point interface to remote and local users. The VDS shall also have the capability to stream up to four simultaneous video streams over an Ethernet interface.

The user interface shall provide capabilities to enable multiple rack-mounted video detection processors to be locally and remotely accessed from a single point via an Ethernet connection.

The device shall allow the operator to view four videos simultaneously or any one video by controls embedded in the VDS.

Local user access to video detection programming shall be limited to the detection processor unit that is currently being displayed on the monitor.

All local programming and setup parameters for the video detection processor shall be user accessible through the interface unit without requiring the user to swap user interface cables between video detection processors.

Remote access to the device shall be through the built-in Ethernet port via access software running on a Microsoft Windows based personal computer.

A Windows OS remote access firmware shall also be available for remote setup and diagnostics of the interface unit.

The VDS shall support streaming video technology using H.264 standards to allow the user to monitor video detection imagery over the Ethernet interface. Motion JPEG streaming video shall not be allowed.

The interface unit shall allow eight independent streams, one from each video processor, to be transported via Ethernet to four independent streaming video players simultaneously in D1 resolution.

The interface shall allow the user to select the resolution of the displayed streamed video.

The interface unit shall support the streaming and display of eight concurrent streams in D1 resolution.

The VDS shall allow the user to manage the unit's Ethernet bandwidth usage by allowing the user to select high, medium or low resolution.

The interface shall allow the user to change the unit's Ethernet network settings of IP address, subnet mask and default gateway.

The VDS shall allow the user to upload new application firmware through the use of the interface, remotely or on-site.

A Windows OS based application will be provided to remotely view video streams from the VDS.

An iOS based application will be provided to remotely view video streams from the VDS. This application shall allow the user to choose between any number of pre-configured intersection locations. The live video from any cameras at that location will be viewable on an iOS product, including the vehicle and bicycle detections occurring in real-time.

SDLC FUNCTIONALITY

This section sets forth the minimum requirements for a full-function BIU and integrated video detection communication. The VDS shall provide outputs to the controller of vehicle calls from video processors that reside within the detector rack.

FUNCTIONAL CAPABILITIES

The VDS shall have the capability of monitoring phase information and passing that information and other system data such as "time" from the controller to video detection processor modules. The VDP shall also accept data from



video processor modules and relay the information to the controller. The unit shall provide a maximum of 64 detector outputs to the controller via the SDLC interface.

REQUIREMENTS

The module shall be in compliance with the following industry specifications:

- *Transportation Electrical Equipment Specifications (TEES)*, August 16, 2002 (or latest edition), California Department of Transportation
- *NEMA Standard Publication TS 1-1989* (or latest edition), *Traffic Control Systems*, National Electrical Manufacturers Association
- *NEMA Standard Publication TS 2-2003, Traffic Controller Assemblies With NTCIP Requirements, Version 02.06* (or latest edition), National Electrical Manufacturers Association

DATA INTERFACES

The VDS shall have two data interfaces:

- The interface to the controller shall be accomplished by the use of the TS-2 SDLC port and protocol in accordance with the TS-2 specifications. The module shall be able to be configured to respond to BIU addresses 8, 9, 10 and 11 or a combination thereof.
- The interface to communicate with card rack video detection processors shall be manufacturer specific.

SDLC COMMUNICATION INDICATORS

One LED indicator shall be provided for the TS-2 SDLC interface. The indicator shall be used to inform the user of any communication activity on the SDLC port.

INSTALLATION

The cable to be used between the camera and the CCU in the traffic cabinet shall be Cat-5e shielded. The cable shall be suitable for installation in conduit or overhead with appropriate span wire. Shielded RJ-45 connectors shall be used where applicable. The Cat-5e cable, RJ-45 connector, stripping and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

Contractor shall provide 15 feet of slack in each pull box for the cat 5e cable.

WARRANTY

The supplier shall provide a limited three-year warranty on the video detection system.

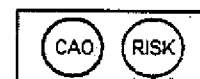
During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factory-certified personnel or factory-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

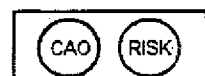
MAINTENANCE AND SUPPORT

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

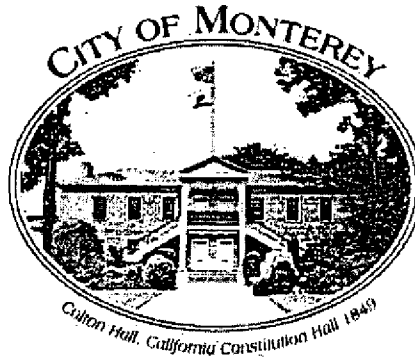
The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on site technical support services.



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APPENDIX A: BID PROPOSAL FORMS



CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS

BID PROPOSAL COVER SHEET

FOR

LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

Submit the following items unbound:

<u>ITEM</u>	<u>INCLUDED</u>
1. Bid Proposal Cover Sheet (this sheet)	_____
2. Proposal and Bid Schedule	_____
3. Declaration of Bidder	_____
4. Acknowledgement of Addenda (if applicable)	_____
5. Bidder's Statement of Qualifications	_____
6. Subcontractor's List	_____
7. Noncollusion Declaration	_____
8. Debarment and Suspension Certification	_____
9. Certification of Good-Faith Effort (Prime)	_____
10. Bid Bond	_____
11. Certification of Workers' Compensation Insurance	_____

Failure to include required items, included those identified above may result in your bid being deemed non-responsive resulting in rejection of your bid.

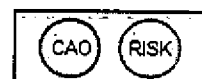
The undersigned Bidder submits the following documents for consideration of the project. The Bidder certifies that all statements and information set forth below are true and accurate.

By: _____

Company Name

Signature

Date



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

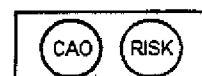
CITY OF MONTEREY

To the Honorable City Council
 City of Monterey
 City Hall
 Monterey, California

The undersigned declares to have carefully examined the location of the proposed work, that the Plans and Specifications as set forth herein have been examined, and hereby proposes to furnish all materials and equipment and do all the work required to complete the said work in accordance with said Plans and Specifications for the lump sums and unit prices set forth in the following schedule:

BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
1	Mobilization and Demobilization	1	LS		
2	Storm Water Compliance	1	LS		
3	Traffic Control	1	LS		
4	Furnish and Install SCOOT Adaptive System	1	LS		
5	Lighthouse Avenue and Hoffman Avenue	1	LS		
6	Lighthouse Avenue and McClellan Avenue	1	LS		
7	Lighthouse Avenue and Drake Avenue	1	LS		
8	Lighthouse Avenue and Dickman Avenue	1	LS		
9	Lighthouse Avenue and Reeside Avenue	1	LS		
10	Lighthouse Avenue and Del Monte Avenue	1	LS		
11	Record Drawings	1	LS		
TOTAL BASE BID (ITEMS 1 THROUGH 11) (In words) _____ _____					(In Figures) \$



ADDITIVE ALTERNATIVE 1 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
12	Lighthouse Avenue and David Avenue	1	LS		
TOTAL ALTERNATIVE 1 BID (ITEM 12) (In Words)					(In Figures)
_____					\$

ADDITIVE ALTERNATIVE 2 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
13	Lighthouse Avenue and Irving Avenue	1	LS		
TOTAL ALTERNATIVE 2 BID (ITEM 13) (In Words)					(In Figures)
_____					\$

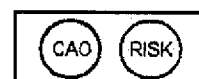
ADDITIVE ALTERNATIVE 3 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
14	Lighthouse Avenue and Prescott Avenue	1	LS		
TOTAL ALTERNATIVE 3 BID (ITEM 14) (In Words)					(In Figures)
_____					\$

GRAND TOTAL BID (BASE BID PLUS ADDITIVE ALTERNATIVES 1-3 (ITEMS 1-14)) (In Words)					(In Figures)
_____					\$

BASIS OF AWARD

Award of contract, if any be made, shall be made to the Contractor with the lowest responsive responsible bid based on the Grand Total Bid (Base Bid plus Additive Alternatives 1-3 (Items 1 through 14)).



DECLARATION OF BIDDER RE: LICENSE QUALIFICATIONS

Bidder certifies he/she possesses a license in accordance with a State Act providing for the registration of Contractors. License No. : _____ Class: _____, Expiration date: _____.

In accordance with California Labor Code (SB 854), bidder certifies that he/she is registered with the Department of Industrial Relations. Registration No.: _____.

ALL OF THE INFORMATION CONTAINED IN THIS BID PROPOSAL IS TRUE AND CORRECT AND IS EXECUTED UNDER PENALTY OF PERJURY IN

_____ COUNTY, CALIFORNIA, ON _____, 201_____.

Name of Firm: _____

Address: _____

Telephone: _____

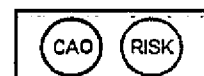
Email: _____

(If firm is an individual, so state. If a firm or co-partnership, state the firm name and give the names of person authorized to execute the declaration on its behalf.)

FAILURE TO PROVIDE ANY OF THE INFORMATION REQUIRED HEREIN INCLUDING CONTRACTOR SIGNATURES MAY RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE

Signature

Printed Name and Title



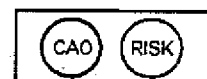
ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall list below any and all addenda issued for this project. Failure to list issued addenda will result in a non-responsive bid:

ADDENDA

DATE RECEIVED

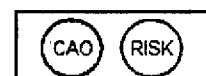
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____



BIDDER'S STATEMENT OF QUALIFICATIONS

The Bidder shall list below a minimum of three (3) jobs of a similar nature recently completed by Bidder's organization:

Project Name	Owner Name	Address	Telephone Number/Email	Contact Name



SUB-CONTRACTOR'S LIST

The Bidder shall list below the name, the location of the place of business, and the California contractor license number of any subcontractors proposed to perform work or labor or render service on this project, or a subcontractor licensed by the State of California who will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications of this project, whose work is in excess of one-half of 1 percent of the Bidder's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater:

Name of Subcontractor	California Contractor License Number	California DIR Registration Number	Location of Place of Business	Trade or Portion of Work



NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

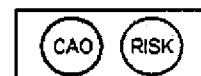
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, disqualification, or determination of ineligibility by any state, federal, or local agency;
- Has not been suspended, debarred, voluntarily excluded, disqualified or determined ineligible by any state, federal, or local agency within the past 3 years;
- Does not have a proposed debarment or disqualification pending; and
- Has not be indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

I declare under penalty of perjury that the foregoing is true and correct and that this certification is signed this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



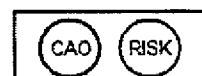
CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Prime Contractor - To be Submitted with Bid)

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the company on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Subcontractor – To be Completed by Subcontractor After Bid is Awarded)

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the contractor on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



BID BOND
(To Be Submitted with Bid)

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **the City of Monterey** ("the Oblige") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Oblige for the Work commonly described as: **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**.

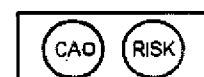
WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Oblige in the penal sum equal to Ten Percent (10%) of the Basis of Award or grand total of the base bid.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for ninety (90) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the Oblige, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Oblige the difference between the amount specified in said Bid Proposal and the amount for which the Oblige may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Oblige in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Oblige, the Surety and Principal shall be jointly and severally liable for payment to the Oblige all costs, expenses and fees incurred by the Oblige in connection therewith, including without limitation, attorney's fees.

[CONTINUED NEXT PAGE]



IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agents or representatives.

(Bidder/Principal Name)

By: _____
 (Signature)

 (Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

(Surety Name)

By: _____
 (Signature of Attorney-In-Fact for Surety)

 (Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

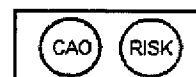
 (Contact Name)

 (Street Address)

 (City, State & Zip Code)

(_____) _____ (_____) _____
 Telephone Fax

 (Email address)



CERTIFICATION OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

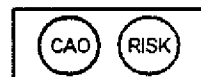
c. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

d. By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

3. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

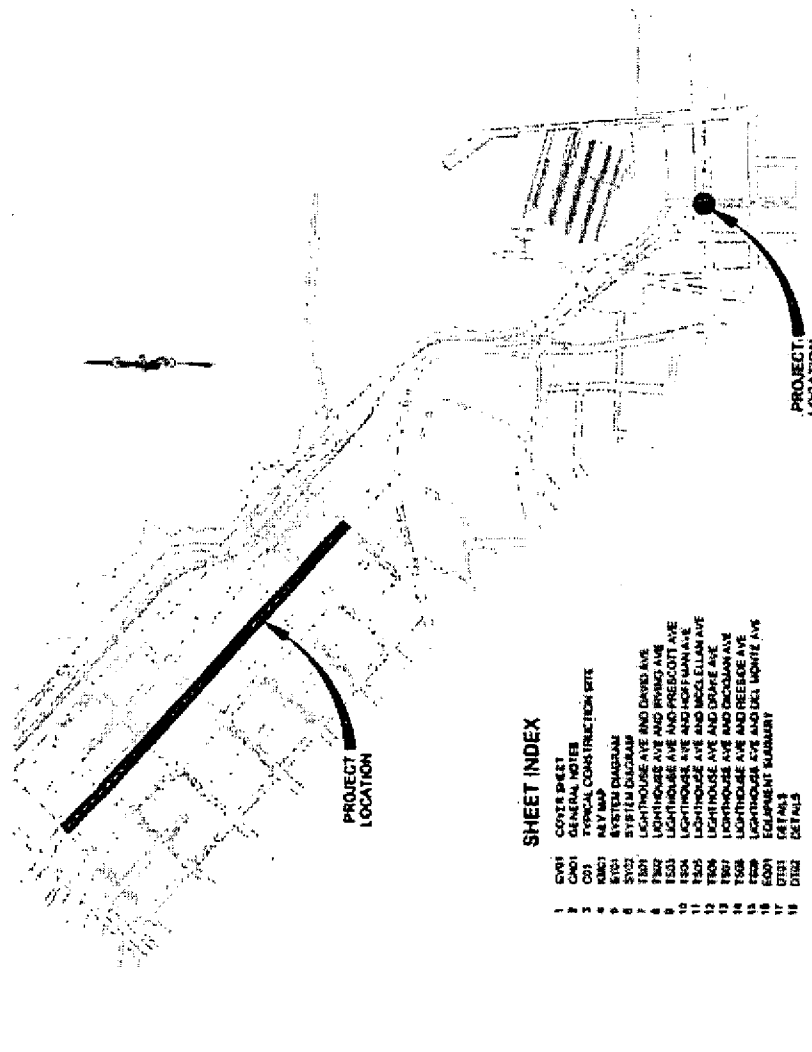
(Contractor Name)

By: _____
(Signature)



LIGHTHOUSE AVENUE ADAPTIVE SYSTEM FOR THE CITY OF MONTEREY

FOR USE IN CONJUNCTION WITH LIGHTHOUSE AVENUE ADAPTIVE SYSTEM SPECIFICATIONS, THE STANDARD DETAILS OF THE CITY OF MONTEREY, AND THE STANDARD PLANS AND SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, 2010.



ABBREVIATIONS

- ACAD - AUTOCAD
- AS - ARCHITECTURAL
- CE - CIVIL ENGINEER
- CL - CENTERLINE
- CO - COUNTY
- CS - CIVIL SERVICE
- DC - DISTRICT
- DM - DISTRICT MAP
- EA - ENVIRONMENTAL ANALYSIS
- EM - ELECTRICAL MECHANICAL
- ENR - ENGINEERING NEWS-RECORD
- EP - ENVIRONMENTAL PLAN
- ES - ENVIRONMENTAL STATEMENT
- ET - ENVIRONMENTAL TRAIL
- EV - EVALUATION
- EX - EXISTING
- FM - FINISHED GRADE
- FS - FINISHED SURFACE
- GA - GEOTECHNICAL
- GC - GEOTECHNICAL CONSULTANT
- GL - GEOTECHNICAL LOG
- GM - GEOTECHNICAL MAP
- GP - GEOTECHNICAL PLAN
- GR - GEOTECHNICAL REPORT
- GS - GEOTECHNICAL SURVEY
- GT - GEOTECHNICAL TEST
- HA - HISTORIC ARCHITECTURE
- HC - HISTORIC COMMISSION
- HM - HISTORIC MAP
- HP - HISTORIC PLAN
- HS - HISTORIC SURVEY
- HT - HISTORIC TEST
- IA - INTERSECTION
- IC - INTERSECTION CONSULTANT
- IL - INTERSECTION LOG
- IM - INTERSECTION MAP
- IP - INTERSECTION PLAN
- IS - INTERSECTION SURVEY
- IT - INTERSECTION TEST
- JA - JUNCTION
- JC - JUNCTION CONSULTANT
- JP - JUNCTION PLAN
- JS - JUNCTION SURVEY
- JT - JUNCTION TEST
- LA - LANDSCAPE ARCHITECTURE
- LC - LANDSCAPE CONSULTANT
- LP - LANDSCAPE PLAN
- LS - LANDSCAPE SURVEY
- LT - LANDSCAPE TEST
- MA - MATERIALS
- MC - MATERIALS CONSULTANT
- MP - MATERIALS PLAN
- MS - MATERIALS SURVEY
- MT - MATERIALS TEST
- NA - NOT AVAILABLE
- NC - NOT CONSULTED
- NE - NOT EVALUATED
- NI - NOT IDENTIFIED
- NO - NOT OBSERVED
- NP - NOT PLANNED
- NS - NOT SURVEYED
- NT - NOT TESTED
- OA - OFFICIAL ACTION
- OC - OFFICIAL CONSULTANT
- OP - OFFICIAL PLAN
- OS - OFFICIAL SURVEY
- OT - OFFICIAL TEST
- PA - PUBLIC ADMINISTRATION
- PC - PUBLIC CONSULTANT
- PP - PUBLIC PLAN
- PS - PUBLIC SURVEY
- PT - PUBLIC TEST
- RA - ROADWAY
- RC - ROADWAY CONSULTANT
- RP - ROADWAY PLAN
- RS - ROADWAY SURVEY
- RT - ROADWAY TEST
- SA - STRUCTURAL ANALYSIS
- SC - STRUCTURAL CONSULTANT
- SP - STRUCTURAL PLAN
- SS - STRUCTURAL SURVEY
- ST - STRUCTURAL TEST
- TA - TRAFFIC ANALYSIS
- TC - TRAFFIC CONSULTANT
- TP - TRAFFIC PLAN
- TS - TRAFFIC SURVEY
- TT - TRAFFIC TEST
- UA - UTILITIES ANALYSIS
- UC - UTILITIES CONSULTANT
- UP - UTILITIES PLAN
- US - UTILITIES SURVEY
- UT - UTILITIES TEST
- VA - VEHICLE ANALYSIS
- VC - VEHICLE CONSULTANT
- VP - VEHICLE PLAN
- VS - VEHICLE SURVEY
- VT - VEHICLE TEST
- WA - WATER ANALYSIS
- WC - WATER CONSULTANT
- WP - WATER PLAN
- WS - WATER SURVEY
- WT - WATER TEST
- XA - X-RAY ANALYSIS
- XC - X-RAY CONSULTANT
- XP - X-RAY PLAN
- XS - X-RAY SURVEY
- XT - X-RAY TEST
- YA - YIELD ANALYSIS
- YC - YIELD CONSULTANT
- YP - YIELD PLAN
- YS - YIELD SURVEY
- YT - YIELD TEST
- ZA - ZONING ANALYSIS
- ZC - ZONING CONSULTANT
- ZP - ZONING PLAN
- ZS - ZONING SURVEY
- ZT - ZONING TEST

LEGEND

- EXISTING
- PROPOSED
- CONCRETE
- ASPHALT
- GRAVEL
- GRAVEL WITH SAND
- GRAVEL WITH SAND AND STONE
- GRAVEL WITH SAND AND STONE AND CURB
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY
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- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION
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- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY
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- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR AND SPACE
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR AND SPACE AND AEROSPACE
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR AND SPACE AND AEROSPACE AND MARINE
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- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR AND SPACE AND AEROSPACE AND MARINE AND POLAR AND SPACE
- GRAVEL WITH SAND AND STONE AND CURB AND SIDEWALK AND BIKEWAY AND TRAIL AND PLANTING AND LIGHTING AND FURNITURE AND SIGNAGE AND ART AND LANDSCAPE AND WATER AND UTILITIES AND TELECOMMUNICATIONS AND ENERGY AND SECURITY AND AVIATION AND SPACE AND OCEANOGRAPHY AND METEOROLOGY AND CLIMATE AND AEROSPACE AND MARINE AND POLAR AND SPACE AND AEROSPACE AND MARINE AND POLAR AND SPACE AND AEROSPACE

SHEET INDEX

- 1 COVER SHEET
- 2 GENERAL NOTE
- 3 TYPICAL CONSTRUCTION SITE
- 4 ALY MAP
- 5 SYSTEM DIAGRAM
- 6 SYSTEM PLAN
- 7 LIGHTHOUSE AVE AND DAVIS AVE
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- 9 LIGHTHOUSE AVE AND PRESCOTT AVE
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- 11 LIGHTHOUSE AVE AND MCLELLAN AVE
- 12 LIGHTHOUSE AVE AND DRAKE AVE
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- 14 LIGHTHOUSE AVE AND LEXL MORTY AVE
- 15 EQUIPMENT SUMMARY
- 16 DETAILS
- 17 DETAILS
- 18 DETAILS

VICINITY MAP

Kimley»Horn
 CONSULTING ENGINEERS, INC.
 540 PACIFIC STREET, MONTEREY, CA 93940
 TEL: 831-948-2021 WEBSITE: WWW.KIMLEY-HORN.COM

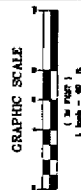
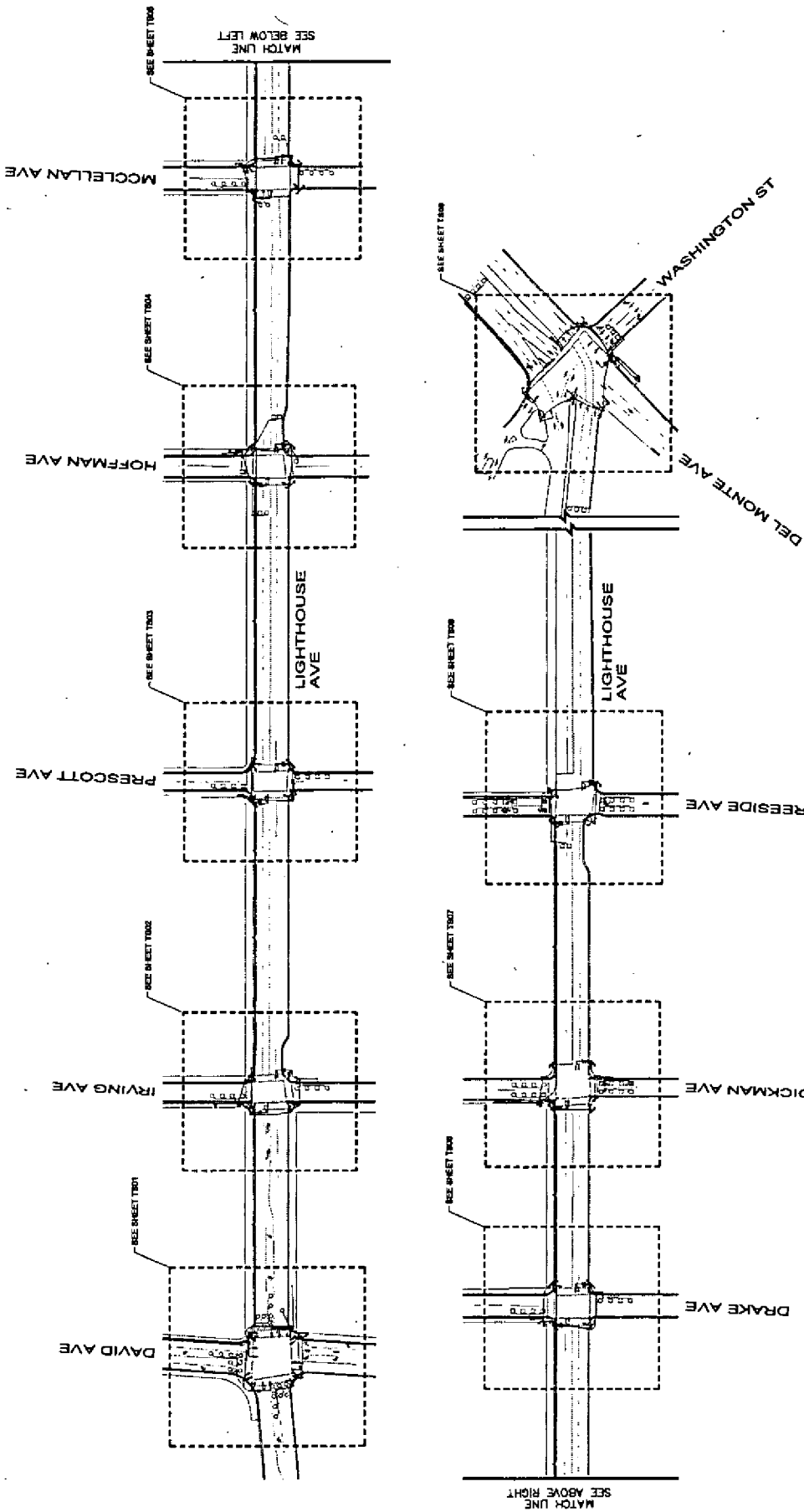
CITY OF MONTEREY
 DEPARTMENT OF PLANS AND PUBLIC WORKS
 540 PACIFIC STREET, MONTEREY, CA 93940
 TEL: 831-948-2021 WEBSITE: WWW.MONTEREY.ORG


NO.	DATE	DESCRIPTION
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2	02/01/10	REVISIONS
3	02/15/10	REVISIONS
4	03/01/10	REVISIONS
5	03/15/10	REVISIONS
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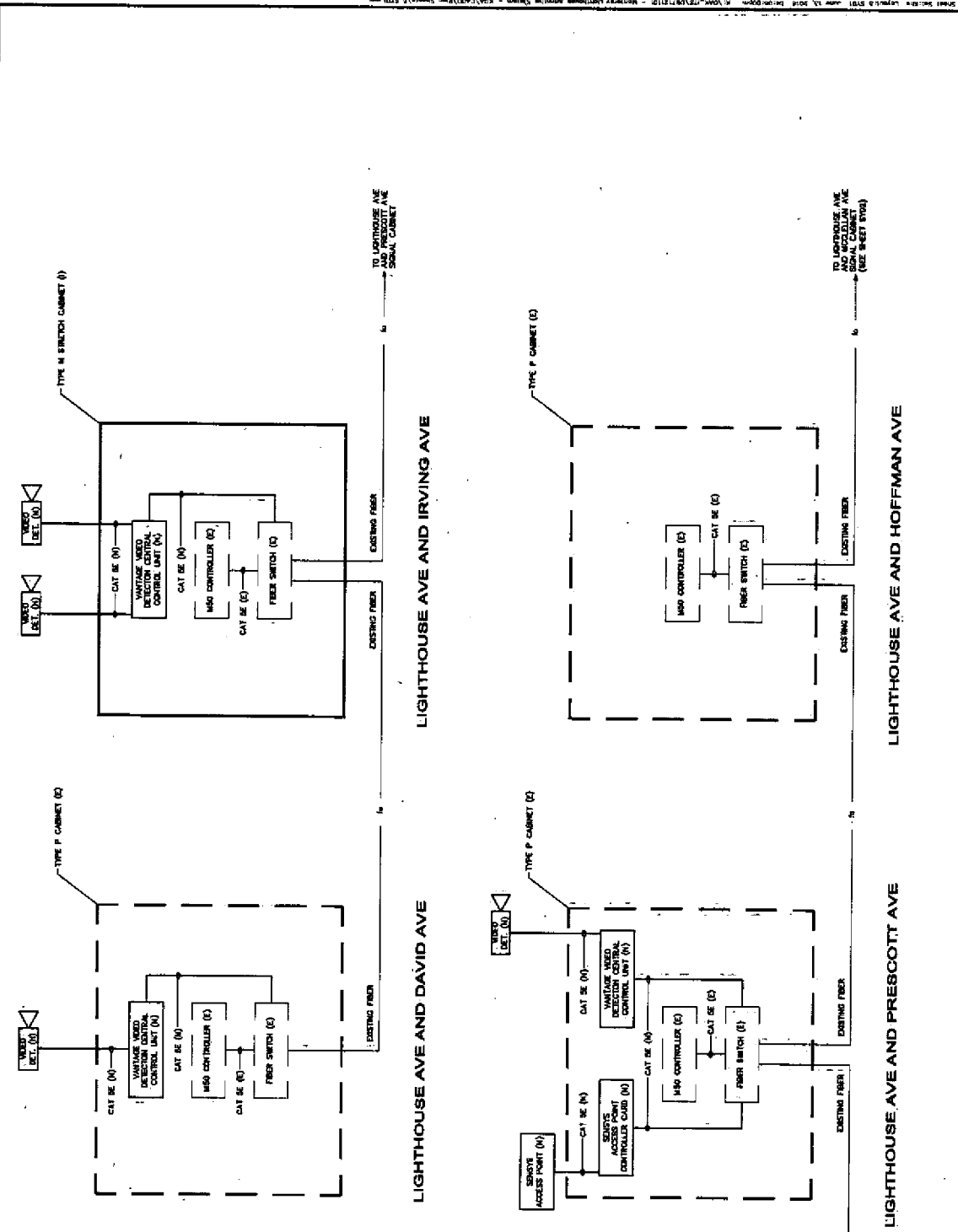
PROJECT NO.	10-001
PROJECT NAME	LIGHTHOUSE AVENUE ADAPTIVE SYSTEM
CITY	MONTEREY, CALIFORNIA
DATE	01/15/10
DRAWN BY	J. HORN
CHECKED BY	K. HORN
SCALE	AS SHOWN
SHEET NO.	100
TOTAL SHEETS	100

CAO RISK



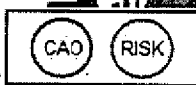
		Kimley»Horn <small>1000 JEFFERSON ST. SUITE 200, MONTEREY, CA 93940 TEL: 831.646.3921 WWW.KIMLEY-HORN.COM</small>	
CITY OF MONTEREY DEPARTMENT OF PLANS AND PUBLIC WORKS <small>600 PACIFIC STREET, MONTEREY, CA 93940 TEL: 831.646.3921 WEBSITE: WWW.MONTEREY.ORG</small>		LIGHTHOUSE AVENUE ADAPTIVE SYSTEM KEY MAP SHEET 1 OF 18	
NO.	DATE	REVISION	
DESIGNED BY	DATE	BY	
CHECKED BY	DATE	BY	
APPROVED BY	DATE	BY	
PROJECT NO.	DATE	BY	

CAO	RISK
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LEGEND
 (N) NEW FIBER
 (E) EXISTING FIBER
 (C) CITY-FURNISHED ITEM TO BE INSTALLED BY THE CONTRACTOR
 (O) CITY-FURNISHED ITEM TO BE INSTALLED BY THE CONTRACTOR

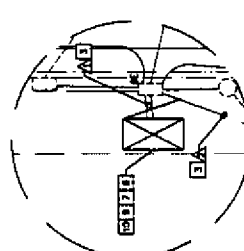
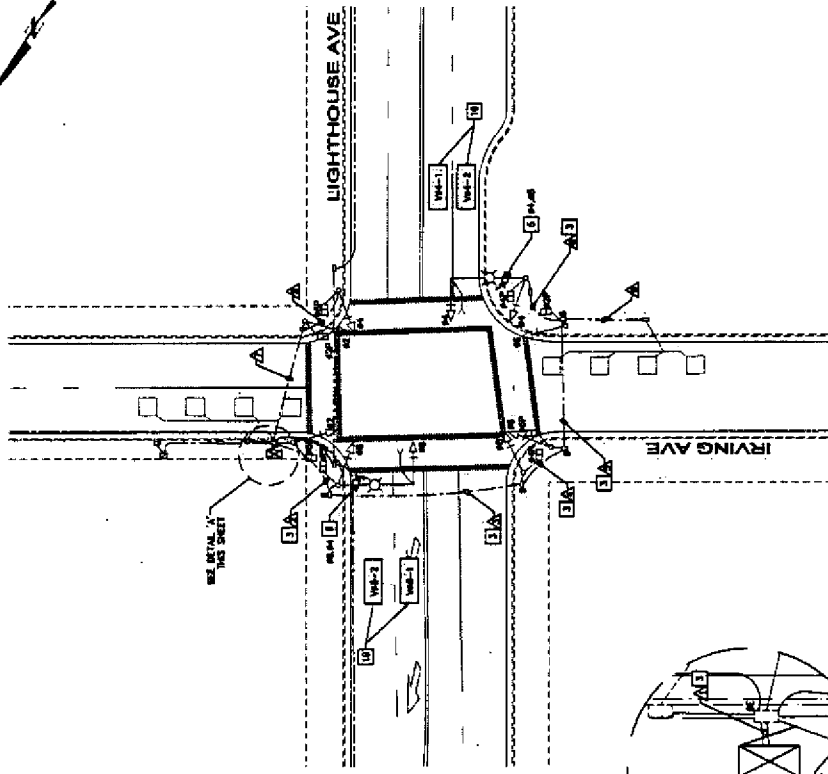
CITY OF MONTEREY DEPARTMENT OF PLANS AND PUBLIC WORKS 580 PACIFIC STREET, MONTEREY, CA 93940 TEL: 831.646.3921 WEBSITE: WWW.MONTEREY.ORG		Kimley»Horn 1000 MARKET STREET, SUITE 200, SAN FRANCISCO, CA 94102 TEL: 415.774.2500 FAX: 415.774.2501		PROJECT NO. 15-000000 SHEET NO. 15-000000-01 DATE: 08/14/15 DRAWN BY: JRM CHECKED BY: JRM APPROVED BY: JRM
LIGHTHOUSE AVENUE ADAPTIVE SYSTEM SYSTEM DIAGRAM		SCALE: AS SHOWN DATE: 08/14/15 DRAWN BY: JRM CHECKED BY: JRM APPROVED BY: JRM		SHEET 1 OF 18



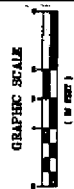
STEADY DEMAND SEQUENCE



EXISTING PHASE DIAGRAM



DETAIL 'A'
1'-0"



CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
WIRE AND CABLE	CONDUCTOR DESIGNATION	BY TYPE	BY SIZE
NO. 14	14-0	1	1
	14-1	1	1
	14-2	1	1
	14-3	1	1
	14-4	1	1
	14-5	1	1
	14-6	1	1
	14-7	1	1
	14-8	1	1
	14-9	1	1
14-10	1	1	
TOTAL NO. 14		10	10
NO. 10	10-0	1	1
	10-1	1	1
	10-2	1	1
	10-3	1	1
	10-4	1	1
	10-5	1	1
	10-6	1	1
	10-7	1	1
	10-8	1	1
	10-9	1	1
10-10	1	1	
TOTAL NO. 10		10	10
TOTAL NO. OF CONDUCTORS		20	20
CONDUIT SIZE (INCHES)		2-2	3-3
CONDUIT FILL (%)		30	11

CONDUCTORS AND CABLES ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE SPECIFIED.
ALL CONDUITS ARE TO BE RIGID UNLESS OTHERWISE SPECIFIED.
N - DENOTES NEW CONDUIT OR CONDUCTOR

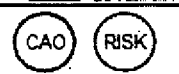
CONSTRUCTION NOTES:

- 1) FURNISH AND INSTALL FIBRIC INTERLOCK AND CABLE IN EXISTING CONDUIT PER CONDUCTOR SCHEDULE. INITIAL ALL CABLES IN A SMALL FIBRIC INTERLOCK CELL. SEE DETAIL 'C' ON SHEET 'D'.
- 2) FURNISH AND INSTALL TUBES W/UTAGE NEXT USED DETECTION CAMERA ON LIGHTHOUSE AVE. SEE DETAIL 'C' ON SHEET 'D'.
- 3) FURNISH AND INSTALL TUBES W/UTAGE NEXT USED DETECTION EQUIPMENT IN CONTROLLER CABINET. SEE SHEET 'D' AND 'E' FOR MORE DETAILS.
- 4) REMOVE AND SALVAGE TO CONTRACTOR EXISTING TYPE 'B' CONTROLLER CABINET.
- 5) INSTALL CITY-FURNISHED TYPE 'A' INTERLOCK CABINET ON EXISTING FOUNDATION. RE-ROUTE AND TERMINATE ALL EXISTING WIRING INTO NEW CABINET. RELocate EXISTING CONTROLLER, TUBES, CABLE, TERMINAL PANEL, FIBRIC PATCH, AND OPTICAL EQUIPMENT TO NEW CABINET.
- 6) DETECTION SIGNAL SHALL REMAIN IN OPERATION AT ALL TIMES DURING CONSTRUCTION.
- 7) CONTRACTOR SHALL CONFIRM WIRE DETECTION ZONE, FINAL SIZE AND LOCATION SHALL BE APPROVED BY THE CITY.

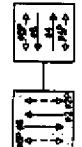


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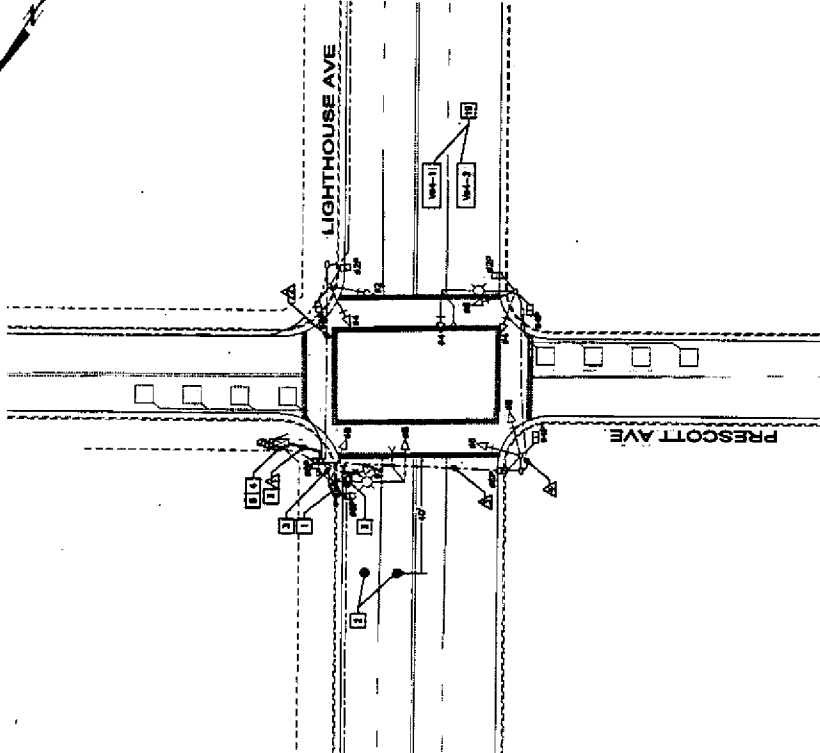
PROJECT NO.	1502
DATE	1/15/14
SCALE	AS SHOWN
DESIGNER	KLH
CHECKED	KLH
APPROVED	KLH
DATE	1/15/14
PROJECT	LIGHTHOUSE AVENUE ADAPTIVE SYSTEM
LOCATION	LIGHTHOUSE AVE AND IRVING AVE
SHEET NO.	1502-1



STEADY DEMAND SCHEMATIC



EXISTING PHASE DIAGRAM



CONDUCTOR SCHEDULE

NO. 14	CONDUCTOR DESIGNATION	FLASHTING SIGNAL	FLASHTING RATE
	1A	3X	120
	1B	3X	120
	2	3X	120
	3	3X	120
	4	3X	120
	5	3X	120
	6	3X	120
	7	3X	120
	8	3X	120
	9	3X	120
	10	3X	120
	11	3X	120
	12	3X	120
NO. 10	TOTAL NO. OF	TOTAL FLASHTING	TOTAL RATE
	CONDUCTORS	FLASHTING	PER HOUR
	12	36	4320
NO. 8	CONDUCTOR	FLASHTING	FLASHTING
	CONDUCTOR	FLASHTING	FLASHTING
	3	9	1080
NO. 6	CONDUCTOR	FLASHTING	FLASHTING
	CONDUCTOR	FLASHTING	FLASHTING
	3	9	1080
NO. 4	CONDUCTOR	FLASHTING	FLASHTING
	CONDUCTOR	FLASHTING	FLASHTING
	3	9	1080
CONDUCTOR SIZE (INCHES)	2-2, 2, 2.5, 3.0		
CONDUCTOR PULL (LB)	20, 11, 11, 16		

ALL CONDUCTORS AND CABLES SHALL BE INSTALLED AS NOTED OTHERWISE. ALL CONDUCTORS AND CABLES SHALL BE INSTALLED AS NOTED OTHERWISE. ALL CONDUCTORS AND CABLES SHALL BE INSTALLED AS NOTED OTHERWISE.

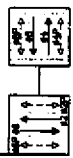
CONSTRUCTION NOTES:

1. REMOVE AND INSTALL SPODS WITHOUT ACCESS POINT ON EXISTING WHITE SIGNAL POLE PER DETAIL C ON SHEET 0101.
2. REMOVE AND INSTALL ONE SPOD'S SIGNAL POLE PER LANE EACH SPOD SHALL BE INSTALLED IN THE CENTER OF THE LANE. SEE SHEET 0101 FOR MORE DETAILS. FINAL LOCATION TO BE APPROVED BY THE CITY.
3. CONDUCTORS SHALL BE INSTALLED AS NOTED OTHERWISE.
4. REMOVE AND INSTALL SPODS ACCESS POINT CONTROLLER CABINETS ON EXISTING CONDUIT PER DETAIL C ON SHEET 0101 AND D FOR MORE DETAILS.
5. REMOVE AND INSTALL ITEMS VANTAGE NOTED VIDEO DETECTION CAMERA ON LIGHTHOUSE AVE. SEE DETAIL C ON SHEET 0101.
6. REMOVE AND INSTALL ITEMS VANTAGE NOTED VIDEO DETECTION EQUIPMENT IN CONTROLLER CABINET. SEE SHEETS 0101 AND D FOR MORE DETAILS.
7. REMOVE AND INSTALL ITEMS VANTAGE NOTED VIDEO DETECTION EQUIPMENT IN CONTROLLER CABINET. SEE SHEETS 0101 AND D FOR MORE DETAILS.
8. REMOVE AND INSTALL ITEMS VANTAGE NOTED VIDEO DETECTION EQUIPMENT IN CONTROLLER CABINET. SEE SHEETS 0101 AND D FOR MORE DETAILS.

PROPERTY PROJECT SHEET	DATE DATE DATE	REVISION
Kimley Horn <small>AN ENGINEERING AND CONSULTING FIRM</small> <small>100 SOUTH PACIFIC STREET, MONTEREY, CA 93940</small> <small>TEL: 831.646.3921 WEBSITE: WWW.MONTEREY.ORG</small>		
CITY OF MONTEREY DEPARTMENT OF PLANS AND PUBLIC WORKS 560 PACIFIC STREET, MONTEREY, CA 93940 TEL: 831 646 3921 WEBSITE: WWW.MONTEREY.ORG		
LIGHTHOUSE AVENUE ADAPTIVE SYSTEM		SHEET 1 OF 18



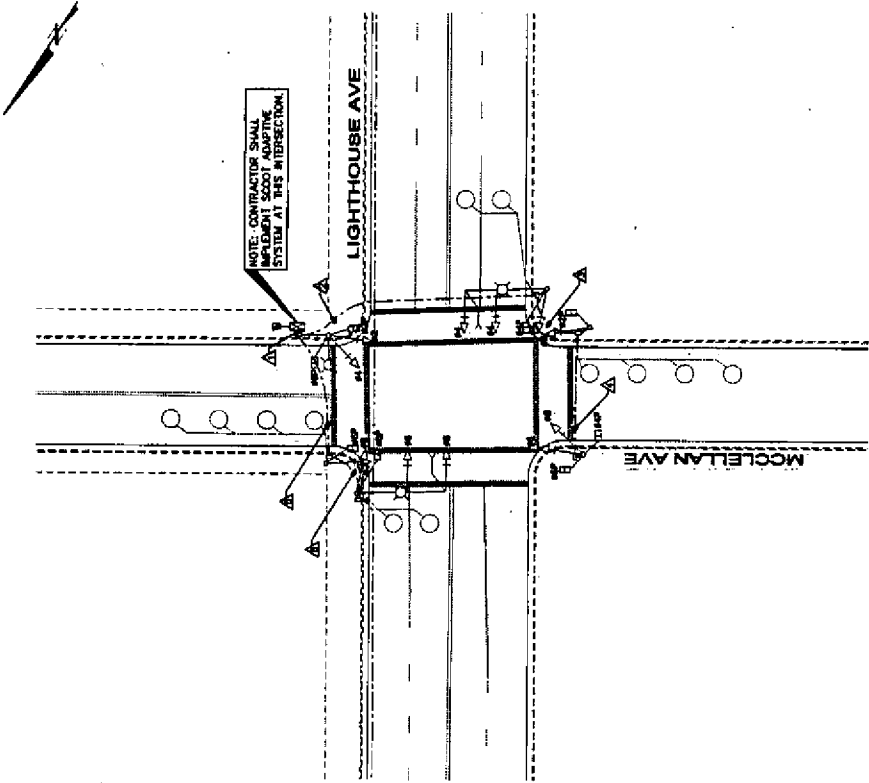
STEADY DEMAND SEQUENCE



EXISTING PHASE DIAGRAM

CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
NO. OF CABLE	CONDUCTOR DESIGNATION	NEW SYSTEM	EXISTING SYSTEM
NO. 11	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 10	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 9	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 8	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 7	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 6	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 5	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 4	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 3	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 2	3/4" ALUMINUM STRAND CONDUCTOR	1	1
NO. 1	3/4" ALUMINUM STRAND CONDUCTOR	1	1
	CONDUIT SIZE (INCHES)	3"	3"
	CONDUIT FILL (%)	57	57

ALL CONDUCTORS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
ALL CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE.
N. - DENOTES NEW CONDUIT OR CONDUCTOR



CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS
680 PACIFIC STREET, MONTEREY, CA 93940
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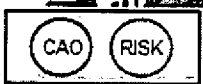
Kimley»Horn
1000 EL CAMINO REAL, SUITE 200
SAN MARINO, CA 91766
TEL: 909 396 2200 FAX: 909 396 2201

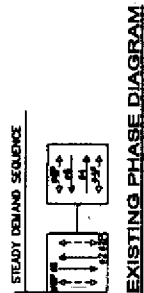
DESIGNED BY	DATE	REVISION
CHECKED BY	DATE	
APPROVED BY	DATE	
CITY ENGINEER	DATE	

LIGHTHOUSE AVENUE ADAPTIVE SYSTEM

LIGHTHOUSE AVE AND MCCLELLAN AVE

1505
04/21/10





CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
NO. OF CABLE	CONDUCTOR DESIGNATION	PER PHASE	TOTAL
NO. 11	TRUCK	1	1
NO. 12	TRUCK	1	1
NO. 13	TRUCK	1	1
NO. 14	TRUCK	1	1
NO. 15	TRUCK	1	1
NO. 16	TRUCK	1	1
NO. 17	TRUCK	1	1
NO. 18	TRUCK	1	1
NO. 19	TRUCK	1	1
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NO. 97	TRUCK	1	1
NO. 98	TRUCK	1	1
NO. 99	TRUCK	1	1
NO. 100	TRUCK	1	1

ALL CONDUCTORS AND CABLES ARE TO BE INSTALLED UNLESS NOTED OTHERWISE.
M - DENOTES NEW CONDUIT OR CONDUCTOR.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL SIGNAL WIRELESS ACCESS POINT ON EXISTING TRAFFIC SIGNAL POLE PER DETAIL C ON SHEET D10.
2. FURNISH AND INSTALL ONE SIGNAL FLEETING SENSOR FOR EACH SENSOR SHALL BE INSTALLED IN THE CENTER OF THE LANE. SEE SHEET D10 FOR MORE DETAILS. FINAL LOCATION TO BE APPROVED BY THE CITY.
3. FURNISH AND INSTALL WIRELESS ACCESS POINT AND ALL WIRELESS SENSORS PER CONSTRUCTION SCHEDULE. INSTALL ALL CABLES IN A SMALL FURCIE MANHOLE CELL. CABLES SHALL BE INSTALLED PER DETAIL C ON SHEET D10.
4. FURNISH AND INSTALL SIGNAL ACCESS POINT CONTROLLER CABINETS IN EXISTING CONTROLLER CABINET. SEE SHEET E10 AND D10 FOR MORE DETAILS.
5. FURNISH AND INSTALL (TWO) WIRELESS MESH VIDEO DETECTION CAMERA ON LUMINAIRE ARM. SEE DETAIL C ON SHEET D10.
6. FURNISH AND INSTALL (TWO) WIRELESS MESH VIDEO DETECTION EQUIPMENT IN CONTROLLER CABINET. SEE SHEET E10 AND D10 FOR MORE DETAILS.
7. FURNISH AND INSTALL WIRELESS VIDEO DETECTION ZONE. FINAL SIZE AND LOCATION SHALL BE APPROVED BY THE CITY.

CAO RISK

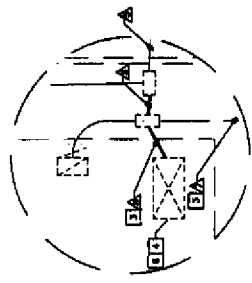
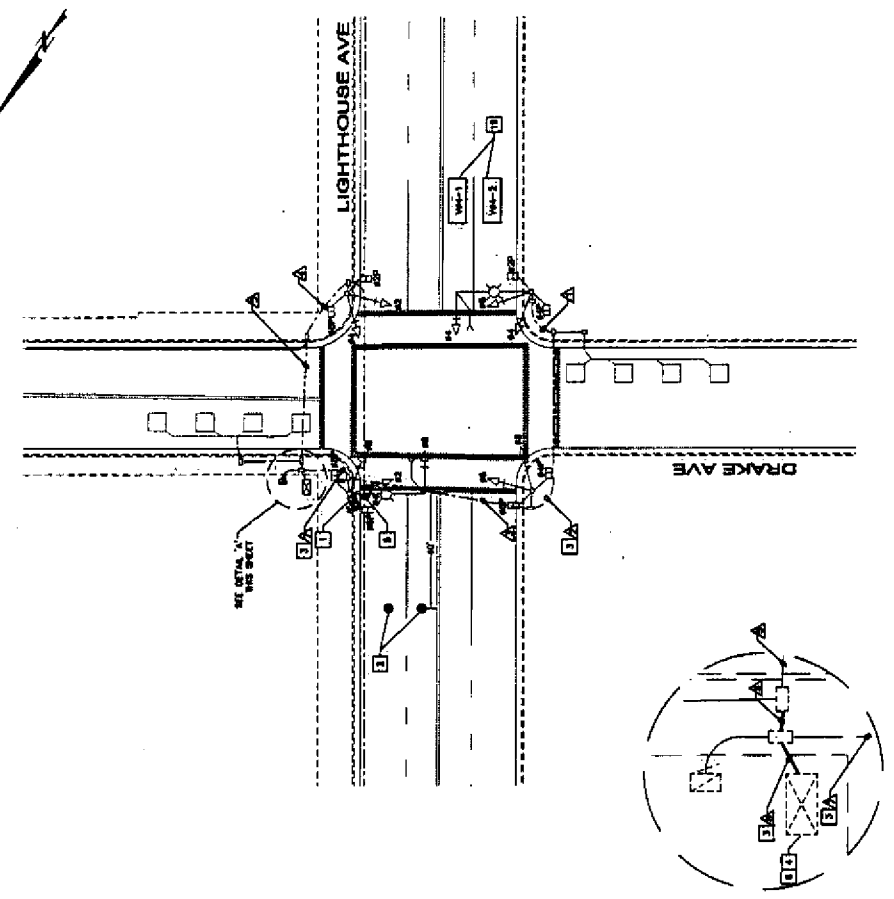


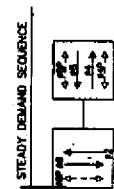
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DEPARTMENT OF PLANS AND PUBLIC WORKS
 600 PACIFIC STREET, MONTEREY, CA 93940
 TEL: 831.646.3921 WEBSITE: WWW.MONTEREY.ORG



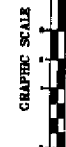
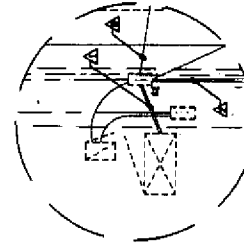
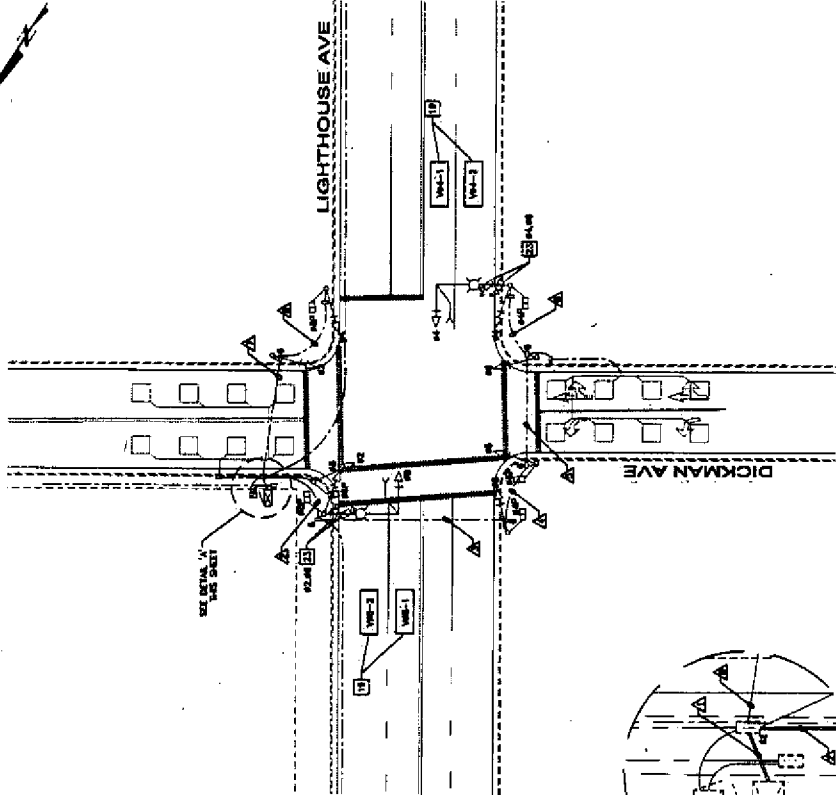
DESIGNED BY: JAA
 CHECKED BY: JAA
 DATE: 08/15/19
 PROJECT: LTHS
 SHEET: 13 OF 18

LIGHTHOUSE AVENUE ADAPTIVE SYSTEM
 LIGHTHOUSE AVE AND DRAKE AVE





EXISTING PHASE DIAGRAM



CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
AIR CABLE	CONDUCTOR DESIGNATION	NEW	EXISTING
NO. 14	GENERAL	1	1
	SPARE	1	1
	NO. 10	1	1
	NO. 8	1	1
	NO. 6	1	1
	NO. 4	1	1
	NO. 2	1	1
	NO. 1	1	1
	NO. 0	1	1
	NO. -1	1	1
NO. -2	1	1	
NO. -3	1	1	
NO. -4	1	1	
NO. -5	1	1	
NO. -6	1	1	
NO. -7	1	1	
NO. -8	1	1	
NO. -9	1	1	
NO. -10	1	1	
NO. -11	1	1	
NO. -12	1	1	
NO. -13	1	1	
NO. -14	1	1	
NO. -15	1	1	
NO. -16	1	1	
NO. -17	1	1	
NO. -18	1	1	
NO. -19	1	1	
NO. -20	1	1	
NO. -21	1	1	
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NO. -24	1	1	
NO. -25	1	1	
NO. -26	1	1	
NO. -27	1	1	
NO. -28	1	1	
NO. -29	1	1	
NO. -30	1	1	
NO. -31	1	1	
NO. -32	1	1	
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NO. -34	1	1	
NO. -35	1	1	
NO. -36	1	1	
NO. -37	1	1	
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NO. -41	1	1	
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NO. -97	1	1	
NO. -98	1	1	
NO. -99	1	1	
NO. -100	1	1	

CONSTRUCTION NOTES:

- CONDUCTOR SHALL BE APPROXIMATELY 1/2" OVER DETECTION ZONE. FINAL SIZE AND LOCATION SHALL BE APPROVED BY THE CITY.
- CONTRACTOR SHALL VERIFY EXISTING WELLS DETECTION ZONES AS SHOWN IN ORDER TO CAPTURE EXISTING DETECTION ZONES, AS WELL AS PROPOSED DETECTION ZONES SHOWN ON PLANS. SHALL PROVIDE AS NOTED ON PLANS.

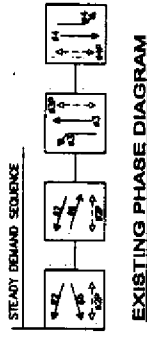
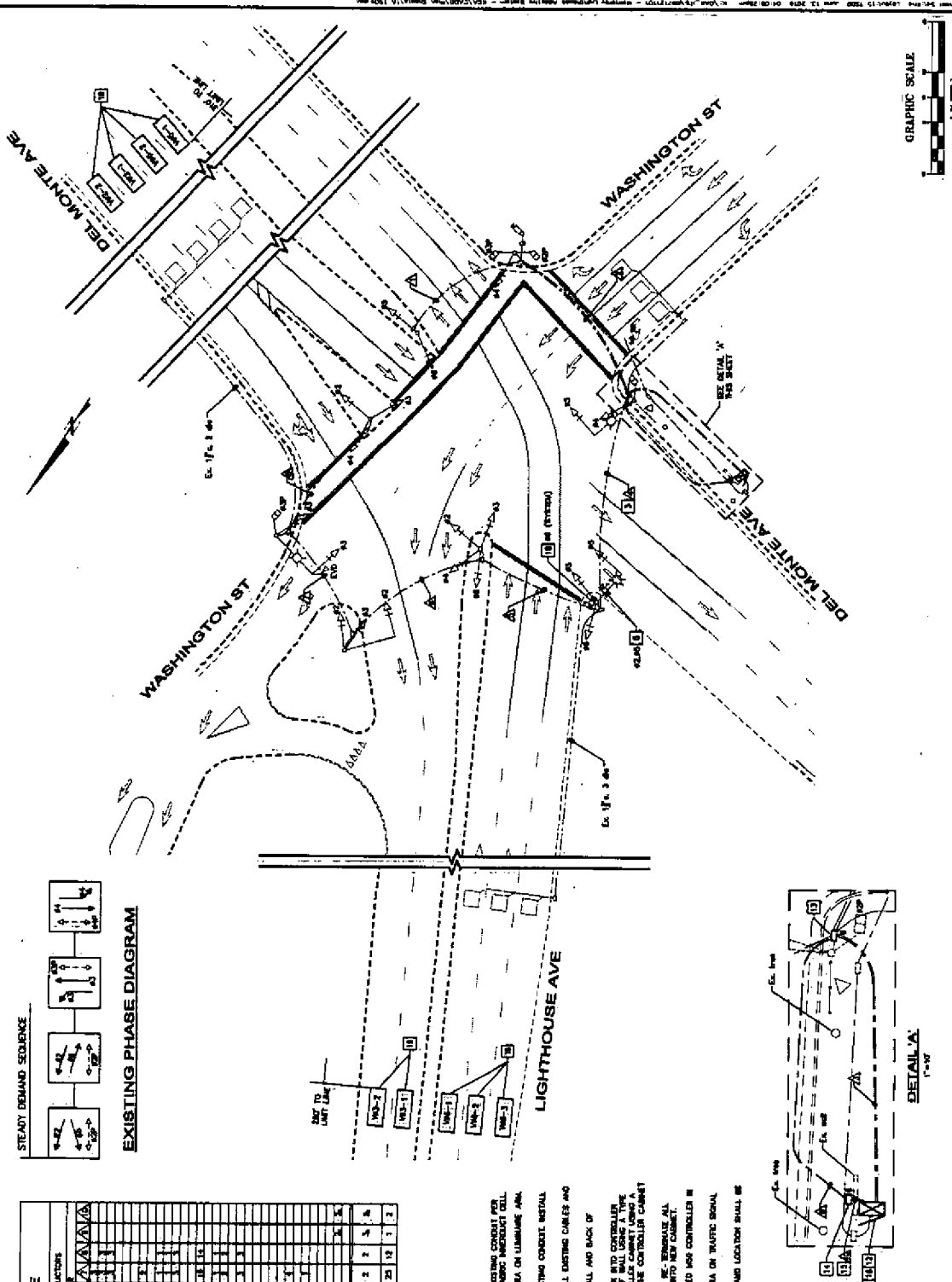
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Kimley»Horn
CONSULTING ENGINEERS AND ARCHITECTS
1000 ELGIN STREET, SUITE 200
MONTEREY, CA 93940
TEL: 831.646.3921

PROJECT NO.	DATE	REVISION
NO. 14	10/1/10	1
NO. 15		
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NO. 95		
NO. 96		
NO. 97		
NO. 98		
NO. 99		
NO. 100		

CAO

RISK



CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
AVE AND CABLE	CONDUCTOR DESIGNATION	NEW	EXISTING
MC 16	16-1	1	1
	16-2	1	1
	16-3	1	1
	16-4	1	1
	16-5	1	1
	16-6	1	1
	16-7	1	1
	16-8	1	1
	16-9	1	1
	16-10	1	1
MC 10	10-1	1	1
	10-2	1	1
	10-3	1	1
	10-4	1	1
	10-5	1	1
	10-6	1	1
	10-7	1	1
	10-8	1	1
	10-9	1	1
	10-10	1	1
MC 9	9-1	1	1
	9-2	1	1
	9-3	1	1
	9-4	1	1
	9-5	1	1
	9-6	1	1
	9-7	1	1
	9-8	1	1
	9-9	1	1
	9-10	1	1
MC 8	8-1	1	1
	8-2	1	1
	8-3	1	1
	8-4	1	1
	8-5	1	1
	8-6	1	1
	8-7	1	1
	8-8	1	1
	8-9	1	1
	8-10	1	1
MC 7	7-1	1	1
	7-2	1	1
	7-3	1	1
	7-4	1	1
	7-5	1	1
	7-6	1	1
	7-7	1	1
	7-8	1	1
	7-9	1	1
	7-10	1	1
MC 6	6-1	1	1
	6-2	1	1
	6-3	1	1
	6-4	1	1
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MC 5	5-1	1	1
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MC 1	1-1	1	1
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	1-5	1	1
	1-6	1	1
	1-7	1	1
	1-8	1	1
	1-9	1	1
	1-10	1	1

ALL CONDUCTORS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
 ALL CONDUITS ARE EXISTING UNLESS NOTED OTHERWISE.
 N = SHOWN FOR CONDUIT ON CONDUIT

CONSTRUCTION NOTES:

- 1) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 2) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 3) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 4) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 5) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
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- 7) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 8) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 9) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.
- 10) CONDUITS AND CABLES ARE EXISTING UNLESS NOTED OTHERWISE.



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DEPARTMENT OF PLANS AND PUBLIC WORKS
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Kimley»Horn
CONSULTING ENGINEERS AND ARCHITECTS

NO.	DATE	REVISION

PROJECT NO. 1509
 SHEET 15 OF 18

LIGHTHOUSE AVENUE ADAPTIVE SYSTEM
 LIGHTHOUSE AVE AND DEL MONTE AVE

CAO

RISK

LOCATION	PROPOSED EQUIPMENT					
	NEW CABINET TYPE	VIDEO DETECTION CAMERA	VIDEO DETECTION CONTROL UNIT	SENSYS ACCESS POINT CONTROLLER CARD	SENSYS ACCESS POINT	SENSYS PAVEMENT SENSOR
LIGHTHOUSE AVENUE/DAVID AVENUE		1	1			
LIGHTHOUSE AVENUE/IRVING AVENUE	M-STRETCH*	2	1			
LIGHTHOUSE AVENUE/PRESCOTT AVENUE		1	1	1	1	2
LIGHTHOUSE AVENUE/HOFFMAN AVENUE						
LIGHTHOUSE AVENUE/McCLELLAN AVENUE						
LIGHTHOUSE AVENUE/DRAKE AVENUE		1	1	1	1	2
LIGHTHOUSE AVENUE/DICKMAN AVENUE						
LIGHTHOUSE AVENUE/REESIDE AVENUE		1	1			
LIGHTHOUSE AVENUE/DEL MONTE AVENUE	P*	2	1			

* CITY-FURNISHED EQUIPMENT TO BE INSTALLED BY THE CONTRACTOR

CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS
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Kimley»Horn
1000 F STREET, SUITE 200
MONTEREY, CA 93940
TEL: 831.646.3921

NO. DATE

NO. DATE

NO. DATE

NO. DATE

REVISION

DATE: 01/15/2011

BY: [Signature]

DATE: 01/15/2011

BY: [Signature]

DATE: 01/15/2011

BY: [Signature]

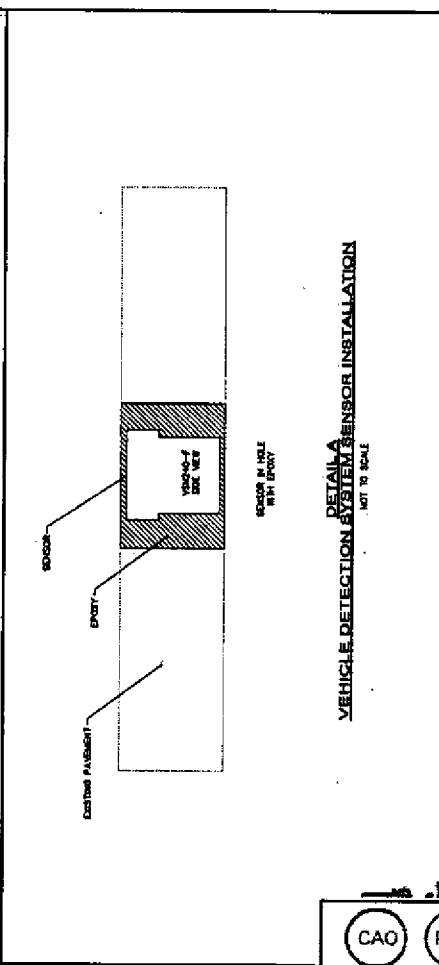
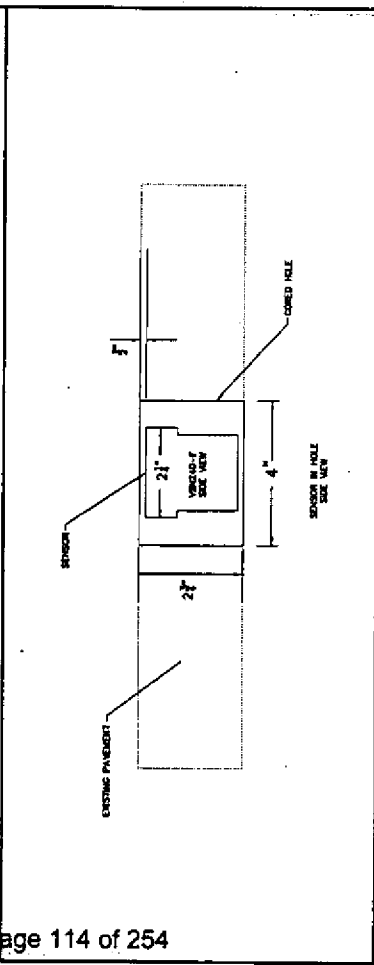
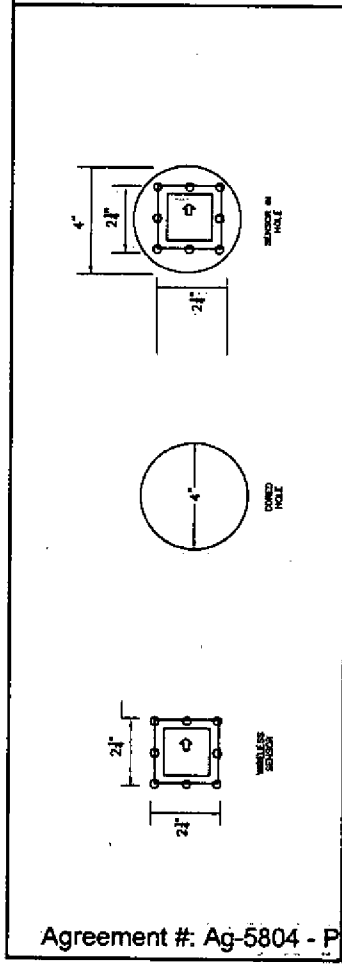
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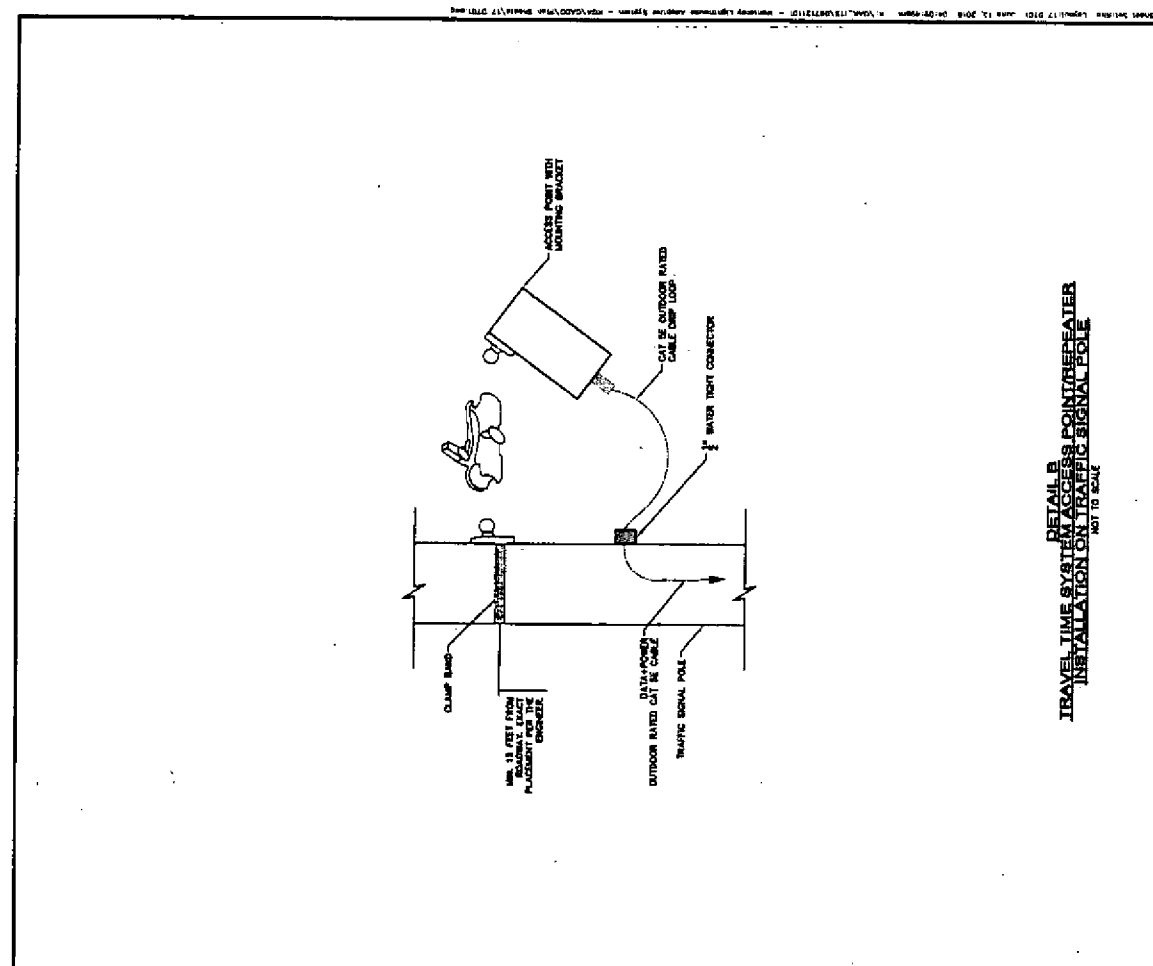
LIGHTHOUSE AVENUE ADAPTIVE SYSTEM

EQUIPMENT SUMMARY



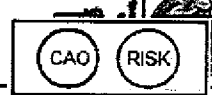


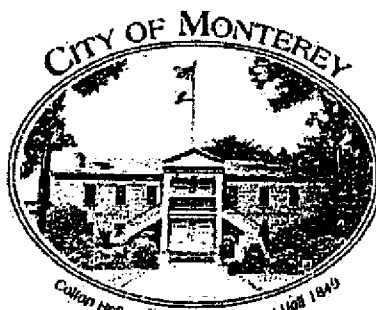
DETAIL A
VEHICLE DETECTION SYSTEM SENSOR INSTALLATION
NOT TO SCALE



DETAIL B
TRAVEL TIME SYSTEM ACCESS POINT RECREATOR
INSTALLATION ON TRAFFIC SIGNAL POLE
NOT TO SCALE

	Kimley»Horn A PROFESSIONAL ENGINEERING FIRM 1000 ELGIN STREET, SUITE 200 MONTEREY, CALIFORNIA 93940 TEL: 831.646.3921 FAX: 831.646.3922 WWW.KIMLEY-HORN.COM	CITY OF MONTEREY DEPARTMENT OF PLANS AND PUBLIC WORKS 580 PACIFIC STREET, MONTEREY, CA 93940 TEL: 831.646.3921 WEBSITE: WWW.MONTEREY.ORG	PROJECT NO. 17101	DATE 12/13/07	REVISION	Lighthouse Avenue Adaptive System DETAILS	SHEET 11 OF 18
			DRAWN BY: []	CHECKED BY: []	DATE: []	SCALE: []	PROJECT: []





DEPARTMENT OF PLANS AND PUBLIC WORKS
ENGINEERING DIVISION

DATE: June 20, 2016
TO: All Bidders
SUBJECT: Lighthouse Avenue Adaptive Traffic Control System Project
Bid proposals due on Tuesday, July 12, 2016 at 2:00 p.m.
Sent Via: EbidBoard

Please replace the Specifications with the attached revised Specifications. Specifications on EbidBoard have been replaced with the revised version.

Please refer to the following sections for revisions (in track-changes):

- Part I, Page 1: Non-Mandatory Pre-Bid Meeting
- Part II, Page 9: Bid Item 10. Lighthouse Avenue and Del Monte Avenue
- Part II, Page 10: Bid Item Description: Additive Alternative 1, Additive Alternative 2
- Part II, Page 11: Bid Item Description: Additive Alternative 3
- Part II, Page 12: Bid Bond moved to later in Part II, revisions to Declaration of Bidder
- Part III, Page 1: Contract Award and Execution
- Appendix A, Page 1: Bid Proposal Cover Sheet
- Appendix A, Page 4: Bid Bond moved to later in Appendix A, revisions to Declaration of Bidder

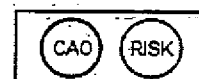
All other conditions of the Specifications remain the same. Acknowledge this addendum and all others in your bid in Appendix A of the Specifications.

Sealed unbound bid proposals will be received in the office of the City Clerk, attention Finance Director, 580 Pacific Street, Room 6, City of Monterey, California, until 2:00 p.m., July 12, 2016.

If you have additional questions, please contact Andrea Renny by email at engineering-admin@monterey.org.

Sincerely,

Andrea Renny, P.E., P.T.O.E
Associate Civil Engineer





CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS

SPECIFICATIONS

FOR

**LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM
(37N1225, 37N1444)**

FORMAL BID

This is a Neighborhood Improvement Project

TECHNICAL SPECIFICATIONS APPROVED BY:

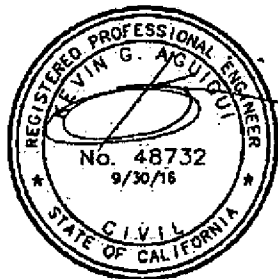
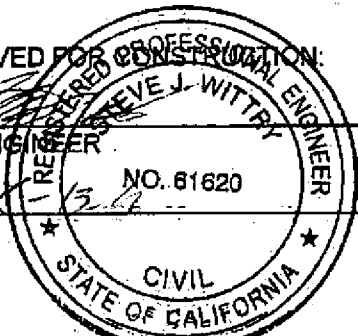
Kevin Aguigui, PE
ENGINEER

DATE: 06/13/2016

APPROVED FOR PROFESSIONAL:

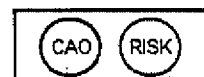
STEVE J. WITTRY
REGISTERED PROFESSIONAL ENGINEER
CITY ENGINEER

DATE: 6/13/16
NO. 61620

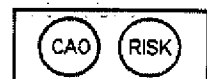


Master Specification Revision: 05/21/2015

Project Specification Revision: 05/25/2016



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LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

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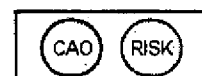
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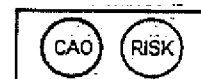
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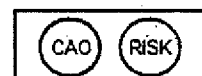
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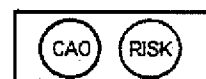
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**CITY OF MONTEREY
DEPARTMENT OF PUBLIC WORKS
MONTEREY, CALIFORNIA**

PART I: NOTICE TO CONTRACTORS

Sealed unbound bid proposals will be received in the office of the City Clerk, attention Finance Director, 580 Pacific Street, Room 6, City of Monterey, California, until 2:00 p.m., July 12, 2016, at which time they will be publicly opened and read in the City Council Chambers, for furnishing all labor, materials, tools, equipment and incidentals for the construction of **Lighthouse Avenue Adaptive Traffic Control System (37n1225, 37n1444)** in Monterey, California, in accordance with these plans and specifications.

In general, the work consists of, but is not limited to, furnishing and installing an adaptive traffic control system along the Lighthouse Avenue corridor consisting of vehicle detection, including wireless pavement sensors, video detection cameras, equipment in controller cabinets, associated equipment cabling in existing conduits; installing City-furnished traffic controller cabinets and controllers; removing and salvaging existing cabinets and foundations, furnishing, installing and integrating central computers and servers including all hardware, software, cabling and licenses for a complete adaptive traffic control system.

At the time of the bid opening, the successful Bidder must be legally entitled to perform contracts requiring a Class C-10 Contractor's license. Any Bidder or contractor not so licensed shall be subject to all penalties imposed by law including, but not limited to, any appropriate disciplinary action by the Contractors' State License Board.

All electricians performing work under this contract, as defined as making electrical connections at or above 100 volt-amperes, shall be certified pursuant to Section 3099 et seq. of the California Labor Code. Contractor shall submit proof of certification, or proof that the requirements of Section 3099.4 (a) of the California Labor Code have been met, prior to electricians commencing work under this contract.

SPECIFICATIONS AND BID FORMS

Specifications, including instructions to Bidders and all necessary contract documents and forms, are available on-line from the City's website located at <http://monterey.org/en-us/Business/Bids-and-RFPs>. In order to download project documents, you must register as a document (plan) holder on EbidBoard at no cost through the City web site. Potential bidders, subcontractors and suppliers are responsible for reviewing the complete bidding documents, including all addenda, prior to submitting their bid. They are also advised to check the City's web site noted above periodically and prior to submitting their bid. Submit **unbound** bid proposals (see Appendix A) in sealed envelopes clearly marked on the exterior with the project name, bid opening date and bid opening time for which the bid proposal is being submitted. When submitting a bid in a sealed envelope within another sealed envelope, such as an envelope provided by an overnight carrier, be sure to also mark the exterior of the outermost envelope or overnight carrier's envelope clearly with the project name, bid opening date and bid opening time.

NON-MANDATORY PRE-BID CONFERENCE

A non mandatory pre-bid conference is scheduled for 10:00 on June 23, 2016 at City Hall, 580 Pacific Street, Monterey, CA 93940. This conference will allow bidders to review and inspect project conditions.

PREVAILING WAGES

Local prevailing wage rates shall be paid in accordance with Sections 1770, 1773, and 1782, as amended, of the California Labor Code, and Section 28-20(e) of the Monterey City Code, on all public works construction contracts exceeding twenty-five thousand dollars (\$25,000) and all public works contracts for alteration, demolition, repair or maintenance work exceeding fifteen thousand dollars (\$15,000). Local wage rates may be obtained from City of Monterey, Engineering Division Office, City Hall, Monterey, CA, (831-646-3921) or the Director, Department of Industrial Relations, State of California, 455 Golden Gate Avenue, San Francisco, California (415-703-4774). Any Bidder contractor awarded a public works contract that uses a craft or classification not in the general prevailing wage determinations may be required to pay the wage rate most closely related in the general determinations, effective at the time of the call for bids.



In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code. **See Part III of these Specifications for additional requirements.**

In accordance with the provisions of Section 1773.3 of the Labor Code, the City of Monterey shall provide notice to the Department of Industrial Relations (DIR) of the award of any public works contract subject to the requirements of Chapter 1 of the Labor Code, within five days of the award. The notice shall be transmitted electronically in a format specified by the DIR (see <https://www.dir.ca.gov/pwc100ext/>) and shall include the name of the contractor, any subcontractor listed on the successful bid, the bid and contract award dates, the contract amount, the estimated start and completion dates, job site location, and any additional information the DIR specifies that aids in the administration and enforcement of this chapter.

BID BOND

Cash, a certified check or cashier's check, payable to the order of the City of Monterey, or a satisfactory bid bond, in original form (no fax or photocopy shall be accepted), executed by the Bidder and an acceptable surety in an amount equal to ten percent (10%) of the bid amount shall be submitted with each bid.

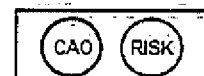
BID VALIDITY

No Bidder may withdraw their bid for a period of **ninety (90) days** from the date of opening of the bids for the purpose of reviewing the bids and investigating the qualifications of Bidders, prior to awarding of the contract. Any bid withdrawal before the expiration of such time period shall result in the forfeiture of Bidder's Bid Bond. In the event of a bid mistake resulting from a clerical error made by the Bidder, withdrawal of such bid without forfeiture of the Bid Bond may only be allowed if the criteria set forth in California Public Contracts Code Sec. 5103 are met and the procedures set forth therein are followed; any such approval by City of bidders request to withdraw bid shall be at the sole discretion of the City.

RESPONSIBLE BIDDER

Responsible bidder as it pertains to this contract shall be as follows:

1. **Standards of Responsibility:** The City may reject bids on the basis of non-responsibility. A responsible bidder is one that has the capacity in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance of the contract. Factors to be considered in determining whether the standard of responsibility has been met include whether a bidder has:
 - a. The appropriate financial, material, equipment, facility, capacity (adequate workforce to complete the job in a timely fashion) and personnel resources, including all required certifications, licenses, and expertise necessary to indicate its capacity to meet all contractual requirements, including the following specific requirements:
 - i. Adequate workforce to meet multiple critical work schedules at once;
 - ii. Ability to start projects on the commencement dates set forth by the City and satisfactorily complete them within the City's stated time limits;
 - b. A satisfactory record of performance, including but not limited to any prior work performed by bidder for the City or other agency;
 - c. Evidence of bidder's ability to provide the required bonding and insurance capacity. Apparent low bidder with cash or cashier's check as bid bond is required to submit a pre-qualification letter from an acceptable surety or cashier's check as performance bond within fourteen (14) calendar days of the bid opening;
 - d. A satisfactory record of integrity, diligence, and professionalism in the specific contract work;



- e. The legal qualifications to contract with the City; and
 - f. Supplied all information requested by the City in connection with the inquiry concerning responsibility.
2. Information Pertaining to Responsibility. The prospective contractor shall supply any information requested by the City concerning the responsibility of such contractor, including the qualifications and performance records of contractor's employees and proposed subcontractors. If the prospective contractor fails to supply the requested information, the City shall base the determination of responsibility in award of the Contract upon any available information, or may find the prospective contractor non-responsible on the basis of its failure to provide the requested information to the City.
 3. The City's Duty Concerning Responsibility. Before awarding a contract, the City must be satisfied that the prospective contractor is responsible. The City may use the information provided by prospective contractor as well as information obtained from other legitimate sources, including City staff's own experience with the prospective contractor and prospective contractor's employees.
 4. Written Determination of Non-responsibility Requirements. If a bidder or offeror who otherwise would have been awarded the Contract is found non-responsible, a written determination of non-responsibility setting forth the basis determination shall be prepared by the City and sent to the non-responsible bidder or offeror. The bidder or offeror shall have an opportunity to appeal the City's determination on non-responsibility.

BID REJECTION

The City reserves the right to reject any or all bids as the best interests of the City may dictate and, to the extent permitted by law, waive any irregularity in any bid. If there is any reason for believing that collusion exists among the bidders, the City may reject any or all bids.

UNBALANCED BID

Bids which are obviously unbalanced may be rejected. For the purposes of this section, an unbalanced bid is one that (a) has unit prices based on nominal prices for some items of work and enhanced unit prices for other items of work, and (b) the amount and manner in which the unit prices are distributed is not reflective of the true cost to perform the work. Any unbalanced bid may be rejected by the City whether or not the result of the unbalanced bid increases the cost of the project to the City.

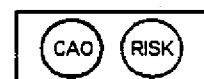
BIDDER PROTEST

All bid protests shall follow the procedures set forth in Monterey City Code §28-26 et seq., and the City's Purchasing Manual, both of which are available on-line on the City's website located at <http://monterey.org>. Payment of a bid protest filing fee in the amount set forth in the City Code and Purchasing Manual shall be prerequisite to the filing of any such protest.

INTERPRETATION OF SPECIFICATIONS

Should a Bidder be in doubt as to the true meaning of any item in the Plans or Specifications or should Bidder discover items containing discrepancies or omissions, the Engineer shall be immediately notified. All requests for interpretations must be submitted ninety-six (96) hours before bid opening. All questions must be directed to the Project Manager Andrea Renny, Associate Civil Engineer, by emailing engineering-admin@monterey.org. The project name must be referenced in all communication.

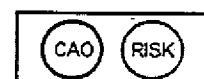
If found necessary, interpretation or correction will be made by written addendum, a copy of which will be sent to each plan holder. Such addenda are to be considered as part of the contract documents, and the Bidder shall acknowledge this condition by listing each addendum by number in his bid proposal. The Engineer shall not be held responsible for any oral interpretations or instructions. No addenda can be issued less than forty-eight (48) hours before bid opening without an accompanying bid time extension. The Engineer reserves the right to make decisions on extending the bid period.



DEFINITIONS

For the purposes of this document, the following definitions shall apply:

<u>CITY:</u>	The term <u>City</u> refers to and indicates the City of Monterey, Monterey County, State of California.
<u>ENGINEER OR CITY ENGINEER</u>	The term <u>Engineer</u> or <u>City Engineer</u> refers to and indicates the Public Works Director of the City of Monterey or his duly authorized representative.
<u>BIDDER:</u>	Party submitting a bid for consideration by the City of Monterey.
<u>CONTRACTOR:</u>	The term <u>Contractor</u> refers to and indicates the party or parties contracting to perform the work to be done in pursuance of this contract and specifications.
<u>COUNCIL OR CITY COUNCIL:</u>	The City Council of the City of Monterey.
<u>PLANS:</u>	The project plans referred to herein.
<u>SPECIAL PROVISIONS:</u>	Part IV of these Specifications.
<u>SPECIFICATIONS:</u>	This document, in its entirety.
<u>STANDARD SPECIFICATIONS:</u>	Specifications entitled "State of California, Department of Transportation, Standard Specifications" of latest publication on file in the office of the City Clerk of the City of Monterey.
<u>STANDARD PLANS:</u>	Plans entitled "State of California, Department of Transportation, Standard Plans" of latest publication.
<u>ADA:</u>	Americans with Disabilities Act of 1990, Titles II and III, revised September 15, 2013.
<u>CBC:</u>	California Building Codes, latest edition as adopted by the City of Monterey.
<u>IBC:</u>	International Building Codes, latest edition.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

CITY OF MONTEREY

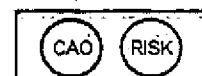
PART II: PROPOSAL

To the Honorable City Council
 City of Monterey
 City Hall
 Monterey, California

The undersigned declares to have carefully examined the location of the proposed work, that the Plans and Specifications as set forth herein have been examined, and hereby proposes to furnish all materials and equipment and do all the work required to complete the said work in accordance with said Plans and Specifications for the lump sums and unit prices set forth in the following schedule:

BASE BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
1	Mobilization and Demobilization	1	LS		
2	Storm Water Compliance	1	LS		
3	Traffic Control	1	LS		
4	Furnish and Install Split, Cycle and Offset Optimization Technique SCOOT Adaptive System	1	LS		
5	Lighthouse Avenue and Hoffman Avenue	1	LS		
6	Lighthouse Avenue and McClellan Avenue	1	LS		
7	Lighthouse Avenue and Drake Avenue	1	LS		
8	Lighthouse Avenue and Dickman Avenue	1	LS		
9	Lighthouse Avenue and Reeside Avenue	1	LS		
10	Lighthouse Avenue and Del Monte Avenue	1	LS		
11	Record Drawings	1	LS		
TOTAL BASE BID (ITEMS 1 THROUGH 11) (In words) <hr/> <hr/>					(In Figures) \$



ADDITIVE ALTERNATIVE 1 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
12	Lighthouse Avenue and David Avenue	1	LS		
TOTAL ALTERNATIVE 1 BID (ITEM 12) (In Words)					(In Figures)
_____					\$

ADDITIVE ALTERNATIVE 2 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
13	Lighthouse Avenue and Irving Avenue	1	LS		
TOTAL ALTERNATIVE 2 BID (ITEM 13) (In Words)					(In Figures)
_____					\$

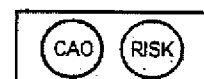
ADDITIVE ALTERNATIVE 3 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
14	Lighthouse Avenue and Prescott Avenue	1	LS		
TOTAL ALTERNATIVE 3 BID (ITEM 14) (In Words)					(In Figures)
_____					\$

GRAND TOTAL BID (BASE BID PLUS ADDITIVE ALTERNATIVES 1-3 (ITEMS 1-14)) (In Words)					(In Figures)
_____					\$

BASIS OF AWARD

Award of contract, if any be made, shall be made to the Contractor with the lowest responsive responsible bid based on the Grand Total Bid (Base Bid plus Additive Alternatives 1-3 (Items 1 through 14)).



BID ITEM DESCRIPTIONS: BASE BID

This section covers details of individual items of the Bid Schedule to insure that it is clear as to what is to be included in each item. The costs submitted with each item are to reflect the work to be completed under that bid item only. Payment of all the following items shall be for actual materials installed on the job and for actual work accomplished.

1. Mobilization and Demobilization

Measurement and payment for this item shall be on a lump sum (LS) basis. The lump sum cost shall pay for all the costs of mobilization and demobilization for items awarded. The work shall include, but not be limited to, preparatory and cleanup work necessary for performance of the work in accordance with the Standard Specifications, Plans and Specifications, and as directed by the Engineer. This item also includes the movement of construction personnel, equipment, supplies and incidentals to and from the project site, and all other work and operations, which must be incurred prior to the beginning of and after the end of construction work. This item shall also include obtaining bonds, insurance policies, licenses, and permits required by the contract documents, project meetings, coordination and all related administrative costs for this Project. Partial payment of this bid item shall be based on percent of this item completed and shall be contingent upon the Contractor's furnishing and the City's acceptance of: 1) the schedule of values, 2) the construction schedule, 3) Traffic Control Plans, 4) Quality Control Plan, 5) all submittals and shop drawings, 6) electrician certifications, 7) subcontractor's Certificate of Good Faith Effort to hire local, and 8) fringe benefit summary statement. Also included in this bid item is maintaining the project site, regular cleanup and final cleanup, temporary fencing and staging area, if any.

2. Storm Water Compliance

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment and incidentals necessary for the implementation of the requirements under "Environmental/Pollution Prevention Requirements" of these Specifications, the General Construction Notes of the Plans, and as directed by the City. This work also includes compliance with all applicable rules, regulations, ordinances and statutes. Also included is providing and installing BMPs, proper maintenance, and inspection of all BMPs installed for the project, removal of BMPs, and clean up and proper disposal of any environmental pollutants due to construction related activities.

3. Traffic Control

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals necessary to maintain vehicular traffic for public use during performance of the work, including all related construction area sign placement and maintenance. This work also includes the preparation, submittal and implementation of the traffic control plan(s), establishing traffic detour(s), traffic control device placement and maintenance, flagging, barriers, temporary drainage facilities, temporary access, temporary asphalt tapers, protection of adjacent existing improvements from damage or staining, removal of the detour(s) upon direction of the Engineer, and restoration of all areas affected by construction, maintenance, use, and removal of the detour in accordance with the Standard Specifications, Plans and Specifications, and as directed by the Engineer.

4. Furnish and Install Split, Cycle and Offset Optimization Technique (SCOOT) Adaptive System

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in furnishing and installing all SCOOT servers (hardware and software), system integration, validation and testing, warranties, coordination and correspondence between the Contractor and the System Vendor, training and licenses for a complete and fully operational adaptive systems at all adaptive system intersections along the Lighthouse Avenue corridor.

5. Lighthouse Avenue and Hoffman Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and



incidentals for all the work including the installation of new detector lead-in cables, fabric innerduct, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational loop detection system.

6. Lighthouse Avenue and McClellan Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of the SCOOT adaptive system at this intersection.

7. Lighthouse Avenue and Drake Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

8. Lighthouse Avenue and Dickman Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the integration, configuration, and testing of the existing video detection system including adjustment of the existing video detection cameras, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

9. Lighthouse Avenue and Reeside Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video



detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

10. Lighthouse Avenue and Del Monte Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing and new conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the removal and salvaging of the existing City controller cabinet.

The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of the City furnished Type P cabinet and controller, conduits, cabling, re-wiring, splicing, terminations, cabinet equipment relocation, and any and all connections and terminations from the existing cabinet to the new cabinet complete and in place for a fully operational cabinet and controller system.

This work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of new conduit complete and in place and as shown on the plans and as directed by the Engineer.

This work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of new pull boxes complete and in place and as shown on the plans and as directed by the Engineer.

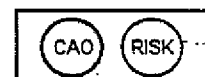
11: Record Drawings

Measurement and payment for this item shall be on a lump sum (LS) basis for furnishing to the City a complete set of Record (As-Built) Drawings.

BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 1

12. Lighthouse Avenue and David Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including



the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 2

13. Lighthouse Avenue and Irving Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of the City furnished Type M (stretch) cabinet and controller on existing foundation, conduits, cabling, re-wiring, splicing, terminations, cabinet equipment relocation, and any and all connections and terminations from the existing cabinet to the new cabinet complete and in place for a fully operational cabinet and controller system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the salvaging of the existing City controller cabinet.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric inner duct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

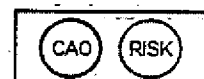
BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 3

14. Lighthouse Avenue and Prescott Avenue

Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, testing and training of the wireless detection system including the wireless sensor units, the access points, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational wireless detection system.



The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

ANCILLARY ITEMS

Payment for any items that do not have instruction indicating where expenses for said items are to be accounted for are to be considered ancillary to the work and accounted for in every one of the lump sum or unit price items and no additional compensation will be allowed therefor.

LUMP SUM PRICE BREAKDOWN

Immediately after award of the contract, the contractor shall submit a cost breakdown list to the Engineer for all Lump Sum Bid items. The list shall consist of major elements of work that make up the item and shall be used for determining progress pay estimates.

BID CLARIFICATION

Pursuant to the provisions of the California Public Contract Code Section 20103.8, City reserves the option to award any or all the additive bid items in addition to the original contract after the lowest responsive responsible Bidder has been determined, should the City later obtain additional funding for additive alternatives not awarded with the original contract.

For responsible bidder as it pertains to this contract, see Part I, Responsible Bidder.

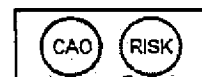
Unit and lump sum prices shall be for items in place, as shown on the Plans, including all labor, materials, equipment, taxes, and incidentals necessary for a complete job.

Whenever unit prices are required and there is an incorrect extension thereof, the unit price correctly extended shall prevail and the total bid shall be corrected to reflect the correct extension. If a bid item amount is zero, enter zero. If a bid item is included elsewhere, enter "included". Do not enter "N/A" into the Bid Schedule.

The foregoing quantities are approximate only, being given as a basis for comparison of bids, and the City of Monterey does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of work by twenty-five percent (25%) or to omit portions of the work as may be deemed necessary by the Engineer.

Bidders may withdraw or revise their bid personally, or upon a written or telegraphic request, or by FAX (the City's FAX number is 646-3702), at any time prior to the hour set for the opening of bids, but not thereafter; however, the City shall not accept faxed copies of bid bonds, affidavits or any other documents where an original document or signature is required by these Specifications. Bids may not be withdrawn for the time period specified in BID VALIDITY of Part I.

The **Noncollusion Declaration** included in this document shall be executed and submitted with each bid. The **Local Hire Certification** included in this document shall be executed and submitted with each bid, except in the following cases: 1) informal bids (i.e., under \$65,000); 2) whenever a state or federal law or regulation applicable to a particular contract prohibits the provision of a local hire requirement; or 3) whenever the City, in accordance with the requirements of the City Code or state law, determines that the contract is necessary to respond to an emergency which endangers the public health, safety, or welfare; or 4) whenever the City determines that a suitable pool of persons providing specialized skills does not exist locally for a specific public works project.



DECLARATION OF BIDDER RE: LICENSE QUALIFICATIONS

Bidder certifies he/she possesses a license in accordance with a State Act providing for the registration of Contractors. License No. : _____, Class: _____, Expiration date: _____.

In accordance with California Labor Code (SB 854), bidder certifies that he/she is registered with the Department of Industrial Relations. Registration No.: _____.

ALL OF THE INFORMATION CONTAINED IN THIS BID PROPOSAL IS TRUE AND CORRECT AND IS EXECUTED UNDER PENALTY OF PERJURY IN

_____ COUNTY, CALIFORNIA, ON _____, 201_____.

Name of Firm: _____

Address: _____

Telephone: _____

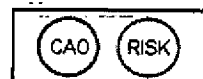
Email: _____

(If firm is an individual, so state. If a firm or co-partnership, state the firm name and give the names of person authorized to execute the declaration on its behalf.)

FAILURE TO PROVIDE ANY OF THE INFORMATION REQUIRED HEREIN INCLUDING CONTRACTOR SIGNATURES MAY RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE

Signature

Printed Name and Title



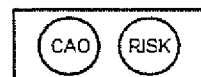
ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall list below any and all addenda issued for this project. Failure to list issued addenda will result in a non-responsive bid:

ADDENDA (Please acknowledge with initials)

DATE RECEIVED

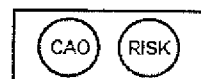
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____



BIDDER'S STATEMENT OF QUALIFICATIONS

The Bidder shall list below a minimum of three (3) jobs of a similar nature recently completed by Bidder's organization:

Project Name	Owner Name	Address	Telephone Number/Email	Contact Name



SUBCONTRACTOR'S LIST

The Bidder shall list below the name, the location of the place of business, and the California contractor license number of any subcontractors proposed to perform work or labor or render service on this project, or a subcontractor licensed by the State of California who will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications of this project, whose work is in excess of one-half of 1 percent of the Bidder's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater:

Name of Subcontractor	California Contractor License Number	California DIR Registration Number	Location of Place of Business	Trade or Portion of Work



**NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID**

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

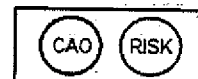
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, disqualification, or determination of ineligibility by any state, federal, or local agency;
- Has not been suspended, debarred, voluntarily excluded, disqualified or determined ineligible by any state, federal, or local agency within the past 3 years;
- Does not have a proposed debarment or disqualification pending; and
- Has not be indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies; initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

I declare under penalty of perjury that the foregoing is true and correct and that this certification is signed this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



LOCAL HIRING REQUIREMENT

All Contractors who submit bids, or proposals, to construct or provide work on any City of Monterey Public Works project, or for any other Public Works construction, or improvement, on City property must comply with Monterey City Code Article 2 of Chapter 28, which sets forth the requirements regarding the Local Hiring Requirement for Public Works Projects. A copy of Monterey's Local Hiring Requirement Ordinance is available at the City Clerk's Office; Bidders are responsible for familiarizing themselves with the contents thereof before signing the certifications required below.

Among other requirements, this ordinance requires the Contractor to promise to make a good-faith effort to hire qualified individuals who are residents of the Monterey Bay Area (Monterey, Santa Cruz and San Benito Counties), in sufficient numbers so that no less than fifty percent (50%) of the Contractor's total construction work force, including subcontractor work force, measured in labor work hours, is comprised of Monterey Bay area residents. This same requirement applies to all subcontractors.

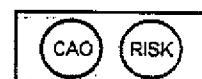
Every Bidder must complete and sign under penalty of perjury a Certification of Good-Faith effort to Hire Monterey Bay Area Residents, on the form provided, and submit said Certification with the sealed bid no later than the date and time of the bid opening. Bidder shall attach to the Certification documentary evidence supporting Bidder's promise to meet, or to make a good-faith effort to meet, the local hiring goal.

Contractor shall include in each and every subcontract relating to the project the requirement that the subcontractor promises to make a good faith effort to hire qualified individuals who are residents of the Monterey Bay Area. Contractor shall be responsible for subcontractor's compliance.

Prior to submitting bids, Bidders shall ensure that any and all subcontractors listed in their bids are not disqualified at that time pursuant to Section 28-78 of the City ordinance referenced above. Prospective contractors may consult the list, available from the City Clerk, of contractors and subcontractors, if any, who are currently disqualified.

The local hiring requirement shall not apply under the following circumstances:

- (a) Informal Bids, or
- (b) Whenever a state or federal law or regulation applicable to a particular contract prohibits the provision of a local hire requirement; or
- (c) Whenever the City, in accordance with the requirements of the Code or state law, determines that the contract is necessary to respond to an emergency which endangers the public health, safety, or welfare; or
- (d) Whenever the City determines that a suitable pool of persons providing specialized skills does not exist locally for a specific public works project. An example would be marine-related pile drivers.



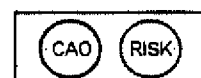
**CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Prime Contractor – To be Submitted with Bid)**

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the company on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



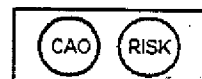
**CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Subcontractor – To be Completed by Subcontractor After Bid is Awarded)**

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the contractor on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



BID BOND
(To be Submitted with Bid)

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **the City of Monterey** ("the Oblige") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Oblige for the Work commonly described as: **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**

WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Oblige in the penal sum equal to Ten Percent (10%) of the Basis of Award or grand total of the base bid.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for ninety (90) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the Oblige, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Oblige the difference between the amount specified in said Bid Proposal and the amount for which the Oblige may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Oblige in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Oblige, the Surety and Principal shall be jointly and severally liable for payment to the Oblige all costs, expenses and fees incurred by the Oblige in connection therewith, including without limitation, attorney's fees.

[CONTINUED NEXT PAGE]



IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agents or representatives.

(Bidder/Principal Name)

By: _____
(Signature)

(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

(Contact Name)

(Street Address)

(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

(Email address)



CERTIFICATION OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

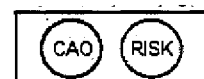
a. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

b. By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

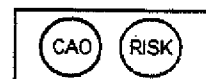
2. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

(Contractor Name)

By: _____
(Signature)



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PART III: GENERAL PROVISIONS
FORMAL BID (\$65,000 and over)

BIDDING**JOB SITE AND DOCUMENT EXAMINATION**

The bidder is required to thoroughly examine the job site, Plans and Specifications including Contract Form (See Part III, Page 2) for the work contemplated, and it will be assumed that the bidder has investigated and is satisfied as to the requirements of the plans and specifications, including the contract. It is mutually agreed that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

BID DOCUMENT COMPLETION

Proposals to receive consideration shall be made in accordance with the following instructions:

1. The proposal shall be made upon the form provided therefor with all items filled out (Appendix A of these specifications). The completed form must be without interlineations, alterations, or erasures. All submitted documents must be in original form (no photocopies or faxes).
2. Each bid shall be accompanied by cash, a cashier's check, a certified check, or a bidder's bond executed by the bidder and an acceptable surety in original form, or any negotiable instruments in original form that are not cancelable amounting to ten percent (10%) of the bid, payable to the City of Monterey. The amount so posted shall be forfeited to the municipality if the bidder does not, within fifteen (15) calendar days after written notice that the contract has been awarded to said bidder, enter into a contract with the municipality for the work.

The City shall have the right to hold all bid bonds until award of the contract. However, the Finance Director may order the return of all bid bonds except that of the two (2) lowest bidders prior to the award.

CONTRACT AWARD AND EXECUTION**CONTRACT AWARD**

The contract shall be awarded, if an award is made, to the lowest responsive responsible bidder as defined in Part II, Bid Clarification, of these specifications, within ninety (90) calendar days from the date bids are publicly opened, examined and declared unless a different bid validity period is specified in Part I, Bid Validity. If the award is not made within the specified period, then all of the bids submitted shall be deemed to have been rejected by the legislative body. Bid items included in total contract award will vary depending on available funding.

CONTRACT EXECUTION

A contract shall not be deemed to have been made between the Contractor and the City of Monterey until all of the following steps have been completed:

1. Award of the contract by the City Council,
2. Within fifteen (15) calendar days after written notice that a contract has been awarded to him (Notice of Award), the Contractor shall submit two (2) signed original contracts, required bonds or alternative security, evidence of insurance that conforms to the contract, and City of Monterey Business License or evidence of application for said license.
3. Upon approval of the foregoing documents, the City will execute the contract and return an original to the Contractor.



PERFORMANCE BOND

BOND NO. _____

PREMIUM: _____

WHEREAS, The _____, (hereinafter designated as "Obligee") and _____ (hereinafter designated as "Principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated _____, and identified as project _____ is hereby referred to and made a part hereof; and

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

NOW, THEREFORE, We, the principal and _____ as surety, are held and firmly bound unto the hereinafter called "The Obligee," in the penal sum of _____ dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by county in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

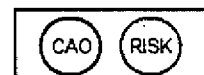
The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named, on

By _____
PRINCIPAL

By: _____
PRINCIPAL

By: _____
ATTORNEY-IN-FACT



PAYMENT (LABOR AND MATERIALS) BOND

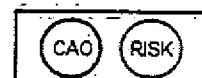
BOND NO.: _____

KNOW ALL MEN/WOMEN BY THESE PRESENT that we, _____ as Principal (also referred to herein as "CONTRACTOR"), and _____ as Surety, are held and firmly bound unto City of Monterey, hereinafter called "OWNER," in the sum of _____ Dollars (\$ _____), for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into the annexed Contract with the City of Monterey for the **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM**, in accordance with OWNER's Call for Bids documents and Principal's Bid Dated _____, and to which reference is hereby made for all particulars, and is required by said City of Monterey to give this bond in connection with the execution of said Contract;

NOW, THEREFORE, if said CONTRACTOR, its Subcontractors, its heirs, executors, administrators, successors, or assigns, shall fail to pay (a) for any materials, provisions, equipment, or other supplies used in, upon, for or about the performance of the WORK contracted to be done under the Contract, or (b) for any work or labor thereon of any kind contracted to be done under the Contract, or (c) for amounts due under the Unemployment Insurance Code with respect to work or labor performed pursuant to the Contract, or (d) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the CONTRACTOR and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to such work and labor, in each case, as required by the provisions of Sections 9550-9566 inclusive, of the Civil Code of the State of California and acts amendatory thereof, and sections of other codes of the State of California referred to therein and acts amendatory thereof, and provided that the persons, companies, corporations or other entities so furnishing said materials, provisions, provender, equipment, or other supplies, appliances, or power used in, upon, for, or about performance of the Work contracted to be executed or performed, or any person, company, corporation or entity renting or hiring implements or machinery or power for or contributing to said Work to be done, or any person who performs work or labor upon the same, or any person, company, corporation or entity who supplies both work and materials therefor, shall have complied with the provisions of said laws, then said Surety will pay in full the same in an amount not exceeding the sum hereinabove set forth and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee, as shall be fixed by the Court. This bond shall inure to the benefit of any and all persons named in Section 9100 of the Civil Code of the State of California so as to give a right of action to them or their assigns in any suit brought upon this bond.

PROVIDED, that any alterations in the WORK to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of said Contract Documents, shall not in any way release said CONTRACTOR or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract Documents release either said CONTRACTOR or said Surety, and notice of such alterations or extensions of the Agreement is hereby waived by said Surety.



IN WITNESS WHEREOF, the Principal and the Surety have executed this instrument in duplicate this

_____ day of _____, 20_____.

Surety

Principal

By: _____

By: _____

Print Name

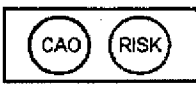
Print Name/Title

Address

(_____) _____
Telephone Number

(_____) _____
FAX Telephone Number

NOTARIAL CERTIFICATE OF ATTORNEY IN FACT AND SEAL OF SURETY MUST BE ATTACHED.



SCOPE OF WORK

INTENT

The work to be done consists of furnishing all labor, materials, methods and processes, implements, tools, equipment, incidentals and machinery except as otherwise specified, which are necessary and required to complete the contract in a satisfactory and workmanlike manner.

The intent of the plans and specifications is to prescribe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the contract. Where the plans or specifications describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the best quality are to be used.

CHANGES AND EXTRA WORK

Changes and extra work shall be in accordance with Section 4-1.05, Changes and Extra Work, of the Standard Specifications.

The Engineer reserves the right to make such alterations, deviations, additions to or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any items or portion of the work, as may be deemed by the Engineer to be necessary or advisable, and to require such extra work as may be determined by the Engineer to be necessary for the proper completion or construction of the whole work contemplated.

When special conditions arise, such as mitigation of unforeseen conditions or additional work, the work shall be negotiated as "extra work" in accordance with the Standard Specifications. Approved Change Orders shall describe the changes or extra work, contract time adjustments and payment basis for such work as applicable. Change Orders are valid contract amendments when approved and signed by the City and Contractor. All changes and extra work must be negotiated and approved before the work is performed.

The City may require the Contractor to work outside approved construction hours noted in Part IV, Construction Procedure. For work done during these times, when required by the City, payment to the Contractor may be adjusted per General Prevailing Wage Rate provisions.

CLEANUP

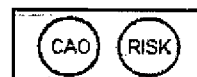
All work sites shall be kept as clear of equipment, material and waste material as is practicable at all times. The City of Monterey and/or government Representative shall make the determination that this requirement is being complied with.

If the City is required to provide cleanup of the work sites due to failure of the Contractor to so provide, or in case of emergency, the City shall charge the Contractor the actual cost of labor and materials and may deduct said costs from any monies due and owing the Contractor.

Upon completion and before making application for acceptance of the work, the Contractor shall clean the street and/or other areas of work, and all ground occupied by him in connection with the work, of all rubbish, excess materials, temporary structures, and equipment, and all parts of the work shall be left in a neat and presentable condition.

CONTROL OF WORK

CONTRACT COMPONENTS



These specifications, the plans and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all; they are intended to be cooperative, to describe, and to provide for a complete job.

Shop drawings required by the plans, specifications or the Engineer shall be furnished by the Contractor and approved by the Engineer before any work relating to the shop drawings is performed unless approval is waived in writing by the Engineer.

It is mutually agreed that shop drawing approval by the Engineer does not relieve the Contractor of any responsibility for accuracy of dimensions and details, and that the Contractor shall be responsible for agreement and conformity of the shop drawings with the approved plans, specifications and site conditions.

Submittal review and approval by the Engineer does not relieve the Contractor from compliance with the requirements and intentions of the plans and specifications.

All authorized alterations affecting the requirements and information given on the approved plans and specifications shall be in writing. No changes shall be made on any plan, specification or drawing after the same has been approved by the Engineer, except by direction of the Engineer.

In the event of discrepancy, written dimensions shall take precedence over scaled dimensions.

ENGINEER'S AUTHORITY

The Engineer shall respond to any and all inquiries as to the quality or acceptability of materials furnished and work performed, and as to the manner of performance and rate of progress of the work; all inquiries as to the interpretation of the plans and specifications; all inquiries as to the acceptable fulfillment of the contract on the part of the Contractor; and all inquiries as to claims and compensation. The Engineer's response shall be final and the Engineer shall have executive authority to enforce and make effective such responses.

Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained in the plans and specifications, the Contractor shall submit a written Request for Information (RFI) to the Engineer. Responses to RFI's shall be in writing and deemed part of the contract documents. Contractor shall comply with response explanation or interpretation so far as may be consistent with the intent of the plans, specifications and amendments thereto.

In the event of doubt or question relative to the true meaning of the plans and specifications, reference shall be made to the City Manager, or his designee, whose decision thereon shall be final.

ASSIGNMENT

The contract may be assigned only upon the written consent of the City Council.

SUBCONTRACTING

Any Proposed substitution of subcontractors must comply with the requirements of the Subletting and Subcontracting Fair Practices Act, California Public Contract Code §4100, et seq.

The Contractor shall give his personal attention to the fulfillment of the contract and shall keep the work under his control.

Subcontractors will not be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor, and their work shall be subject to the provisions of the contract, plans and specifications.



Where a portion of the work sublet by the Contractor is not being prosecuted in a manner satisfactory to the Engineer, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work.

REPRESENTATIVE

The Contractor shall assign a representative per Section 5-1.16, Representative, of the Standard Specifications and submit contact information (name, telephone number) to the City of Monterey Engineering Division. If the after-hours representative is different than the on-site representative, provide contact information for both.

The Contractor shall be constantly on the work during its progress or shall be represented by a foreman who is competent to receive and carry out instructions which may be given by the proper authorities, and the Contractor shall be held liable for the faithful observance of any lawful instructions of the Engineer not in conflict with the contract, and which may be delivered to the Contractor, contractor's superintendent, foreman, or other representatives on the work. If the Contractor believes the Engineer's instructions are in conflict with the contract, the Contractor shall immediately bring it to the attention of the Engineer in writing.

The Contractor shall provide and maintain an office in the City of Monterey near the site of the work and shall allot such space to the Engineer or his representative as is required for proper keeping of records and plans of work, if required by the plans or specifications.

EQUIPMENT

While certain sections of these specifications may provide that equipment of a particular size and type is to be used to perform portions of the work, it is to be understood that the development and use of new or improved equipment is to be encouraged.

The Contractor may request, in writing, permission from the Engineer to use equipment of a different size or type in place of the equipment specified.

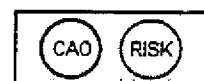
The Engineer, before considering or granting such request, may require the Contractor to furnish, at Contractor's expense, evidence satisfactory to the Engineer that the equipment proposed for use by the Contractor is capable of producing work equal to, or better than, that which can be produced by the equipment specified.

PROPERTY AND FACILITY PRESERVATION

Attention is directed to Section 5-1.36, Property and Facility Preservation, Section 7-1.05, Indemnification and Section 7-1.06, Insurance, of the Standard Specifications. Due care shall be exercised to avoid injury to existing street improvements or facilities, utility facilities, adjacent property, roadside trees and shrubbery that are not to be removed.

The Contractor shall be held responsible for any damages to existing streets, highways, roads, driveways, sidewalks, curbs, gutters, utilities, other public facilities or private property caused by Contractor's operations. Where the work calls for cutting into or disturbing existing materials, the Contractor shall patch or repair the existing area to a neat, finished product. This shall include touch up or repair of the existing which was disturbed, and repair to the same structural capacity as the existing facility or better.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in protecting or repairing property, shall be considered as included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefor.



POTENTIAL CLAIMS AND DISPUTE RESOLUTION

Potential claims and dispute resolution shall be in accordance with Section 5-1.43, Potential Claims and Dispute Resolution, of the Standard Specifications.

CONTRACTOR'S RESPONSIBILITY FOR WORK

All work which is defective in its construction or deficient in any of the requirements of the plans and specifications shall be remedied or removed and replaced by the Contractor in an acceptable manner, and no compensation will be allowed for such correction.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and unsuitable materials may be rejected, notwithstanding the fact that such defective work and unsuitable materials have been previously overlooked or approved by the Engineer and accepted or estimated for payment.

All work done beyond the lines and grades shown on plans or established by the Engineer, or any extra work done without written authority, will be considered as unauthorized and will not be paid for.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to cause defective work to be remedied, or removed and replaced, and unauthorized work to be removed. The cost of removing, replacing, or repairing said defective or unauthorized work may be deducted from any monies due and owing the Contractor but said right of set-off shall be an alternative and not the sole remedy of the City.

Until the formal acceptance of the work by the City (as constituted by the filing of the Notice of Completion), the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by the acts of the federal government or the public enemy.

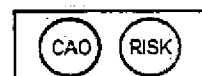
Should the City elect to occupy a project before acceptance, the City will issue a Notice of Substantial Completion designating those portions of the work that will be occupied or utilized. Contractor shall be relieved from maintenance and from the responsibility of injury and damage to this work. However, any guarantees will not begin until acceptance of the entire project, and the Contractor shall retain responsibility for making good defective work or materials.

EMPLOYEES

All workmanship shall be fully up to the highest standard of modern construction and practice. The employment of labor shall comply with the prevailing local labor conditions and the Contractor shall employ only competent, careful, orderly persons upon the work. If at any time it shall appear to the Engineer that any person employed upon the work is incompetent, careless, reckless, or disorderly, or disobeys or evades orders and instructions, such person shall be immediately discharged and not again employed upon the work.

CONTROL OF MATERIALS**GENERAL**

The Contractor shall furnish without charge such samples of materials and tests of materials as are required by the plans, specifications or the Engineer. No material shall be used until it has been approved by the



Engineer.

All tests of materials ordered by the Engineer and made by the Contractor shall be made in accordance with commonly recognized standards of national organizations, and such special methods of tests as are prescribed in the plans and specifications.

All materials not conforming to the requirements of the plans and specifications shall be considered defective, and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Engineer. No rejected materials, the defects of which have been subsequently corrected, shall be used until approved in writing by the Engineer.

Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer shall have authority with any order to remove and replace defective material. The cost of removing, replacing or repairing said defective or unauthorized material may be deducted from any monies due and owing the Contractor but said right of set-off shall be an alternative and not the sole remedy of the City.

For convenience in designation on the plans or in the specifications, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and his catalog information. The use of an alternative article or material which is of equal quality and of the required characteristics for the purpose intended will be permitted, provided that the burden of proof as to the quality and suitability of alternatives shall be upon the Contractor who shall furnish, at the contractor's expense, all information necessary as required by the Engineer. The Engineer shall be the sole judge as to the quality and suitability of alternative articles or materials and that decision shall be final.

MATERIAL SOURCE

At the option of the Engineer, the source of supply of each of the materials shall be approved by the Engineer before delivery is started and before such material is used in the work. Representative preliminary samples of the character and quality prescribed shall be submitted by the Contractor or producer of all materials to be used in the work, for testing or examination by the Engineer.

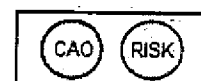
QUALITY

Except as otherwise provided, sampling and testing of all materials, and the laboratory methods and testing equipment required under the plans and specifications shall be in accordance with the latest requirements of the State of California, Department of Transportation, Office of Materials Engineering and Testing Services. Sampling and testing of materials not covered by CalTrans specifications and not otherwise provided for, shall be in accordance with the latest Test Methods and Standards of the American Society for Testing and Materials (ASTM).

GUARANTEE

All materials supplied and all work done under this contract shall be guaranteed by the Contractor for a period of one (1) year from the date of formal acceptance by the City of Monterey. Upon receipt of notice from the Engineer of failure of any part of the guaranteed materials during the guarantee period, the affected parts shall be replaced promptly and at the expense of the Contractor.

The Contractor shall maintain the performance bond (See Part IV, Contract Bonds) in full force and effect during the guarantee period for the purpose of insuring that said repairs or replacements will be made, or may, at the Contractor's option, replace said performance bond for a similar bond in the amount of twenty (20) percent of the total contract amount including adjustments or the original performance bond, whichever is greater.



LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**LAWS**

The Contractor shall keep fully informed of all existing and future state and federal laws and all municipal ordinances and regulations of the City of Monterey which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

All work shall comply in every respect with all the governing laws, regulations, and ordinances of the City of Monterey, which shall be considered for the purpose of contract to which the plans and specifications refer, a part thereof. The Contractor shall give to the proper authorities all necessary notices relative to the work, and shall obtain and pay for all such permits, licenses, notices, inspections, or tests required as part of the contract price. All permits issued by the City for work done under this contract shall be issued at no charge.

All bidders and contractors shall be licensed in accordance with the laws of this State, specifically the provisions the Business and Professions Code, Division 3, Chapter 9. Any bidder or contractor not so licensed is subject to the penalties imposed by such laws. In accordance with the requirements in Public Contract Code Section 10164, in all contracts where Federal funds are involved, the Contractor shall be properly licensed at the time the Contract is awarded.

NONDISCRIMINATION

The Contractor shall comply with Section 1735 of the Labor Code, which reads as follows:

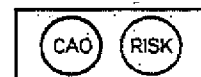
"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform Work under the contract.

LABOR CODE

In accordance with the provisions of Sections 1725.5, 1771.1, 1771.3, and 1771.4 of the Labor Code, this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal (subject to the requirements of Section 4104 of the Public Contract Code), or engage in the performance of any contract for public work, as defined by that chapter of the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the Labor Code.

An inadvertent error in listing a subcontractor that is not registered shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any one of Section 1771.(c)(1)-(3) applies. Failure of a listed subcontractor to be registered shall be grounds for the contractor to substitute a registered subcontractor for the unregistered subcontractor. The City shall not accept any bid, nor shall the City or bidder enter any contract or subcontract, without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5 of the Labor Code. The prime contractor shall post job site notices, as required by Section 1771.4(a) (2) of the Labor Code and regulations. The prime contractor shall submit records to the Labor Commissioner, as required by Sections 1771.4(a) (3), 1771.4(c) (2), and 1776 of the Labor Code.



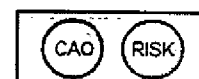
WAGES

Local prevailing wage rates shall be paid in accordance with Sections 1770, 1773, and 1782, as amended, of the California Labor Code, and Section 28-20(e) of the Monterey City Code, on all public works construction contracts exceeding twenty-five thousand dollars (\$25,000) and all public works contracts for alteration, demolition, repair or maintenance work exceeding fifteen thousand dollars (\$15,000).

The Contractor and any subcontractor under the Contractor shall comply with Labor Code Sections 1774 and 1775. Pursuant to Section 1775, the Contractor and any subcontractor under the Contractor shall forfeit to the State or political subdivision on whose behalf a contract is awarded a penalty of not more than two hundred dollars (\$200), or such other amount as may be amended from time to time by the Department of Industrial Relations, for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for the Work or craft in which the worker is employed for any public (City) Work done under the contract by the Contractor or by any subcontractor under the Contractor in violation of the requirements of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. The amount of this forfeiture shall be determined by the Labor Commissioner and shall be based on consideration of the mistake, inadvertence, or neglect of the Contractor or subcontractor in failing to pay the correct rate of prevailing wages, or the previous record of the Contractor or subcontractor in meeting their respective prevailing wage obligations, or the willful failure by the Contractor or subcontractor to pay the correct rates of prevailing wages. A mistake, inadvertence, or neglect in failing to pay the correct rate of prevailing wages is not excusable if the Contractor or subcontractor had knowledge of the obligations under the Labor Code. In addition to the penalty and pursuant to Labor Code Section 1775, the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor or subcontractor. If a worker employed by a subcontractor on a public works (City) project is not paid the general prevailing per diem wages by the subcontractor, the prime contractor of the project is not liable for the penalties described above unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

1. The contract executed between the contractor and the subcontractor for the performance of Work on the public works (City) project shall include a copy of the requirements in Sections 1771, 1775, 1776, 1777.5, 1813 and 1815 of the Labor Code.
2. The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.
3. Upon becoming aware of the subcontractor's failure to pay the specified prevailing rate of wages to the subcontractor's workers, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for Work performed on the public works (City) project.
4. Prior to making final payment to the subcontractor for Work performed on the public works (City) project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to the subcontractor's employees on the public works (City) project and any amounts due pursuant to Section 1813 of the Labor Code.

Pursuant to Section 1775 of the Labor Code, the Division of Labor Standards Enforcement shall notify the Contractor on a public works (City) project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works (City) project to pay workers the general prevailing rate of per diem wages. If the Division of Labor Standards Enforcement determines that employees of a subcontractor were not paid the general prevailing rate of per diem wages and if the City did not



retain sufficient money under the contract to pay those employees the balance of wages owed under the general prevailing rate of per diem wages, the contractor shall withhold an amount of moneys due the subcontractor sufficient to pay those employees the general prevailing rate of per diem wages if requested by the Division of Labor Standards Enforcement. The Contractor shall pay any money retained from and owed to a subcontractor upon receipt of notification by the Division of Labor Standards Enforcement that the wage complaint has been resolved. If notice of the resolution of the wage complaint has not been received by the Contractor within 180 days of the filing of a valid notice of completion or acceptance of the public works (City) project, whichever occurs later, the Contractor shall pay all moneys retained from the subcontractor to the City. These moneys shall be retained by the City pending the final decision of an enforcement action.

Pursuant to the requirements in Section 1773 of the Labor Code, the City has obtained the general prevailing rate of wages (which rate includes employer payments for health and welfare, pension, vacation, travel time and subsistence pay as provided for in Section 1773.8 of the Labor Code, apprenticeship or other training programs authorized by Section 3093 of the Labor Code, and similar purposes) applicable to the Work to be done, for straight time, overtime, Saturday, Sunday and holiday Work. The holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of the particular craft, classification or type of workmen concerned.

The general prevailing wage rates and any applicable changes to these wage rates are available at the City of Monterey, Engineering Division Office, City Hall, Monterey, CA, (831-646-3921). General prevailing wage rates are also available from the California Department of Industrial Relations' Internet Web Site at: <http://www.dir.ca.gov>.

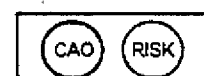
The wage rates determined by the Director of Industrial Relations for the project refer to expiration dates. Prevailing wage determinations with a single asterisk after the expiration date are in effect on the date of advertisement for bids and are good for the life of the contract. Prevailing wage determinations with double asterisks after the expiration date indicate that the wage rate to be paid for Work performed after this date has been determined. If Work is to extend past this date, the new rate shall be paid and incorporated in the contract. The Contractor shall contact the Department of Industrial Relations as indicated in the wage rate determinations to obtain predetermined wage changes. Pursuant to Section 1773.2 of the Labor Code, general prevailing wage rates shall be posted by the Contractor at a prominent place at the site of the Work.

Changes in general prevailing wage determinations which conform to Labor Code Section 1773.6 and Title 8 California Code of Regulations Section 16204 shall apply to the project when issued by the Director of Industrial Relations at least ten (10) days prior to the date of the Notice Inviting Bids for the project.

The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the contract. The possibility of wage increases is one of the elements to be considered by the Contractor in determining the bid, and will not under any circumstances be considered as the basis of a claim against the City on the contract. The Contractor shall make travel and subsistence payments to each workman, needed to execute the Work, in conformance with the requirements in Labor Code Section 1773.8.

CERTIFIED PAYROLL RECORDS

The Contractor shall conform to the requirements in Labor Code Section 1776 concerning payroll records. Regulations implementing Labor Code Section 1776 are located in Sections 16016 through 16019 and Sections 16207.10 through 16207.19 of Title 8, California Code of Regulations. The Contractor and each subcontractor shall preserve their payroll records for a period of 3 years from the date of completion of the contract.



APPRENTICES

The Contractor and subcontractors shall comply with the provisions in Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Code of Regulations Section 200 et seq. To ensure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, the Contractor and each subcontractor should, where some question exists, contact the Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, CA 94102, or one of its branch offices prior to commencement of Work on the contract. Responsibility for compliance with this section lies with the Contractor. It is State and City policy to encourage the employment and training of apprentices on public works contracts as may be permitted under local apprenticeship standards.

WORKING HOURS

Eight hours labor constitutes a legal day's Work. The Contractor or any subcontractor under the Contractor shall forfeit, as a penalty to the State of California, twenty five dollars (\$25) or such other amount as may be amended by the Department of Industrial Relations from time to time for each worker employed in the execution of the contract by the respective Contractor or subcontractor for each calendar day during which that worker is required or permitted to Work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the requirements of the Labor Code, and in particular, Section 1810 to Section 1815, thereof, inclusive, except that Work performed by employees of Contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay, as provided in Section 1815 thereof.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS

The Contractor shall conform to all local, state and federal rules and regulations pertaining to safety. Furnished equipment, material and services shall comply with all OSHA Standards and regulations and all applicable governmental laws and orders. The Contractor shall post an OSHA poster in a conspicuous location as required by law.

EXCAVATION SAFETY

Per California Labor Code Section 6500, Contractor shall possess a valid Construction Activity Permit for construction of trenches or excavations which are five (5) feet or deeper and into which a person is required to descend. When trenches or excavations five (5) feet or deeper are anticipated as part of the contract, Contractor shall possess a valid permit at the time of bidding and for the life of the contract. Contractor shall furnish copies of valid permits to the City of Monterey Engineering Division office. When required in Part I, Notice to Contractors, Contractor must provide evidence of a current T1 Annual Trench/ Excavation Permit at the time of bidding.

Contractor shall comply with California Labor Code Section 6705 which provides that prior to the commencement of excavation of any trench or trenches five (5) feet or more in depth, Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer.

Plans must be submitted to the Engineer at least five (5) working days prior to the commencement of excavation. If said plans are not submitted five (5) days prior to the commencement of said excavation, the City shall not be liable to Contractor for any delay in work caused by delinquent submission of said plans.

Trenching of more than four (4) feet below the surface shall require the Contractor to promptly notify the Engineer if unknown hazardous wastes, subsurface or latent physical site conditions different from those indicated or



unusual site conditions are encountered, and inform the City as to its duty to investigate those conditions. The Contractor may file for a change order for any conditions different from those indicated.

PUBLIC CONVENIENCE AND PUBLIC SAFETY

Attention is directed to Section 7-1.03, Public Convenience, and Section 7-1.04, Public Safety, of the Standard Specifications for the provisions relating to the Contractor's responsibility for providing for the convenience and safety of the public in connection with his operations. Standard Specifications are on file in the office of the City Engineer.

Contractor is to notify the Engineer of the start date and construction schedule at least nine (9) calendar days prior to the planned start of construction unless otherwise noted in Part IV.

The Contractor shall conduct his operations as to cause the least possible inconvenience to public traffic. The Contractor shall provide traffic control devices or personnel where necessary in conformance with good traffic safety standards. The Contractor shall provide sufficient warning signs or devices to give adequate notice to the public of dangerous or changed conditions existing during construction.

The City Engineer shall determine the adequacy of said devices and, in cases of dispute, his determination shall be final.

If the City is required to provide traffic direction, signs or devices, due either to failure of the Contractor to so provide or in case of emergency, the City shall charge Contractor the actual cost of labor and materials and may deduct said costs from any monies due and owing the Contractor.

WORKER'S COMPENSATION

Pursuant to the requirements in Section 1860 of the Labor Code, the Contractor will be required to secure the payment of workers' compensation to the Contractor's employees in conformance with the requirements in Section 3700 of the Labor Code.

PATENTS

If any material, composition, process, method of construction or any other thing called for or required by the plans and specifications or used in the work is covered by letter patent, all royalties and expenses thereof, all litigation thereupon, or anything whatsoever which may develop as a cost from the use of such materials, composition, process, method, or any other thing which is covered by letter patent, shall be borne by the Contractor.

RIGHT OF PROPERTY

Nothing in the contract shall be construed as vesting the Contractor with any right of property in the materials furnished and used in the work herein provided for after they have been attached to the work and have become an integral portion of the work herein provided. All such materials shall, upon their becoming an integral part of the work herein provided, be, and remain, the property of the City of Monterey.

INCREASED FORCE

In case of emergency involving danger to life or property, continuous work with increased force may be required by the Engineer.



LIABILITIES

Right of general supervision by the City shall not make the Contractor an agent of the City, and the liability of the Contractor for all damages to persons or to public or private property arising from the Contractor's execution of the work shall not be lessened because of such general supervision.

PROSECUTION AND PROGRESS**GENERAL**

If at any time in the opinion of the Engineer, the Contractor has failed to supply an adequate working force, or material of proper quality, or has failed in any other respect to prosecute the work with the diligence and force specified and intended in and by the terms of the contract, notice thereof in writing shall be served upon the Contractor. Should the Contractor neglect or refuse to provide means for a satisfactory compliance with the contract, as directed by the Engineer, within the time specified in such notice, the Engineer in any such case shall have the power to suspend the operation of the contract. Upon receiving notice of such suspension, the Contractor shall discontinue said work, or such parts of it as the City may designate.

Upon such suspension, the Contractor's control shall terminate, and thereupon the Engineer or duly authorized representative may take possession of all or any part of the Contractor's materials, tools, equipment, and appliances upon the premises, and use the same for the purpose of completing said contract, and hire such force and buy or rent such additional machinery and appliances, tools, and equipment and buy or rent such additional materials and supplies at the Contractor's expense as may be necessary for the proper construction of the work and for the completion thereof; or may employ other parties to carry the contract to completion, employ the necessary workers, substitute other machinery or materials and purchase the materials contracted for in such manner as the City may deem proper; or the City may annul and cancel the contract and re-let the work or any part thereof.

Any excess of cost arising therefrom over and above the contract price will be charged against the Contractor and his sureties, who will be liable therefor. In the event of such suspension, all money due the Contractor or retained under the terms of this contract shall be forfeited to the City, but such forfeiture will not release the Contractor or his sureties from liability for failure to fulfill the contract. The Contractor and his sureties will be credited with the amount of money so forfeited toward any excess of cost over and above the contract price, arising from the suspension of the operations of the contract and the completion of the work by the City as above provided, and the Contractor will be so credited with any surplus remaining after all just claims for such completion have been paid.

In the determination of the question whether there has been any such noncompliance with the contract as to warrant the suspension or annulment thereof, the decision of the City Manager shall be binding on all parties to the contract.

SUSPENSIONS AND DELAYS

Suspensions of work and delays shall be in accordance with Section 8-1.06, Suspensions, and Section 8- 1.07, Delays, of the Standard Specifications.

The Engineer shall have the authority to suspend the work wholly or in part, for such period as the Engineer may deem necessary due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as the Engineer may deem necessary due to the failure on the part of the Contractor to carry out Engineer's orders given or to perform any provisions of the work. The Contractor shall immediately obey such order of the Engineer and shall not resume work until ordered in writing by the Engineer.



Any act of, or any omission of anything required to be done by the City, its officers, agents or employees which shall cause the Contractor delay in the completion of the work shall be a ground for extension of time on the part of the Contractor to complete the work but shall not grant the Contractor any monetary damages for such delay.

RIGHTS OF WAY

Rights-of-way or easements for work to be constructed will be provided by the City. The Contractor shall make his own arrangements and pay all expenses for additional area required by him outside of the limits of rights-of-way or easements unless otherwise especially provided. In the event of delay on the part of the City, its officers, agents or employees in obtaining any such rights-of-way or easements for the work to be constructed, then the Contractor shall have time for the completion of his contract for the period or periods caused by such delay or delays but shall have no damages against the local entity, its officers, agents or employees.

PAYMENT

GENERAL

Attention is directed to Section 9, Payment, of the Standard Specifications on file in the office of the City Engineer, the provisions of which shall govern unless other and conflicting provisions are set forth in these specifications and/or the plans.

The City pays for the Contractor furnishing the resources and activities to complete the work. The Contractor shall accept the City's payment as full compensation for furnishing the resources and activities, including, but not limited to all labor, materials, tools, equipment, taxes and incidentals necessary to complete the work and for performing all work contemplated, and embraced under the contract; also for loss or damage arising from the nature of the work or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the formal acceptance by the City, and for all risks of every description connected with the prosecution of the work; also for all expenses incurred in consequence of the suspension or discontinuance of the work as herein specified, and for completing the work according to the plans and specifications.

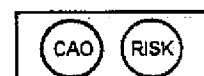
The City shall not be obligated to process any payment request until thirty (30) calendar days after receipt of a correct, complete and undisputed progress payment request or sixty (60) calendar days after receipt of a correct, complete and undisputed final payment request. Payments not made within the specified time periods are subject to an interest rate of two percent (2%) per month. A payment request shall not be deemed complete unless all related documentation has been supplied and verified, and all related contract requirements have been satisfactorily met.

PROGRESS PAYMENTS

The Contractor may, once each month, make an estimate in writing of the total amount of work done to the time of such estimate and the value thereof, and request payment for that work.

Upon approval of the progress payment request, the Engineer shall cause to be paid to the Contractor the balance not retained as aforesaid, after deducting therefrom all previous payments and all sums to be withheld or retained under the provisions of the contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the contract, or when in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than one thousand dollars (\$1,000.00).

Except as set forth in the following paragraph, the Engineer shall retain five percent (5%) of the value of the materials so estimated to have been furnished and delivered and unused, or furnished and stored as aforesaid, as



part security for the fulfillment of the contract by the Contractor. The Engineer shall also retain five percent (5%) of the value of all work done.

The Contractor may elect to receive 100% of payments due under the contract from time to time, without retention of any portion of the payment by the City, by depositing approved securities of equivalent value with the City or in an escrow account with an approved bank in accordance with the provisions of Section 4590 of the Government Code. Such securities, if deposited by the Contractor, shall be valued by the City's Finance Director, whose decision on valuation of the securities shall be final.

No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

PAYMENT AFTER CONTRACT ACCEPTANCE

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Engineer shall promptly make such inspection, and when the work is found to be acceptable under the contract and the contract fully performed, the Engineer shall file a Notice of Completion.

Final payment, including all sums withheld or retained as herein before specified as partial security for the fulfillment of the contract, shall be paid promptly by the City after expiration of the lien period (see California Civil Code § 3179 et seq.), providing there are no disputes arising from the performance of the contract or the amount due.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**PART IV: SPECIAL PROVISIONS****GENERAL**

The work, in general, consists of furnishing and installing an adaptive traffic control system along the Lighthouse Avenue corridor. The work shall include, but not be limited to, furnishing and installing vehicle detection including wireless pavement sensors, video detection cameras, equipment in controller cabinets, associated equipment cabling in existing conduits; installing City-furnished traffic controller cabinets and controllers; removing and salvaging existing cabinets and foundations; furnishing, installing and integrating central computers and servers including all hardware, software, cabling and licenses for a complete adaptive traffic control system.

PLANS AND SPECIFICATIONS

A component in one Contract part applies as if appearing in each. The parts are complementary and describe and provide for a complete work. The work embraced herein shall be done in accordance with the appropriate provisions of the Standard Specifications insofar as the same may apply, and in accordance with the specifications and plans. In case of conflict between the Standard Specifications, Standard Plans, and these Special Provisions and the Plans, the order of precedence shall be as follows:

Special Provisions shall take precedence over Plans and the Plans shall take precedence over Standard Specifications and Standard Plans. These Special Provisions shall also take precedence over conflicting portions of the "General Provisions, Part III" of these project specifications.

CONTRACT BONDS

For Bid Bond requirements, see Part I, Bid Bond, of these Specifications.

The Contractor, at the time of signing and executing the contract, shall execute and file with the City a performance bond to the satisfaction and approval of said City, in a sum of not less than one hundred percent (100%) of the amount of the contract conditional upon the faithful performance of the contract. For additional information, see Guarantees elsewhere in these specifications.

The Contractor, at the time of signing and executing any contract in excess of twenty-five thousand dollars (\$25,000), shall execute and file with the City a payment bond (public works labor and materials bond) to the satisfaction and approval of said City, in a sum of one hundred percent (100%) of the amount of the contract in accordance with Public Contract Code §9550 et seq.

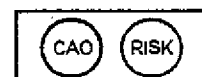
Please refer to Part III, Page 3, for sample bond forms.

The surety shall be an admitted carrier in California with a valid surety license and possess a minimum rating from A. M. Best Company of A-VII. The Surety and /or co-sureties must be listed as an acceptable surety on federal bonds by the United States Department of the Treasury, subject to the maximum amount shown in the listing. If co-sureties are used, their bonds shall be on a joint and several basis.

Notwithstanding the above, the Contractor may substitute adequate securities for any bond called for under the provisions of these Specifications as set forth in Public Contracts Code Section 22300. Alternate security substitutions shall be submitted to the City no later than ten (10) days after written notice that a contract has been awarded to the contractor to allow processing and escrow agreement for in lieu security.

The Contractor shall submit the contract with his signature affixed thereto, required bonds or alternate security and evidence of insurance that conforms to the contract within fifteen (15) calendar days after written notice that a contract has been awarded to him.

The Contractor shall maintain the performance bond in full force and effect during the guarantee period for the purpose of insuring that said repairs or replacements will be made, or may, at the Contractor's option, replace said



performance bond for a similar bond in the amount of twenty percent (20%) of the total contract amount, including adjustments, or the original performance bond, whichever is greater.

TIME LIMITS

Within fifteen (15) calendar days after written notice that a contract has been awarded (Notice of Award), the Contractor shall submit two (2) signed original contracts, required bonds or alternative security, evidence of insurance that conforms to the contract, and City of Monterey Business License or evidence of application for said license.

A Notice to Proceed will be issued upon receipt of the foregoing documents. The Contractor shall begin work within **fourteen (14) calendar days** after the effective date of the Notice to Proceed.

The Contractor shall diligently prosecute the contract to completion on or before the expiration of **eighty (80) calendar days** from the effective date of the Notice to Proceed.

LICENSES AND PERMITS

Prior to the execution of any contractual agreements, the successful Bidder shall obtain a City of Monterey Business License, and all applicable permits (except Coastal Zone Conservation permits) for construction.

City permits shall be issued at no charge, except for construction parking permits. Construction parking permits are as follows for dashboard permits (commercial vehicles only):

\$10 per vehicle/space per day (meter space):

Cannery Row Area
Wharf Area
Waterfront Area
Foam Street
Scott/Oliver Streets

\$5 per vehicle/space per day (non meter space):

Lighthouse Avenue
Downtown Area
All other restricted/enforced area on-street.

Paper construction parking permits may be obtained at the Parking Division office, 340 Tyler Street, Monterey, CA 93940 (831.646.3953).

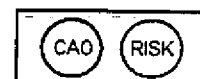
Contractor shall be required to obtain and hold a Public Works Permit (Encroachment Permit) and/or Building Permit from the Building Permit and Inspection Division. Contractor shall provide a copy of the completed permit(s) to the Engineering Division no later than three (3) days prior to the start of construction. The permit application fee(s) shall be waived. Where applicable, the City shall submit permit applications.

SITE INSPECTION

It shall be the Contractor's responsibility to inspect the site and become thoroughly familiar with all aspects of the work to be done:

The submission of a bid shall be conclusive evidence that the Bidder has investigated the site and is thoroughly satisfied as to the conditions to be encountered, as to the character, quality, and scope of the work to be performed; the quantity of materials to be furnished; and as to all the requirements of these specifications.

It shall be the Contractor's responsibility to be aware of surface and subsurface drainage conditions that may exist at the site. The Contractor is further responsible for work necessary to rectify any resulting drainage problems; labor, materials, equipment, and incidentals necessary to achieve the solution shall be borne by the Contractor.



SUBMITTALS

The review of submittals and approval thereof by the City does not relieve the Contractor from compliance with the requirements and intentions of the plans and specifications to which the submittals pertain.

Submittal Format:

1. Contractor shall submit individually bound copies of all submittals and revised submittals to the City's construction manager. A minimum of two (2) copies shall be submitted unless otherwise directed. Submittal submission may be done in pdf form via email.
2. All submittals shall have a cover sheet containing the following:
 - a. Submittal date, submittal number and submittal revision number (as applicable),
 - b. City project name,
3. Each submittal item shall clearly identify the specification section(s) and paragraph(s) for which the submittal item pertains to.
4. Contractor is not guaranteed a specific review time period. If Contractor requires a quick submittal turnaround of specific submittal items, Contractor must indicate which submittal items require a quick turnaround by attaching a memo to the submittal indicating such and the requested turnaround period. The City shall make every effort to meet the requested review period.
5. Contractor shall place orders for all materials or equipment in time to prevent any delays to the construction schedule or project completion. If any materials or equipment are not ordered in a timely fashion, any additional charges made by equipment manufacturers and/or suppliers to complete the manufacturer and/or delivery in time to meet the construction schedule or project completion, together with any special handling charges shall be borne by the Contractor.

Submittal Content and Product Data:

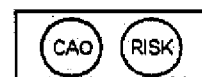
1. Contractor shall review and accept submittals prior to submission.
2. Submittals shall contain all required information such as shop drawings, product data, etc.
3. Each submittal item shall be identified by manufacturer, brand name, trade name, model number, size, rating and additional information as is necessary to properly identify and verify the materials and equipment. The phrase "as specified" is not considered sufficient.
4. Where possible, submittal information shall be limited to the specific item being submitted. In the event multiple materials or equipment are described in one submittal, Contractor shall clearly identify the pertinent information being submitted on.
5. Accessories, controls, finish, etc. not required to be submitted or identified with the submittal shall be furnished and installed as specified.

CONSTRUCTION SURVEYS

Construction surveys, when required, shall be provided by and paid for by the contractor and no additional compensation shall be made.

The Contractor shall preserve all stakes and points set for lines, grades, or measurement of the work in their proper places until authorized to remove them by the Engineer. All expenses incurred in replacing stakes that have been removed without proper authority shall be paid by the Contractor.

The City shall be given the opportunity to check forms for line and grade prior to any concrete being placed.



PROTECTION OF PRIVATE PROPERTY

Private property grounds and facilities, if damaged or removed because of the Contractor's operations, shall be restored or replaced to same or better than the original condition and located in the same position and alignment as is reasonably possible. Contractor shall comply with the applicable portions of Section 5-1.36, "Property and Facility Preservation", Section 7-1.05, "Indemnification", and Section 7-1.06, "Insurance" of the Standard Specifications.

CONSTRUCTION QUALITY CONTROL

Definitions

Quality Management (QM) - All control and assurance activities instituted to achieve the product quality established by the contract requirements.

Contractor Quality Control (CQC) - The construction contractor's system to manage, control, and document contractor's, suppliers', and subcontractor's activities to comply with contract requirements.

Contractor Responsibility

General: The Contractor shall establish and maintain an effective quality control system in compliance with the Plans and Specifications. The quality control system shall consist of plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction, and operations which comply with contract requirements. The system shall cover construction operations both onsite and offsite, and shall be keyed to the proposed construction sequence.

The Quality Control Plan

Quality Control Plans and Procedures.

The Contractor will be required to prepare a Quality Control Plan. This plan shall include, as a minimum, the following:

1. A description of the quality control procedures, including a chart showing lines of authority and acknowledgement that the Contractor shall implement the control system for all aspects of the work specified and shall report to the project manager or someone higher in the Contractor's organization.
2. The name, qualifications, duties, responsibilities, and authorities of each person assigned a QC function.
3. A copy of the letter to the Engineer signed by an authorized official of the firm which describes the responsibilities and delegates the authority to implement the QC plan shall be furnished.
4. Procedure for scheduling and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents.
5. Control testing procedures for each specific case. Note that in the case of federally-funded projects, QA/QC testing must be performed by the city by a Caltrans-certified lab.
6. Reporting procedures including proposed reporting formats.

QC Plan Implementation

1. **Preconstruction Conference**. During the pre-construction conference, a mutual understanding of the CQC system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's management with the Engineer's inspection. Minutes of the conference shall be prepared by City staff, and be signed by both the Contractor and the Engineer. The minutes shall become a part of the

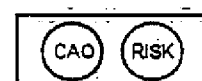


contract file. There may also be occasions when subsequent conferences will be called to reconfirm mutual understandings.

2. **General.** After issuance of the Notice to Proceed, and prior to the start of construction, the Contractor shall furnish, for acceptance by the Engineer, the Contractor Quality Control (CQC) Plan with which he proposes to implement the requirements of Contract Clause entitled "Construction Quality Control". The plan shall identify personnel, procedures, instructions, records, and forms to be used. If the Contractor fails to submit an acceptable QC plan within the time herein prescribed, the Engineer may refuse to allow construction to start if an acceptable interim plan is not furnished.
3. **Control of Materials, Tests, and Inspections.** As listed below, and noted elsewhere in the specifications but not limited to the following items, the Quality Control Plan will include the dates for the Contractor to furnish certificates for product, or product test compliance, shop drawings or catalog cuts and requests for inspection or review.
 - a. **Tests and Inspections (if applicable):**
 - Sub-grade compaction
 - Aggregate placement and compaction
 - Forms Placement
 - Trench backfill and bedding
 - Reinforcing bar placement
 - Fill Material
 - Pipe placement
 - Lateral Connections
 - Welding
 - High Strength Fasteners and Bolts
 - Epoxy
 - b. **Materials and Materials Certification (if applicable):**
 - Aggregate Base
 - Hot Mix Asphalt/Asphalt Concrete
 - Concrete
 - Catch Basin and Manhole Casting
 - Reinforcing Bar
 - Pipe Material
 - Trench backfill material
 - Lumber
 - RC pipe
 - Slurry backfill
 - c. **Daily Reports**

The Contractor shall provide copies of daily reports which describe the work performed, weather conditions, personnel, and equipment on site, and quality control activities performed.

The Contractor will not be paid for work prior to Engineer reviewing and accepting daily reports for the period of time payment is requested.
4. **Acceptance of Plan.** Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Engineer reserves the right to require the Contractor to make changes in the CQC plan and operations as necessary to obtain the quality specified.
5. **Notification of Changes.** After acceptance of the QC plan, the Contractor shall notify the Engineer in writing of any proposed change. Proposed changes are subject to acceptance by the Engineer.
6. **Testing and Certification.** The Contractor shall pay for all tests and inspections as required by the Plans



and Specifications. The Contractor shall furnish certification of materials being used, upon request of the Engineer, without additional charge.

GUARANTEE

Materials and labor guarantees shall be per Part III of these specifications. All warranty shall be to the satisfaction of the City. Final payment will not be released without submission of warranties. Any materials installed in Army Buildings (with City of Monterey approval) shall issue warranty (if exists) to the United States Army prior to formal acceptance of work, and deliver to the City of Monterey, Engineering Division Office.

REGULATIONS

The Contractor and all subcontractors shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work, safety and hiring/employment practices. Nothing in the Plans and Specifications shall be construed to permit work not conforming to the regulations and codes set forth herein which include, but are not limited to the following:

1. Americans with Disabilities Act (ADA) accessibility and employment standards. In the event of conflicting federal and state standards, the standard that provides greater access will take precedence.
2. Monterey City Code, as amended,
3. California Building Code, latest edition as adopted by the City of Monterey (2013 Edition),
4. California Electrical Code, latest edition as adopted by the City of Monterey (2013 Edition),
5. California Mechanical Code, latest edition as adopted by the City of Monterey (2013 Edition),
6. California Plumbing Code, latest edition as adopted by the City of Monterey (2013 Edition),
7. California Green Building Standards Code, latest edition as adopted by the City of Monterey,
8. California Historic Building Code, latest edition as adopted by the City of Monterey,
9. California Occupational Safety and Health Administrative Code, latest edition,
10. California Government Code Section 4216, Protection of Underground Infrastructure,
11. National Fire Protection Associations NFPA 1 Fire Code, latest edition,
12. The California Labor Code,
13. Federal Water Pollution Control Act (Clean Water Act), and,
14. Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.).

PUBLIC SAFETY AND PROTECTION OF THE WORK

The Contractor shall furnish, erect and maintain such fences, barricades, guards, lights and other devices as are necessary to prevent accidents and avoid damage to the construction work or injury to the public. No separate payment shall be made for such work. If in the opinion of the Engineer, adequate barricades or warning devices are not maintained by the Contractor, the City may furnish and erect same and charge the Contractor therefor. Attention is directed to Sections 7-1.03 "Public Convenience" and 7-1.04, "Public Safety", of the Standard Specifications published by the State of California Department of Transportation.



INDEMNIFICATION AND HOLD HARMLESS

To the fullest extent permitted by law, Contractor agrees to indemnify, investigate, defend (at Contractor's sole cost and expense and with legal counsel reasonably approved by City), protect and hold harmless, the City of Monterey, its officials, officers, employees, agents, and representatives from and against any and all claims [including, without limitation, claims for bodily injury or death (including but not limited to Contractor, persons employed by Contractor, persons acting on behalf of Contractor, and third parties) or damage to property], demands, obligations, losses, damages, actions, causes of action, suits, judgments, fines, penalties, liabilities, defense costs, and expenses (including, without limitation, reasonable attorneys' fees, disbursements, and court costs, and all other professional, expert, or Contractors' fees and costs) of every kind or nature arising out of or in connection with or relating to any work or activities of Contractor (or Contractor's contractors or subcontractors, if any) conducted under this Agreement or arising out of the failure on Contractor's part to perform their obligations under this agreement. Except as provided by law, the indemnification provisions stated above shall apply regardless of the existence or degree of fault of the City, except for those claims which arise out of the active negligence, sole negligence, or willful misconduct of the City of Monterey.

Notwithstanding the provisions of the above paragraph, Contractor agrees to assume all risk and to indemnify and hold harmless the City from and against any and all claims, demands, defense costs, liability, expense, or damages of any kind or nature arising out of or in connection with damage to or loss of any property belonging to Contractor or Contractor's employees, contractors, representatives, patrons, guests, or invitees.

Contractor further agrees to indemnify City for damage to or loss of City property arising out of or in connection with Contractor's work associated with this Agreement or arising out of any act or omission of Contractor or any of Contractor's employees, agents, contractors, representatives, patrons, guests, or invitees; excepting such damage or loss arising out of the negligence of the City.

INSURANCE

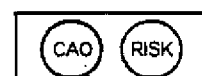
Contractor shall procure and maintain for the duration of the contract, *and for 2 years thereafter*, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.

MINIMUM SCOPE AND LIMITS OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$5,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (**ISO CG 25 03 or 25 04**) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than **\$5,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Surety Bonds** as described in Part III.
5. **Professional Liability** (if Design/Build), with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.

If the contractor maintains **broader coverage and/or** higher limits than the minimums shown above, the Entity requires and shall be entitled to **the broader coverage and/or** higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Entity.



SELF-INSURED RETENTIONS

Self-insured retentions must be declared to and approved by the Entity. At the option of the Entity, either: the contractor shall cause the insurer shall reduce or eliminate such self-insured retentions as respects the Entity, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Entity guaranteeing payment of losses and related investigations, claim administration, and defense expenses. **The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Entity.**

OTHER INSURANCE PROVISIONS

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **The Entity, its officers, officials, employees, and volunteers are to be covered as additional insureds** on the CGL policy with respect to liability arising out of with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or **both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37** forms if later revisions used).
2. For any claims related to this project, the **Contractor's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13** as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the Entity, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the Entity.

CLAIMS MADE POLICIES

If any coverage required is written on a claims-made coverage form:

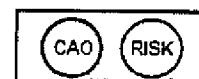
1. The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor must purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements must be submitted to the Entity for review.
5. If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the Entity.

WAIVER OF SUBROGATION

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the Entity for all work performed by the Contractor, its employees, agents and



subcontractors.

VERIFICATION OF COVERAGE

Contractor shall furnish the Entity with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the Entity before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

SUBCONTRACTORS

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that Entity is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

SPECIAL RISKS OR CIRCUMSTANCES

Entity reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

PRE-CONSTRUCTION CONFERENCE

Prior to the beginning of any work on this project, a pre-construction conference shall be held at the City's Engineering Division Office, City Hall, Monterey, CA. The date and time of this conference shall be established by the Contractor contacting that office at 831-646-3997 not less than forty-eight (48) hours in advance of the meeting date and time.

An itemized list of materials and equipment the Contractor proposes to use on the project shall be submitted to the City prior to or during the preconstruction conference.

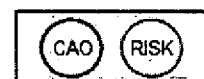
A preliminary project timeline shall be submitted to the City prior to or during the preconstruction conference.

LIQUIDATED DAMAGES

Unless stated otherwise in the Specifications, it is agreed by the parties to the contract that in case all the work called for under the contract is not completed before or upon the expiration or the time limit as set forth in these specifications, damage will be sustained by the City of Monterey and that it is and will be difficult or impossible to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is therefore agreed that the Contractor will pay to the City of Monterey the sum of **\$1,200 (One Thousand Two Hundred Dollars)** per day for each and every day's delay beyond the time prescribed to complete the work or the actual damages ascertained, whichever will be greater; and the Contractor agrees to pay such liquidated damages as herein provided; and in case the same are not paid, agrees that the City of Monterey may deduct the amount thereof from any money due or that may become due the Contractor under the contract.

It is further agreed that, in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the City shall have the right to extend the time for completion of the contract or not, as may seem best to serve the interest of the City; and if it decides to extend the time limit for the completion of the contract, it shall further have the right to charge to the Contractor, his heirs, assigns or sureties, and to deduct from the final payment of the work, all or any part, as it may deem proper, of the actual cost of engineering, inspection, superintendence and other overhead expenses during the period of such extension, except that the cost of final measurements and preparation of final estimate shall not be included in such charges.

The contractor shall not be assessed with liquidated damages nor the cost of engineering and inspection during any delay in the completion of the work caused by Acts of God or of the public enemy, fire, floods, epidemics,



quarantine restrictions, strikes, freight embargoes and unusually severe weather or delays of subcontractors due to such causes; provided that the Contractor shall within ten (10) days from the beginning of any such delay notify the Engineer in writing of the causes of delay, who shall ascertain the facts and the extent of delay, and his findings of the facts thereon shall be final and conclusive. "Unusually severe weather" means that which is considered outside the normal average for the Monterey area as determined by historical weather records. The Contractor will not receive a time extension for normal or below normal precipitation.

CONSTRUCTION PROCEDURE

An outline of the proposed construction procedure shall be submitted by the Contractor to the Engineer for review and shall obtain his approval before beginning work. The Engineer will be especially interested in:

1. Minimizing any interruption to use of driveways (no more than 4 hour interruption). Any interruption more than 4 hours shall be prearranged with the Engineer. Residence occupant shall be notified with a written notice a minimum of three (3) business days in advance.
2. Adjacent property owners shall be notified with a written notice a minimum of three (3) business days in advance of any construction impacts.
3. Minimizing any interruption to building operations and parking lots. Contractor shall notify the Engineer a minimum of one week in advance of any interruptions to building operations and parking lots.
4. Minimizing any hazard to the general public.
5. Proper handling of hazardous materials.
6. All work will occur between 7 am and 7 pm unless otherwise approved in writing.
7. Contractor shall notify the Engineer a minimum of twenty-four (24) hours in advance of concrete placement for checking and acceptance of forms by the Engineer prior to concrete placement. Mitigation of concrete placement done without acceptance of forms by the Engineer prior to concrete placement shall be the sole responsibility of the Contractor. The costs of such mitigation shall be borne by the Contractor.

Traffic control requirements cited elsewhere in these Specifications must be considered in the construction procedure submitted to the Engineer.

TRAFFIC CONTROL

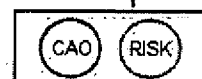
Pursuant to the authority contained in Vehicle Code Section 591, the City has determined that within those areas that are within the limits of the project and are open to traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. In accordance with the statement in Vehicle Code Section 591, this section shall not relieve the Contractor or any person from the duty of exercising due care. The Contractor shall take all necessary precautions for safe operation of the Contractor's equipment and the protection of the public from injury and damage from the Contractor's equipment.

Traffic control shall conform to the provisions of Section 12, "Temporary Traffic Control" of the Standard Specifications and the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD) as adopted by Caltrans.

A Traffic Control Plan (TCP) shall be submitted to the Engineer for approval prior to construction and must be applicable to existing site conditions. Contractor shall notify all emergency services, affected residences, affected businesses, and the Engineering Division Office (831) 646-3921 a minimum of three (3) business days in advance as to proposed closures and alternate routes available.

The following shall be incorporated into the Traffic Control Plan:

1. Two (2) travel lanes shall be open during non-working hours.



2. At least one (1) travel lane shall remain open during working hours. Flag persons or other appropriate traffic control devices as approved by the Engineer shall be used during periods of one-way travel.
3. Access to driveways shall be left open unless work is actually being performed in areas fronting the driveway. All driveways shall be accessible during non-working hours. See Construction Procedure elsewhere in these specifications.
4. No trench shall be left open during non-working hours.
5. Parking restrictions will be acceptable when and where needed. (All require prior approval of the Engineer).

The following requirements apply to Traffic Control Plans:

1. All Traffic Control Plans shall follow the CA MUTCD Chapter 6. Examples may be found at: <http://www.dot.ca.gov/hq/traffops/engineering/mutcd/pdf/camutcd2014/Part6.pdf>
2. The contractor shall submit a TCP using legible lettering. Show location and dimensions of the work zone, lanes, tapers, parking and any staging areas.
3. Label streets and proposed traffic control area. Show all nearby streets with street names to assure proper orientation.
4. Show all affected sidewalks, crosswalks, bike lanes, driveways and intersections in the construction work zone including areas affected by taper transition.
5. If a sidewalk or path is obstructed, contractor must then submit an ADA compliant pedestrian detour plan in accordance with the CA MUTCD chapter 6D and the Public Rights-of-Way Accessibility Guidelines (PROWAG). Please refer to: <http://dot.ca.gov/hq/traffops/engineering/control-devices/pdf/PedBrochure.pdf>
6. Label all taper lengths and widths, delineator spacing and sign spacing. Indicate location of construction signs, barricades and delineators.
7. Show all parking restriction zones and signs, as appropriate. Telephone the Parking Division Office (831.646.3953) if restricting parking in time-limit or metered zones. Temporary "NO PARKING" signs shall be posted seventy-two (72) hours prior to commencing work.
8. Indicate on the TCP the duration of the construction work, including dates and times.
9. Indicate on the TCP the Contractor's name, address and telephone number. Include the Contractor's during and after hours Representative's contact information (name, telephone number).
10. It is the Contractor's responsibility to assure that all Traffic Control Plans (TCP) and traffic control devices are in compliance with the 2014 CA MUTCD as adopted by Caltrans.

Traffic Control Plans shall contain the following notes:

1. Minimum width of temporary traffic lanes is ten (10) feet clear (from delineator or cone base, not center).
2. The City Traffic Engineer or his representative has the authority to make any field changes to assure public safety.
3. All traffic control devices shall be removed from view when not in use. Signs shall not be facing traffic when not in use.
4. Spacing of channelizing devices shall not exceed twenty-five (25) feet.



5. Any road closure also requires notification be provided to the City of Monterey Fire Department and Police Department. Notifications may be made at the non-emergency telephone number, 831.646.3914.
6. All temporary traffic delineation (delineators and cones) used shall be a minimum of thirty-six (36) inches tall. Retroreflective bands are required for night time traffic.
7. Any work that disturbs normal traffic signal operations shall be coordinated with the Signal Traffic Technician.
8. The Contractor is responsible for restoring the road back to satisfactory condition including, but not limited to, paving, striping, markings, signs and traffic signal loop detectors within five (5) calendar days of completion of work at affected intersections or road segments.
9. Any work that created an undue safety risk or creates severe congestion may be shut down by the City Traffic Engineer, his representative, Field Inspector or Police Department personnel.

The Contractor is to notify residences and/or businesses a minimum of three (3) business days in advance of closing access to any driveways or providing any detours or changes in on-street parking. Notifications shall be in writing.

Contractor shall provide all labor and facilities required for safe and expeditious handling of traffic during the course of construction. Contractor shall provide all flaggers, signs, delineators, and barricades required for traffic control and shall modify or remove same at appropriate times. The Engineer shall be the sole judge as to the adequacy of the Contractor's traffic control measures. If such measures are found to be inadequate by the Engineer, the City may furnish and install same and charge the Contractor therefor.

The Contractor shall, at his own expense, construct and maintain in good condition, such detours, detour bridges and temporary crossings for use by the public as deemed necessary or expedient by the Engineer for the proper execution of the work.

The Contractor shall designate a representative who can be reached immediately (24 hours per day) in the event of traffic control device failures.

CONSTRUCTION PROJECT SIGNS

For Neighborhood Improvement Projects (NIP), the Contractor shall post temporary Neighborhood Improvement Project signs, one at each end of the blocks or at entrances to project sites, in a manner approved by the Engineer. Sign panels shall be provided by the City and mounted on stakes. Sign panels and posts, if provided by the City, shall be returned to the City in good condition.

REMOVAL OF OBSTRUCTIONS

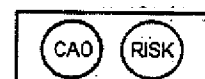
The Contractor shall remove and dispose of all structures, debris or other obstructions of any character to the construction called for in the plans, specifications, and as required by the Engineer.

If archeological items or hazardous wastes are discovered during construction operations, the Contractor shall cease operations in those areas and the Contractor shall immediately notify the Engineer.

The Contractor shall remove and dispose of all trees designated for removal as shown on the plans, designated by the specifications and as required by the Engineer for the proper completion of the work. See Tree Protection Requirements elsewhere in these specifications.

UNDERGROUND UTILITIES

Contractor shall locate all underground obstructions and utilities, (electric, gas, water lines, etc.). Prior to any trenching operation, Contractor shall pothole underground obstructions and utilities that appear to be in conflict with the new construction. The Plans show the approximate location of underground facilities in the project area as they



have been provided to the City. Repair of damage to any utility line shown on the Plans with reasonable accuracy shall be made at the Contractor's expense. However, the City shall fairly compensate the Contractor for costs of locating and repairing damage not due to failure of the Contractor to exercise reasonable care, and removing or relocating such facilities not indicated or in a location different from that indicated on the Plans and Specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay in completion of the project when such delay was caused by the failure of the City or utility company to provide for removal or relocation of such utility facilities. Contractor shall notify all utility companies of trenching operations forty-eight (48) hours in advance to enable the utility companies to take any action they deem appropriate.

UTILITY COMPANY COORDINATION

Contractor shall coordinate construction activities with the utility companies as required and shall adjust the construction schedule to accommodate utility relocation as necessary.

CONTRACT PLANS AND SPECIFICATIONS

The Contractor will be supplied with five sets of plans and specifications at no expense. One of these sets of plans is to be used for the purpose of recording record (as-built) conditions. Additional sets will be furnished on request at the cost of reproduction. The work shall conform to the contract plans and specifications, all of which form a part of the contract documents and are available in the office of the City Engineer, City Hall, Monterey, California.

DUST CONTROL

The Contractor shall minimize dust generation from the jobsite and shall spray the site with water or dust palliative as required, in accordance with Section 14-9, "Air Quality", of the Standard Specifications.

CONNECTION TO EXISTING UTILITIES

The City shall permit the Contractor to use available existing utilities at the City's expense, excluding telephone; however, if the Contractor chooses to make use of said utilities, Contractor shall assume full responsibility for any changes made by Contractor related thereto, and for any consequences caused thereby. Upon completion of the work, Contractor shall remove any modifications to existing utilities made by Contractor, and shall restore existing utilities to conditions existing at time of award.

SANITARY FACILITIES

Contractor may provide his/her own portable sanitary facilities on-site, for the duration of the work. Coordinate location(s) with the Engineer. Existing City-owned sanitary facilities may be used.

INSPECTION OF WORK

It is the responsibility of the contractor to call for all required inspections within the required time lines. The City of Monterey reserves the right to perform random inspections at any time.

The Engineer shall at all times have access to the work during construction, and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship and character of materials used and employed in the work.

Whenever the work provided and contemplated by the contract shall have been satisfactorily completed and the final cleanup performed, the Engineer will make the final inspection.

RECORD DRAWINGS

A set of marked-up prints, clear, legible, and made with standard drafting tools and indicating all changes, added work, and deviations from the design and reflecting the record (As-Built) condition of the work must be received before the work is considered complete. Existing utilities exposed during construction are to be located, including



invert or top elevation, and shown on the Record (As-Built) drawings.

The Record (As-Built) Drawings shall be completed for the Engineer's acceptance before final payment and Notice of Completion on this contract will be made.

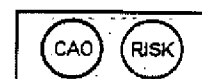
ENVIRONMENTAL/POLLUTION PREVENTION REQUIREMENTS

Contractor shall comply with all air pollution and environmental control rules, regulations, ordinances and statutes that apply to the project and any work performed pursuant to the contract. Additionally, City Code Chapter 31.5 Storm Water Management Section 31.5-12. Prohibition of Illegal Discharges, states,

"No person or entity shall discharge or cause to be discharged into the municipal Storm Drain System or waters of the state any materials, including but not limited to Pollutants or waters containing any Pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water..."

Regardless of project size, the Contractor shall submit a site-specific Erosion and Sediment Control Plan or Storm Water Pollution Prevention Plan for City review and approval prior to start of work. The Contractor shall effectively implement and properly maintain storm water best management practices (BMPs) during construction to prevent discharges of pollutants, and including trash, to local drainages and waterways. Contractor shall comply with all water quality regulations in Monterey Municipal Code Chapter 31.5 Storm Water Management, and City Phase II Storm Water Permit requirements as prescribed by the State Water Resources Control Board (SWRCB) and Central Coast Regional Water Quality Control Board (RWQCB) regulations for the prevention of construction site discharges of pollutants, illicit discharges, and enforcement of prohibited and illicit discharges. The contractor shall employ at all times storm water runoff controls and BMPs at the site, including but not limited to erosion prevention, sediment controls, site stabilization, good housekeeping practices, proper materials storage, handling, and waste management, and similar pollution prevention measures to prevent dumping or illegal discharges during construction into the street and/or storm drain system. Storm water management and control practices shall result in the following outcomes on all construction sites, regardless of size:

- Protection of storm drain inlets and adjacent waterways must be implemented at all times to prevent illicit discharges of sediment, construction debris and fluids, and waste of any kind;
- No release of hazardous substances, such as oils, paints, thinners, fuels, and other chemicals; if such a spill occurs that may threaten local water quality, contractor must call 911 immediately and notify City Public Works staff;
- Minimization of site disturbance shall be kept to that portion necessary for construction only, and perimeter controls shall be implemented at all times during all weather conditions;
- Soil stabilization of graded areas shall be in place at all times where construction activities have temporarily and/or permanently ceased;
- No deposit of mud, soil, sediment, concrete washout, trash, dewatering, or other similar construction-related material or waste shall occur on or into public rights of way, private streets, or into the City's storm water system and related natural resources, either by direct deposit, dropping, discharge, erosion, or tracking by construction vehicles. Any such discharge shall be cleaned-up promptly if an immediate threat to water quality exists, or if not immediate, at the end of the current work shift or workday in which the deposit occurred, whichever comes first;
- No runoff from graded areas or stockpile areas shall contain sediments and/or pollutants. Stockpiles shall be adequately and securely covered to avoid contact with rainfall and wind to prevent soil and stockpile movement by water and/or wind;
- Runoff containing sediments shall be captured in secondary containment structures and either treated to remove sediments prior to discharge or infiltrated in the soil on-site;



- No exposure of graded areas and stockpile areas to storm water run-on shall occur. Run-on shall be controlled by diversion structures such as dikes, secondary containment, or stockpile covers; and,
- All hard-surfaced areas are to be swept regularly and free of dirt and construction debris such that the surface of the pavement is clearly visible at all locations, and construction entrance/exist(s) shall be adequately stabilized to prevent tracking of soil/sediment from reaching streets/paved surfaces and drainage pathways.

Best management practices (BMPs) are required to be illustrated in construction Plans and employed on all construction sites as applicable to the construction activity and shall provide for, and not be limited to: inlet protections, perimeter protections, erosion prevention and soil control measures, soil stabilization measures, spill prevention and discharge control measures; solid waste containment; concrete waste management; proper vehicle and equipment cleaning, fueling, and maintenance; and proper materials management and storage. Detailed procedures to accomplish these protections can be found through the California Storm Water Quality Association's *Construction BMP Handbook Portal*, U.S. EPA *Construction BMP Database and Factsheets*, *Caltrans Storm Water Quality Manuals and Handbooks*, and the *Erosion and Sediment Control Field Manual* by San Francisco Bay Regional Water Quality Control Board. Referenced documents are available for viewing at the City of Monterey Public Works Office at City Hall.

Activities to be performed by Contractor include, but are not limited to:

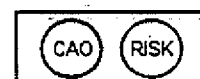
- Development and submittal of an Erosion and Sediment Control Plan or Storm Water Pollution Prevention Plan for City review and approval prior to construction start.
- At all times, Contractor shall implement and maintain the temporary and permanent vegetation (if any), erosion and sediment control measures, and other protective BMP measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness of BMPs, restoration needs for destroyed vegetative cover, and by repair of erosion, sediment, and other protective measures.
- Contractor shall inspect the following areas at least once every seven (7) calendar days, unless otherwise necessary based on current weather conditions or as directed by City inspector, and always within 24 hours prior to and after any predicted storm:
 - Inlet protections and perimeter controls;
 - Vehicle entry and exist locations;
 - Vehicle parking and storage areas;
 - Disturbed areas of the construction site,
 - Areas that have not been finally stabilized,
 - Areas used for storage of materials that are exposed to wind or precipitation,
 - Equipment and staging areas that are exposed to wind or precipitation; and,
 - All waste storage and handling devices and areas.

Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

- Areas noted above shall be inspected for proper BMP implementation and necessary BMP maintenance, as well as evidence of, or the potential for:
 - Erosion, or
 - Sediments entering waterways or the drainage system, or
 - Pollutants entering waterways or the drainage system.

Erosion and sediment control measures shall be observed and maintained to ensure that they are operating correctly. Discharge locations or points shall be inspected regularly to ascertain whether erosion control measures are effective in preventing sedimentation and subsequent degradation of receiving water quality in violation of receiving water quality standards. Vehicle entry and exist locations shall be inspected for evidence of offsite sediment and pollutant tracking and need for cleanup and improved BMP protection measures

- Deficiencies observed during inspections shall be noted and rectified before the end of the workday.



Additionally, the Contractor shall comply with the State Water Resources Control Board's Construction General Permit (CGP), as applicable to the project. Projects subject to the CGP include those that disturb one or more acres of soil, are less than one acre and are part of a common plan of development or sale, or applicable Linear Underground/Overhead Projects, and are required to obtain coverage under the State's CGP for Discharges of Storm Water associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, and subsequent amendments thereto. Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling, or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Application for CGP coverage is made by the Contractor through a Notice of Intent (NOI) to the SWRCB and involves much interaction with the applicable RWQCB as CGP regulator. The Contractor shall develop and supply the City with NOI and associated Storm Water Pollution Prevention Plan (SWPPP) for review and records purposes.

CGP coverage requires the development and implementation of a SWPPP. The SWPPP contents are mandated by the SWRCB and are subject to change, and typically contain site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must illustrate the placement of BMPs for the construction project and list pollution prevention BMPs the discharger will use to protect storm water runoff. Additionally, applicable SWPPPs must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented. All SWPPPs must be developed by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP), and supplied to the City for review and comment. Additional CGP information can be found at the State Water Resources Control Board CGP website:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Construction site storm water management and control measures shall be implemented year-round regardless of "season". All construction site BMPs shall be implemented at the appropriate level for the construction activity at hand and in a proactive manner during all seasons while construction is ongoing.

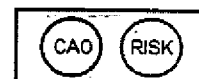
In addition to inspections performed by the City, the City's Environmental Compliance Division representative may perform periodic site monitoring visits to ensure the contractor complies with the requirements specified herein. The City shall provide copies of the completed site monitoring reports to the Contractor. In the event work is found non-compliant, a follow up site monitoring visit will be conducted to ensure non-compliant items have been corrected to the satisfaction of the City. If non-compliant items are not properly addressed prior to the follow up site monitoring visit, the costs associated with additional follow up site monitoring visits shall be deducted from the Contractor's final payment.

TREE PROTECTION REQUIREMENTS

The following guidelines are established pursuant to Section 37-2.5 of the Monterey City Code, which states:

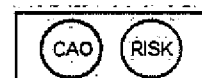
All public or private construction projects requiring acquisition of a building permit shall comply with the tree protection guidelines established by the City in order to safeguard and protect any trees affected by said construction.

1. These Tree Protection Guidelines apply to all "Protected Trees" in the City of Monterey, defined as:
 - a. trees located on a vacant private parcel that are more than two inches (2") in diameter when measured at a point four feet six inches (4' - 6") above the tree's natural grade; and,
 - b. trees located on a private, developed parcel that are more than six inches (6") in diameter when measured at a point four feet six inches (4' - 6") above the tree's natural grade.
2. These standards do not apply to unprotected trees or trees previously approved for removal.
3. All cut, fill, and/or building foundations shall be located a minimum of 4.0 times the diameter of the tree away from the outside edge of the trunk of all trees scheduled for preservation. However, the minimum distance permitted shall be 6' - 0", away from the outside edge of the trunk for all trees of a trunk diameter



less than 2' - 0". The diameter of a tree shall be measured at four feet six inches (4' - 6") above the surrounding grade [Diameter at Standard Height (DSH)].

4. All Protected Trees shall be marked with a spot of paint, or flagging and temporarily fenced during construction. The marking serves to notify City inspectors and workers that the tree is to be fenced at all times during construction. Fencing and marking shall be installed prior to the issuance of building or grading permits and shall be located at the edge of the root zone. The root zone is determined to be that area located out a distance 15 times the trunk diameter in all directions. At no time shall the fencing be located closer than 3' - 0" from the outside edge of the trunk or further than 3' - 0" away from the approved building wall line, foundation, retaining wall, or grade cut, whichever provides the greater distance from the tree trunk. Tree Protection Fencing (TPF) shall consist of 6' tall chain link on all commercial projects and four (4) feet tall plastic snow fencing on residential projects and shall be rigidly supported and maintained during all phases of construction. Fenced areas shall not be used for material stockpile, storage, vehicle parking, or dumping of materials, chemicals, or garbage. Fenced areas shall be maintained in a natural condition and not compacted. Removal of fencing shall only be approved by the City Forester.
5. Prior to the start of construction, all Monterey Pine trees scheduled for preservation shall have the lower 8' - 0", sprayed with Astro or Dragnet and then wrapped with plastic to reduce the potential for infestation by Red Turpentine Beetles. The plastic wrap and spray are used to control beetle attacks and shall remain on the tree throughout the construction period.
6. Utility and drain lines shall be located outside the TPA (Tree Protection Area) root zone of all trees scheduled for preservation. In cases where alternative routes are not available, utility conduit, pipe, wire and drain lines shall be tunneled under major roots. Major roots are determined to be those that exceed two (2) inches in diameter. In no case shall utility lines be permitted within 4.0 times the diameter of the trunk of any trees involved with construction unless the City Forester has approved with specific conditions in advance of work starting.
7. Projects that involve properties with several trees and proposed developments may require the owner or contractor to hire a private Certified Arborist to inspect and monitor the construction work to guarantee that the tree protection guidelines are enforced and that the trees to remain are not damaged, or negatively impacted during any phases of work.
8. All approved construction work within the root zone of trees scheduled for preservation shall observe the following minimum tree protection practices:
 - a. Hand trenching at point or line of grade cuts closest to the trunk to expose major roots 2" in diameter or larger. In cases where rock or unusually dense soil prevents hand trenching, mechanical equipment may be approved by the City Forester, provided that work is closely supervised to prevent tearing or other damage to major roots.
 - b. Exposed major roots shall be cut with a saw to form a smooth surface and avoid tears or jagged edges.
 - c. Absorbent tarp or heavy cloth fabric shall be placed over new grade cuts where roots are exposed and secured by stakes. 2" to 4" of compost or woodchip mulch shall be spread over the tarp to prevent soil moisture loss. The tarp should be thoroughly wetted at least twice per week to insure constant moisture levels until backfilling occurs. In very dry climate conditions, additional watering may be required to maintain a constant moisture level. This program of watering shall be maintained through all phases of construction including delays and other periods of inactivity.
 - d. Decks located within the root zone of trees scheduled for preservation shall be of post and beam construction to eliminate any need for root pruning or removal.
 - e. On-grade patios or paving that cover more than one-third of the feeder zone of pine trees or oak trees shall be constructed of permeable materials that allow aeration and water penetration. Patios and paving shall be combined with any other non-permeable surface or structure for purposes of calculating the one-third coverage standard. A maximum 80% compaction for permeable surfaces shall be allowed. The paving design shall specify this restriction.



- f. Planting beneath trees scheduled for preservation shall take into consideration watering requirements of the tree to prevent damage from over or under watering. Planting beneath native oak trees are of special concern and should be avoided. At a minimum, all new irrigation should be directed away from the trunks of oak trees. Installing lawn or other planting that requires frequent watering insures a slow death for oak trees due to their sensitivity to over watering and susceptibility to oak root fungus. Over-watering may also damage native pines.
9. Failure to comply with these Tree Protection Standards is punishable by civil penalty, including citation and fines.
10. All Tree Protection devices must be in place prior to issuance of a Building Permit. Please contact Robert Reid, City Forester, at 831.646.3860 for inspection to confirm Tree Protection or with any general tree preservation questions.
11. Chapter 37, Preservation of Trees and Shrubs, is available at www.monterey.org or <http://www.codepublishing.com/ca/monterey>
12. These Tree Protection guidelines shall also apply to the following trees:
 - a. Trees located on a vacant public parcel that are more than two inches (2") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade; and,
 - b. Trees located on a public developed parcel that are more than six inches (6") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade; and,
 - c. Trees located within the public right-of-way that are more than two inches (2") in diameter when measured at a point four feet six inches (4'-6") above the tree's natural grade.



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**TECHNICAL SPECIFICATIONS****SECTION 1 - TRAFFIC SIGNAL AND ELECTRICAL SYSTEMS**

This section describes the electrical work to be completed per the project plans. Work includes, but is not limited to, implementing an adaptive traffic signal control system, installing new wireless detection equipment, video detection equipment, City-furnished controller cabinet, and controller cabinet foundation, and removing an existing controller cabinet and cabinet foundation. The locations of cabinets, poles, conduit, pull boxes, detectors, cameras, and electrical service equipment shown on the plans are approximate and exact locations shall be determined in the field. All systems shall be complete and in operating condition at the time of acceptance of the contract.

FOUNDATIONS

Foundations, as shown on the plans, shall conform to the provisions in Section 86-2.03, "Foundations", of the Caltrans Standard Specifications and these Special Provisions. The contractor shall furnish and install anchor bolts for new controller cabinets. Actual base plate dimensions shall be checked by the Contractor prior to pouring concrete foundations.

REMOVING, REINSTALLING OR SALVAGING ELECTRICAL EQUIPMENT

Removing, reinstalling or salvaging electrical equipment shall conform to the provisions in Section 86-7, "Removing, Reinstalling or Salvaging Electrical Equipment," of the 2010 Caltrans Standard Specifications and these Special Provisions. Deliver equipment to 27 Ryan Ranch Rd., Monterey, CA 93940. Whenever a part of a square or slab of existing concrete sidewalk, curb, gutter, or driveway is broken or damaged, the entire square section, or slab, shall be removed and reconstructed as specified. All landscaping that is damaged by the Contractor's operations shall be replaced in kind.

Removed items shall become the property of the Contractor, unless otherwise specified by the plans or the Engineer, and shall be disposed of as provided in Section 7-1.13 of the 2010 Caltrans Standard Specifications.

CONDUCTORS, SIGNAL CABLES, AND WIRING

Conductors, signal cables, and wiring shall conform to the provisions in Section 86-2.08, "Conductors," and Section 86-2.09, "Wiring," of the 2010 Caltrans Standard Specifications, these Special Provisions, and as shown on the plans.

BONDING AND GROUNDING

Bonding and grounding shall conform to Section 86-2.10, "Bonding and Grounding," of the 2010 Caltrans Standard Specifications and these Special Provisions. Grounding to existing water systems will not be permitted.

CITY-FURNISHED TRAFFIC SIGNAL CONTROLLER CABINETS

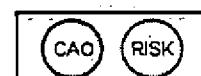
The Contractor shall install City-furnished Type 'P' NEMA TS-2, Type 2 and Type 'M' (stretch) NEMA TS-2, Type 2 controller cabinets as shown on the plans. The City-furnished cabinets shall be installed on existing foundations with the doors oriented as shown on the plans. The cabinets will be stored at 27 Ryan Ranch, Monterey, CA 93940.

REMOVE EXISTING CONTROLLER CABINETS

The Contractor shall disconnect existing cabinet equipment and remove and salvage the existing cabinet. Where necessary, the Contractor shall modify the existing conduit risers to enter the bottom of the new cabinet. The risers shall be installed with a waterproof seal.

CONDUIT

Conduit shall conform to the provisions in Section 86-2.05, "Conduit", of the 2010 Caltrans Standard Specifications and these Special Provisions.



All conduits shall be poly vinyl chloride (PVC), Schedule 80 with rigid steel sweeps. IMC conduit is not allowed. With the exception of bends to and from pull boxes and foundations, the conduit shall run straight and true so that cable pulling forces are minimized. There shall be no more than 180 degrees in bends. An intermediate pull box can be installed to relieve the need for additional bends, at the Contractor's cost.

Insulated bonding bushings will be required on metal conduit. All nonmetallic conduits shall have a No. 8 stranded (with green insulation) copper bonded/grounding wire. These bonding/grounding wires shall be connected in the pull box with cable connectors.

Conduits into pull boxes and pole foundations shall be rigid metal and have 90-degree sweeps. Plastic pulling bells shall be installed on all conduit ends before cables or conductors are pulled through the conduits.

After cables and conductors have been installed, the ends of conduits terminating in pull boxes and/or controller cabinets will be sealed with an approved type of sealing compound.

All excavated areas in the street or sidewalk shall be completely backfilled or covered at the end of each working day and approved by the Engineer.

PULL BOXES

Pull boxes shall conform to the provisions in Section 86-2.06, "Pull Boxes" of the 2010 Caltrans Specifications and these Special Provisions.

When a pull box is subjected to vehicular traffic load, the cover shall be steel embossed with a non-skid pattern.

Pull boxes shall be placed at same elevation as adjacent standard base, service cabinet base or signal controller cabinet base if not an existing or future sidewalk area and elevation is not shown on plans. Pull boxes shall be five feet (5') from base or as shown on the plans. Pull boxes in existing or future sidewalk areas shall be placed at sidewalk elevation. The pull box elevation for pull boxes installed in median areas shall match the slope of the two adjacent curbs. The pull box elevation for pull boxes installed in planting areas adjacent to sidewalk or sidewalk area shall be at sidewalk grade. Pull boxes shall not be located within the limits of wheelchair ramps.

When pull boxes are placed in dirt and planting areas, a concrete collar shall be constructed around the pull box. The concrete collar shall be a minimum 12 inch concrete collar by 4 inch thick and at least 4 inches along the sides of the pull box to the bottom edge. The top of the pull box shall match slope of the adjacent top of curb. The surface elevation of the collar shall match the surface elevation of the pull box and slope away from the pull box at a rate of 1:50 (2%) slope.

The Contractor shall clean all existing pull boxes entered for installation of conduit or cable or all dirt and debris. All pull box lids damaged by Contractor operations shall be replaced at his/her expense. The wiring in these pull boxes shall be neatly bundled, recoiled, and reinstalled in the box. Where existing pull boxes are removed and replaced with new larger boxes, the existing conduits shall be cut back. When the conduits are cut, the existing conductors must either be removed or well protected. The ends of the cut conduits must have bushings placed on them.

Grout in bottom of pull boxes will not be required. Pull boxes shall be set on 6 inches of crushed rock for drainage. The conduits in the pull boxes shall be placed 2 inches above the crushed rock.

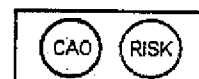
All new pull boxes shall be No. 5 unless otherwise noted on the plans.

All conduit sweeps into No. 6 pull boxes on fiber optic interconnect runs shall be 45 degrees.

Any surface damaged, asphalt or concrete, as a result of pull box installation shall be repaired at Contractor's expense or paid under various items of work.

FABRIC INNERDUCT

Flexible fabric innerduct shall be installed per the Plans, and shall have a minimum of three cells, each with mule



tape, and shall be installed according to the manufacturer's recommendations. Rigid or semi-rigid innerduct is not allowed.

SCOOT ADAPTIVE TRAFFIC SIGNAL SYSTEM

GENERAL

The work described herein consists of furnishing, installing, configuring, integrating and testing the SCOOT adaptive traffic control system as shown on the plans and described in these special provisions.

For items identified as part of Siemens' SCOOT Adaptive System in the plans and these special provisions, Contractor shall contact the following Western Systems representative:

Stewart J. Wilkerson, Territory Manager
swilkerson@westernsystems-inc.com
 1122 Industry Street, Bldg. B
 Everett, WA 98203
 209-304-3517 (mobile), 425-438-1585 (fax)

ADAPTIVE SYSTEM COMPONENTS

As part of the adaptive system, Contractor shall work with Adaptive System Vendor to configure, integrate and test the controller firmware to operate SCOOT on the existing controller. Both the Contractor and the Adaptive System Vendor shall be responsible for configuration of the controller and controller firmware for a full complete and operational system.

In addition, the adaptive system shall include:

- UTC software license for PC SCOOT and SCOOT vMC3 (up to 10 intersections)
- Initial configuration of SCOOT
- ASTRID/INGRID licenses
- Detector survey and documentation
- Graphics
- Equipment installation and onsite setup
- Programming SCOOT parameters
- SCOOT system graphics and documentation
- SCOOT validation and onsite field fine-tuning
- 1-year telephone and email support, and remote access support (via VPN), with one week onsite
- 1 week UTC System Managers and Operators training
- Turn-key, operational SCOOT system

ADAPTIVE SYSTEM TESTING

The Adaptive System Vendor shall conduct tests required herein that demonstrate that the equipment and the system furnished and installed under this contract function in full compliance with the requirements of the contract documents. Submit test procedures for all tests to the City for approval. Conduct all tests in the presence of the City using approved test procedures. Submit test results to the City using approved test data forms. The City will review the test results for conformance with the requirements of these contract documents. If the equipment or systems fail any part of the test, the Adaptive System Vendor shall make all necessary corrections and repeat that test.

Prior to conducting any testing, the Adaptive System Vendor shall submit to the City the testing plans documenting the test procedures. The testing plans shall also document the operation and functional requirements to be verified by the tests.

Any Adaptive System Vendor-furnished equipment that fails during testing shall be replaced immediately at no additional cost to City.



INTEGRATION TEST

Adaptive System Vendor shall integrate, configure and test the SCOOT system. The test procedures shall confirm that the SCOOT server is operational and able to communicate with the traffic controllers and detectors in the field. The test procedure shall also include confirmation that the detectors are mapped accurately for the SCOOT system and that the data from each individual intersection as well as the data along the corridor as a whole is being exchanged with the TACTICS and SCOOT servers. This test may require fine-tuning and calibration of some field elements.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

OFFLINE TEST

Once the system is fully configured and calibrated, the Adaptive System Vendor shall test the system's full operational capabilities offline. The testing procedure shall confirm that the system is capable of completing several operational tasks including, but not limited to, the following:

- Time of day operations
- Automatically enabling and disabling SCOOT operation based on user-configurable traffic volume thresholds by intersection and by blocks of intersections
- Ability to continue operations when there is failed communications to one or more intersections up to a user-configured maximum number

This test shall be conducted offline using live real-time data from the intersections. The test shall be conducted for each intersection individually, then for the entire adaptive corridor.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

OPERATIONAL TEST

Adaptive System Vendor shall begin the operational test of the SCOOT system. This test shall constitute a go live test of adaptive control on the corridor for thirty (30) consecutive and uninterrupted calendar days. During the operational test period, Adaptive System Vendor shall allow the system to run and periodically monitor system operations and make adjustments as necessary. Any fatal errors that cause the SCOOT system to stop operating during this period shall be corrected and the test restarted for another thirty (30) consecutive uninterrupted calendar days.

The Adaptive System Vendor shall complete and submit for review and approval by the City, all of the test data forms containing all of the data to be collected as well as quantitative results for each test.

SYSTEM ACCEPTANCE

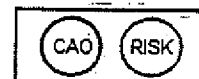
Upon satisfactory completion of the tests above, the City will continue the System Acceptance process with the Adaptive System Vendor. This task shall demonstrate that system implementation is complete, all field installation and integration is complete, installation and configuration of system server is complete, and that the system is ready for City to take over responsibility.

WARRANTY AND MAINTENANCE

The system shall include a minimum 1-year warranty on hardware and software. The warranty period shall begin only after the system and all work under the contract has been accepted by the City. Adaptive System Vendor shall replace defective hardware components at no cost to the City (including parts, shipping, labor, and expenses for repairing or replacing equipment). In addition, Adaptive System Vendor shall provide technical support (telephone, email, remote system support, on-site support) during the warranty period.

TRAINING

Adaptive System Vendor shall provide system operator training to facilitate support and administration of the adaptive system by City staff. Training shall give operators working knowledge of Adaptive System Vendor-



furnished hardware, including operational features and maintenance. Training shall give operators working knowledge of operational commands and database modification procedures required to support the system. Training location shall be approved by the City. Training shall be a minimum of 40 hours (5 working days), and include a combination of hands-on training in addition to classroom training. Adaptive System Vendor shall provide City with copies of all training materials, as well as installation manuals, trouble-shooting manuals, etc.

SENSYS NETWORKS WIRELESS VEHICLE DETECTION SYSTEM

The Contractor shall furnish and install Sensys Networks Wireless Vehicle Detection and/or Travel Time System, or City approved equal, at various locations as shown on the Construction Documents. These components include, but are not limited to, Wireless Vehicle Sensor Nodes, Ethernet Access Points, and Repeaters.

Contractor shall furnish and install Sensys VDS240 Wireless Vehicle Detection System as described below.

VSN240-F WIRELESS SENSOR

Dimensions:

- Length 7.4 cm | 2.9 inches
- Width: 7.4 cm | 2.9 inches
- Height: 4.9 cm | 1.9 inches

RF Specification

- IEEE 802.15.4 Standard Compliant
- Operates in any one of 16 5Mhz channels in the 2.4-2.48 GHz ISM band

Programmable Event Reporting Parameters:

- Transmit Interval in seconds: 0.125, 0.25, 1, 2, 3, 5, 6
- Reporting Latency in seconds: 0.125, 0.25, 0.5, 1, 2, 3, 5, 6, 10, 30
- Latency as low as 50msec in Low-Latency mode
- Presence and Pulse Modes
- RF watchdog timer
- Synchronize event reporting to AP clock or to detection events

Powering:

- Battery powered
- Expected lifetime of 10 years

Environmental:

- NEMA 6P / IP 68
- Temperature: -40F to 185F (-40C to +85C)

AP240-E ACCESS POINT

Host Processor:

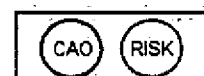
- 66 MHz 5272 Coldfire processor
- 4 MB of Flash memory
- 16 MB of DRAM

SNP-based wireless interface to the VSN240 sensors:

- Conforms to Sensys SNP
- IEEE 802.15.4 Standard Compliant
- Distance from AP240-E to sensors: 100ft to 200ft, depending on AP240-E antenna height and terrain.
- Operates in any one of 16 5MHz channels in the 2.4-2.48 GHz ISM band

Ethernet Interface:

- 10/100 BASE-T
- IP address via DHCP or static
- IP67 RJ45 bulkhead connector



- Proprietary Power Over Ethernet (12V to 24V)
- Standard Power Over Ethernet (36V to 60V)

Serial Port A Interface:

- GPRS or CDMA 1xRTT modem (optional)
- UP to 115.2kbps RS232C

Serial Port B Interface:

- GPS (optional)
- External via IP67 RJ45 bulkhead connector (optional)
- Up to 115,200kbps RS232C or RS485
- Proprietary Power over Serial Port (optional)

TCP/IP Support:

- Protocols supported: telnet, ftp, http, ppp, pptp
- Tunneling to VPN allows connection to AP240-E without a static address
- Encryption over Tunnel (optional)

Powering:

- 9VDC to 24VDC or 36V to 60V input
- 1 W to 1.5 W depending on options
- POE injector with 110VAC to 240VAC 50Hz-60Hz DC supply (optional)
- Solar power panel (12V, 10W with battery back-up)(optional)

Environmental:

- NEMA 4X / IP 67 Enclosure, 6 x 5 x 2.5"
- Temperature: -40F to +176F (-40C to +80C)

SNP-TCP/IP Gateway:

- Supports TCP streams to applications
- Transparent access to sensor data
- Multiple applications can ask for SNP packets based on packet type
- Can supply synchronization to applications

Software Download:

- Can store download image locally in host
- Can download new software to one or more sensors simultaneously

Software Applications

SNAP-STAT:

- Computes counts, speed, occupancy, vehicle length, & other statistics per lane over various intervals
- Real-time individual vehicle speed, length and inter-vehicle time gaps
- Data can be pulled via telnet/ftp or pushed via PeMs® Interface
- On-board storage eliminates dropped data

SNAP COUNT:

- Accurate directional count for parking facilities
- Provides event time-stamp, lane id, direction of travel, and duration of vehicle presence over sensing area

SNAP EVENT:

- IP port to access event data
- SNAP-C:
- Interfaces to contact closure interface cards



INSTALLATION

Detector installation and configuration shall be performed in accordance with the requirements of the applicable SSS, City Standard Details, and the Contract Documents. Attention is directed to City Standard Specifications and State Standard Detail. The Sensys Access Point shall be installed on the existing traffic signal pole as shown on the plans.

Access Point Installation Procedure

1. Determine Access Point location position based on RF range limitation.
2. Run Cat 5e outdoor rated cable from power/data source in traffic cabinet to Access Point.
3. Mount Access Point, and attach Cat 5e cable using push/pull bulk head connector.
4. Point front of Access Point towards Repeater.

VDS Installation Procedure

1. Prior to installation, note sensor's ID, lane number, and location in lane.
2. Unless otherwise specified, Install the sensor in the middle of the lane.
3. Point the arrow on the sensor's label in the direction of traffic flow
4. Core a hole at least 2.25" deep, so that when installed, the top of the sensor is at least 0.25" below the surface.
5. Make sure the sensor installs flat in the cored hole and is not tilted.
6. Wireless system detection only: If multiple sensors are installed per lane, they should be 20 linear feet apart, unless otherwise specified.
7. Travel Time System only: Five sensors should be installed in number 1 or number 2 lane as shown on Construction Documents unless otherwise specified. Sensors should be installed adjacent to each other with 1 foot spacing, unless otherwise specified on the Construction Documents.
8. Record distances between each sensor pair for wireless system detection.

The Contractor shall provide 15 feet of slack in each pull box for the cat 5 cable. The Contractor shall test all components of the system detection unit including sensors, access point, and repeaters to ensure proper operation.

ITERIS VANTAGE NEXT VIDEO DETECTION SYSTEM**GENERAL**

Video Detection Systems shall be installed at the following locations:

1. Lighthouse Avenue/Irving Avenue
2. Lighthouse Avenue/Prescott Avenue
3. Lighthouse Avenue/Drake Avenue
4. Lighthouse Avenue/Reeside Avenue
5. Lighthouse Avenue/Del Monte Avenue

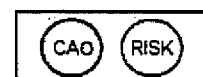
This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle and bicycle traffic.

SYSTEM HARDWARE

The video detection system (VDS) shall accommodate per intersection up to four video cameras, up to four video detection processors (VDP) capable of processing one video source each, one Central Control Unit (CCU), input/output extension modules, video surge suppressors and a pointing device, or any combination thereof.

SYSTEM SOFTWARE

The system shall include software that discriminately detects the presence of individual vehicles and bicycles in a single or multiple lanes using only the video image. Detection zones shall be defined using only an embedded software application. A monitor, a keyboard and a pointing device are used to place the zones on a video image. A minimum of 32 detection zones per camera view shall be available. A separate computer shall not be required to program the detection zones.



VDS HARDWARE**VIDEO DETECTION PROCESSOR SYSTEM INTERFACES**

The following interfaces shall be provided on each video detection processor

VIDEO INPUT

Each VDP will be supplied with video from the VDS Camera Sensor. The interface connector shall be an RJ-45 type and shall be located on the back of the CCU unit.

VIDEO LOCK LED

A LED indicator shall be provided to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.

CONTACT CLOSURE OUTPUT

Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the Video Detection Processor rack-mount configuration. Additionally, the VDS shall allow the use of extension modules to provide up to 32 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30mA at 24VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions. The VDP outputs shall be compatible with industry standard detector racks assignments.

LOGIC INPUTS

Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module. For VDPs and extension modules, 4 inputs shall be supported via detector rack interface. The I/O module shall accommodate eight (8) inputs through a 15-pin "D" connector.

DETECTION LEDS

Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. Rack-mounted video processors shall have a minimum of four (4) LEDs. Rack-mounted extension modules shall have two (2), four (4) or eight (8) LEDs (depending upon extension module type) to indicate detection.

TEST SWITCHES

The front panel of the VDP shall have detector test switches to allow the user to manually place vehicle and bicycle calls on each VDP output channel. The test switch shall be able to place a momentary call.

Both the VDP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the VDP or EM in a standard detector rack and no rack rewiring shall not be required.

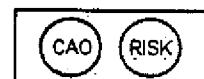
VDP printed circuit boards (PCBs) shall be conformally coated in accordance with Caltrans and NEMA specifications.

ON-BOARD MEMORY

The VDP shall utilize non-volatile memory technology to store on-board firmware and operational data.

FIRMWARE UPGRADE

The VDP and CCU shall enable the loading of modified or enhanced software through either the Ethernet or front-panel USB port (using a USB thumb drive) and without removing or modifying the VDP or CCU hardware.



VDP AND EM POWER

The VDP and EM shall be powered by 12 or 24 volts DC. VDP and EM modules shall automatically compensate for either 12 or 24 VDC operation. VDP power consumption shall not exceed 7.5 watts. The EM power consumption shall not exceed 3 watts.

OPERATING TEMPERATURE

The VDS shall operate satisfactorily in a temperature range from -30° F to +165° F (-34° C to +74° C) and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

VDS CCU

The VDS CCU sensor shall be supplied by the VDS manufacturer.

HARDWARE

The CCU shall be supplied in a standard one (1) Rack Unit (1U) 19" rack format. There shall be brackets to allow the CCU to be mounted under shelves where a 19" frame is not available.

CCU POWER

The CCU shall be powered from an 110V or 230V, 50Hz or 60Hz supply. CCU power consumption shall not exceed 20 Watts

OPERATING TEMPERATURE

The VDS shall operate satisfactorily in a temperature range from -30° F to +165° F (-34° C to +74° C) and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

ON-BOARD MEMORY

The CCU shall utilize non-volatile memory technology to store on-board firmware and operational data.

VIDEO SURGE SUPPRESSION

The CCU shall incorporate video surge suppression for each video input. The CCU shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.5mm²) minimum.

POWER SURGE SUPPRESSION

The CCU shall incorporate power surge suppression both on the input power and on the power supplied to the cameras. The CCU shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.5mm²) minimum.

POWER MANAGEMENT

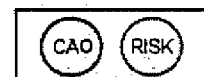
The CCU shall incorporate power management for the various parts of the VDS such that if fault conditions are detected the power supply will safely shut down the power to that peripheral.

INTERFACES**EXTENSION MODULES**

Extension modules (EM) shall be available to eliminate the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The EM shall be available in both 2- and 4-channel configurations. EM configurations shall be programmable from the CCU. A separate I/O module shall also be available having 32 outputs through a 37-pin "D" connector on the front panel and 8 inputs through a 15-pin "D" connector using an external wire harness for expanded flexibility.

The CCU shall provide four ports for connection to VDS camera sensors. The connector shall be an RJ-45 type.

The CCU shall provide four ports for connection to VDPs. The connector shall be an RJ-45 type.



The CCU shall provide 2 USB 'A' ports on the front panel of the rack mount CCU unit. These ports can be utilized for various functions. For example, keyboard and mouse functions during system configuration, USB storage devices can be utilized for bin data and video collection. The USB ports shall not require special mouse software drivers. The USB ports shall be used as part of system setup and configuration.

The CCU shall provide an output to a monitor. The port shall be HDMI.

COMMUNICATIONS

An Ethernet communications port shall be provided on the front panel. The Ethernet port shall be compliant with IEEE 802.3 and shall use a RJ-45 type connector mounted on the front panel of the CCU. The Ethernet communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented or interface software shall be provided. Each VDS shall have the capability to be addressable. The VDP shall support data rates of up to 100Mbps.

The CCU shall provide an SDLC connection to the Traffic Controller. The connector shall be a 'D-15' type, in compliance with NEMA TS-2 specifications.

The CCU shall provide an indicator when the SDLC port is active.

The CCU shall provide an indicator when the unit has power.

The CCU shall provide an indicator when the unit is on line.

The CCU shall provide a Wi-Fi connection. The connection shall be over a standard 2.4GHz connection. The Wi-Fi connection shall be enabled and disabled by a switch on the CCU. The CCU shall provide an indicator when the Wi-Fi connection is active.

The CCU shall provide system status via an on-board Organic Light Emitting Diode display. The display shall indicate various system parameters, such as camera health and VDP health, firmware version and camera air temperature. The display will be enabled and disabled with a switch on the CCU.

VDS CAMERA SENSOR

The VDS camera sensor shall be supplied by the VDS manufacturer.

The VDS camera sensor shall utilize a single shielded CAT5E or CAT6 cable for power and video. Cable termination at the camera shall not require crimping or special tools. The cable termination shall only require a standard wire stripper and a screw driver. No connectors (e.g. BNC) shall be allowed.

The camera sensor shall allow the user to set the focus and field of view via the VDS software. Camera sensor control from the controller cabinet shall communicate over a single Cat-5e or CAT6 cable. No additional wires shall be required.

The camera shall produce a useable video image of the features of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.003 lux to 10,000 lux.

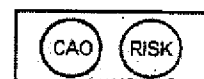
The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night for the VDS algorithms.

The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.

The imager shall employ three dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.

The camera imager shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.

The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 540 TV lines. The color CCD imager shall have a minimum effective area of 811(h) x 508(v) pixels.



The camera shall include an electronic shutter control based upon average scene luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter. The electronic shutter shall operate between the range of 1/60th to 1/90,000th second.

The camera shall utilize automatic white balance.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.

The horizontal field of view shall be adjustable from 4.5 to 48 degrees. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a 12x zoom lens with a focal length of 3.5mm to 35mm.

The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.

The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall allow the camera to be rotated to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view. The camera enclosure with sunshield shall be less than 3.5" (89mm) diameter, less than 5.25" (133mm) long, and shall weigh less than 2.5 pounds (1.14kg) when the camera and lens are mounted inside the enclosure.

The enclosure shall be designed so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.

The camera enclosure shall include a proportionally controlled Indium Tin Oxide (ITO) lens coating for the heating element of the front glass that maximizes heat transfer to the lens. The output power of the heater shall vary with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure. The transparent coating shall not impact the visual acuity and shall be optically clear.

The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -30° F to +140° F (-34 °C to +60 °C) and a humidity range from 0% RH to 100% RH. Measurement of satisfactory video shall be based upon VDP system operation.

The camera shall be powered by 48VDC. Power consumption shall be 5 watts typical and 16 watts or less under worst conditions.

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet (107 meters) for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The video signal shall be fully isolated from the camera enclosure.

Cable terminations at the camera for video and power shall not require crimping tools.

A weather-proof protective cover shall be provided to protect all terminations at the camera. No special tooling shall be required to remove or install the protective cap.

The camera assembly shall include a temperature sensor. The sensor will be polled by the VDS every minute and will supply the current air temperature. The VDS software will display this information on the On-Screen Display for each camera.



VDS SOFTWARE

GENERAL SYSTEM FUNCTIONS

Detection zones shall be programmed via an embedded application displayed on a video monitor and a keyboard and a pointing device connected to the CCU. The menu shall facilitate placement of detection zones and setting of zone parameters or to configure system parameters. A separate computer shall not be required for programming detection zones or to view system operation. All programming function shall occur on live video images, no snapshots or still images are allowed.

The VDS software shall store up to five completely independent detection zone patterns in non-volatile memory.

The VDS can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device. Each configuration shall be uniquely labeled and able to be edited by the user for identification. The currently active configuration indicator shall be displayed on the monitor.

The VDS shall detect vehicles and bicycles in real time as they travel across each detection zone.

The VDS shall accept new detection patterns from an external computer through the Ethernet port when the external computer uses the correct communications protocol for downloading detection patterns. A Windows™-based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.

The VDS shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

The VDS shall send its detection patterns to an external computer through the Ethernet port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.

The VDS shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the video signal.

The VDS shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all affected detection zones in a constant call mode. A user-selected alarm output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists. An On-Screen Icon will be displayed while the system is in this mode.

Up to 32 detection zones per camera input shall be supported and each detection zone must be user-sizeable to suit the site and the desired vehicle detection region.

The VDS shall provide up to 32 open collector output channels per camera input using one or more extension modules.

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may instead be AND'ed together to indicate vehicle presence on a single approach of traffic movement.

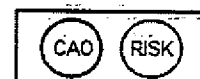
When a vehicle is detected within a detection zone, a visual indication of the detection shall activate on the video overlay display to confirm the detection of the vehicle for the zone.

Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.

The VDS shall provide dynamic zone reconfiguration (DZR). DZR sustains normal operation of existing detection zones when one zone is being added or modified during the setup process. The new zone configuration shall not go into effect until the configuration is saved by the operator.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

The VDS shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.



The VDS shall output a constant call during the background learning period of no longer than 3 minutes.

Detection zone outputs shall be individually configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.

Up to six detection zones per camera view shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the Ethernet port. The zone shall also have the capability to calculate and store average speed and lane occupancy at user-selectable bin intervals of 10 seconds, 20 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes and 60 minutes.

In addition to the count type zone, the VDS shall be able to calculate average speed and lane occupancy for all of the zones independently. These values shall be stored in non-volatile memory for later retrieval.

The VDS shall have an "advance" zone type where raw detection output duration to the traffic controller is compensated for angular occlusion and distance.

The VDS shall employ color overlays on the video output.

The VDS shall have the ability to show controller phase status (green, yellow, or red) for up to 8 phases. These indications shall also be color coded.

The user shall have the ability to enable or disable the display of the phase information on the video output.

The VDS shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state. For example, a zone may be a "count" zone when the phase is green but change to a "presence" zone type when the phase is not green. Another application would be zone type of "extension" when the signal phase is green and then "delay" when red.

The VDS software shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. The additional zone shall utilize geometric extrapolation of the parent zone when creating the child zone. The process shall also automatically accommodate lane marking angles and zone overlaps.

When the user wishes to modify the location of a zone, the VDS software shall allow the user move a single zone, multiple zones or all zones simultaneously.

When the user wishes to modify the geometric shape of the zone, the VDS software shall allow the user to change the shape by moving the zone corner or zone sides.

On screen zone identifiers shall be modifiable by the user. The user shall be allowed to select channel output assignments, zone type, input status, zone labels or zone numbers to be the identifier.

The VDS software shall support bicycle type zones where the zone can differentiate between motorized vehicles and bicycles, producing a call for one but not the other.

Bicycle zone types shall only output when a bicycle is detected. Larger motorized vehicles such as cars and trucks that traverse a bicycle zone shall not provide an output.

The VDS software shall provide the ability to assign a separate output channel for bicycle zones to allow traffic controllers to implement special bicycle timing.

Placement of bicycle type zones in vehicle lanes shall be allowed.

Upon detection of a bicycle, the video output overlay shall indicate active detection as well as providing a unique bicycle detection identifier to visually distinguish bicycle detection versus vehicle detection.

Up to six bicycle detection zones per camera view shall have the capability to count the number of bicycles detected in addition to their normal detection function. The count value shall be internally stored for later retrieval through the Ethernet port.

AUTOMATIC TRAFFIC VOLUME GRAPH

The On-Screen Display shall include an Automatic Traffic Volume graph. This graph will display estimated Vehicles Per Hour (VPH) per movement for each camera view. The graph will display a rolling 24 hour period of VPH.



OCCUPANCY GRAPH

The On-Screen Display shall include an Occupancy Graph. This graph will display estimated approach occupancy for each camera view. The graph will display a rolling 24 hour period of Occupancy.

USER INTERFACES

This section sets forth the minimum requirements for the VDS to provide a single point interface to remote and local users. The VDS shall also have the capability to stream up to four simultaneous video streams over an Ethernet interface.

The user interface shall provide capabilities to enable multiple rack-mounted video detection processors to be locally and remotely accessed from a single point via an Ethernet connection.

The device shall allow the operator to view four videos simultaneously or any one video by controls embedded in the VDS.

Local user access to video detection programming shall be limited to the detection processor unit that is currently being displayed on the monitor.

All local programming and setup parameters for the video detection processor shall be user accessible through the interface unit without requiring the user to swap user interface cables between video detection processors.

Remote access to the device shall be through the built-in Ethernet port via access software running on a Microsoft Windows based personal computer.

A Windows OS remote access firmware shall also be available for remote setup and diagnostics of the interface unit.

The VDS shall support streaming video technology using H.264 standards to allow the user to monitor video detection imagery over the Ethernet interface. Motion JPEG streaming video shall not be allowed.

The interface unit shall allow eight independent streams, one from each video processor, to be transported via Ethernet to four independent streaming video players simultaneously in D1 resolution.

The interface shall allow the user to select the resolution of the displayed streamed video.

The interface unit shall support the streaming and display of eight concurrent streams in D1 resolution.

The VDS shall allow the user to manage the unit's Ethernet bandwidth usage by allowing the user to select high, medium or low resolution.

The interface shall allow the user to change the unit's Ethernet network settings of IP address, subnet mask and default gateway.

The VDS shall allow the user to upload new application firmware through the use of the interface, remotely or on-site.

A Windows OS based application will be provided to remotely view video streams from the VDS.

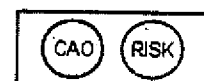
An iOS based application will be provided to remotely view video streams from the VDS. This application shall allow the user to choose between any number of pre-configured intersection locations. The live video from any cameras at that location will be viewable on an iOS product, including the vehicle and bicycle detections occurring in real-time.

SDLC FUNCTIONALITY

This section sets forth the minimum requirements for a full-function BIU and integrated video detection communication. The VDS shall provide outputs to the controller of vehicle calls from video processors that reside within the detector rack.

FUNCTIONAL CAPABILITIES

The VDS shall have the capability of monitoring phase information and passing that information and other system data such as "time" from the controller to video detection processor modules. The VDP shall also accept data from



video processor modules and relay the information to the controller. The unit shall provide a maximum of 64 detector outputs to the controller via the SDLC interface.

REQUIREMENTS

The module shall be in compliance with the following industry specifications:

- *Transportation Electrical Equipment Specifications (TEES)*, August 16, 2002 (or latest edition), California Department of Transportation
- *NEMA Standard Publication TS 1-1989* (or latest edition), *Traffic Control Systems*, National Electrical Manufacturers Association
- *NEMA Standard Publication TS 2-2003, Traffic Controller Assemblies With NTCIP Requirements, Version 02.06* (or latest edition), National Electrical Manufacturers Association

DATA INTERFACES

The VDS shall have two data interfaces:

- The interface to the controller shall be accomplished by the use of the TS-2 SDLC port and protocol in accordance with the TS-2 specifications. The module shall be able to be configured to respond to BIU addresses 8, 9, 10 and 11 or a combination thereof.
- The interface to communicate with card rack video detection processors shall be manufacturer specific.

SDLC COMMUNICATION INDICATORS

One LED indicator shall be provided for the TS-2 SDLC interface. The indicator shall be used to inform the user of any communication activity on the SDLC port.

INSTALLATION

The cable to be used between the camera and the CCU in the traffic cabinet shall be Cat-5e shielded. The cable shall be suitable for installation in conduit or overhead with appropriate span wire. Shielded RJ-45 connectors shall be used where applicable. The Cat-5e cable, RJ-45 connector, stripping and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

Contractor shall provide 15 feet of slack in each pull box for the cat:5e cable.

WARRANTY

The supplier shall provide a limited three-year warranty on the video detection system.

During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factory-certified personnel or factory-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

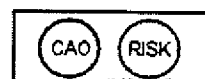
MAINTENANCE AND SUPPORT

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

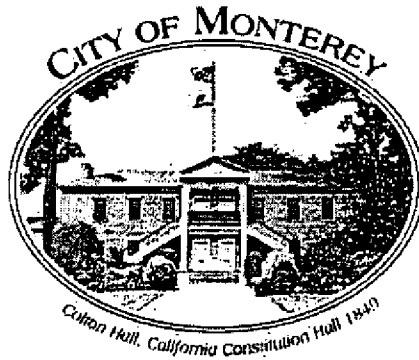
The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on site technical support services.



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APPENDIX A: BID PROPOSAL FORMS



CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS

BID PROPOSAL COVER SHEET

FOR

LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

Submit the following items unbound:

<u>ITEM</u>	<u>INCLUDED</u>
1. Bid Proposal Cover Sheet (this sheet)	_____
2. Proposal and Bid Schedule	_____
3. Declaration of Bidder	_____
4. Acknowledgement of Addenda (if applicable)	_____
5. Bidder's Statement of Qualifications	_____
6. Subcontractor's List	_____
7. Noncollusion Declaration	_____
8. Debarment and Suspension Certification	_____
9. Certification of Good-Faith Effort (Prime)	_____
10. Bid Bond	_____
11. Certification of Workers' Compensation Insurance	_____

Failure to include required items, included those identified above may result in your bid being deemed non-responsive resulting in rejection of your bid.

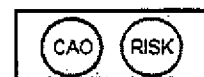
The undersigned Bidder submits the following documents for consideration of the project. The Bidder certifies that all statements and information set forth below are true and accurate.

By: _____

Company Name

Signature

Date



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

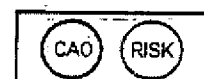
CITY OF MONTEREY

To the Honorable City Council
 City of Monterey
 City Hall
 Monterey, California

The undersigned declares to have carefully examined the location of the proposed work, that the Plans and Specifications as set forth herein have been examined, and hereby proposes to furnish all materials and equipment and do all the work required to complete the said work in accordance with said Plans and Specifications for the lump sums and unit prices set forth in the following schedule:

BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
1	Mobilization and Demobilization	1	LS		
2	Storm Water Compliance	1	LS		
3	Traffic Control	1	LS		
4	Furnish and Install SCOOT Adaptive System	1	LS		
5	Lighthouse Avenue and Hoffman Avenue	1	LS		
6	Lighthouse Avenue and McClellan Avenue	1	LS		
7	Lighthouse Avenue and Drake Avenue	1	LS		
8	Lighthouse Avenue and Dickman Avenue	1	LS		
9	Lighthouse Avenue and Reeside Avenue	1	LS		
10	Lighthouse Avenue and Del Monte Avenue	1	LS		
11	Record Drawings	1	LS		
TOTAL BASE BID (ITEMS 1 THROUGH 11) (In words) <hr/> <hr/>					(In Figures) \$



ADDITIVE ALTERNATIVE 1 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
12	Lighthouse Avenue and David Avenue	1	LS		
TOTAL ALTERNATIVE 1 BID (ITEM 12) (In Words) _____ _____					(In Figures) \$

ADDITIVE ALTERNATIVE 2 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
13	Lighthouse Avenue and Irving Avenue	1	LS		
TOTAL ALTERNATIVE 2 BID (ITEM 13) (In Words) _____ _____					(In Figures) \$

ADDITIVE ALTERNATIVE 3 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
14	Lighthouse Avenue and Prescott Avenue	1	LS		
TOTAL ALTERNATIVE 3 BID (ITEM 14) (In Words) _____ _____					(In Figures) \$

GRAND TOTAL BID (BASE BID PLUS ADDITIVE ALTERNATIVES 1-3 (ITEMS 1-14)) (In Words) _____ _____					(In Figures) \$
--	--	--	--	--	--------------------

BASIS OF AWARD

Award of contract, if any be made, shall be made to the Contractor with the lowest responsive responsible bid based on the Grand Total Bid (Base Bid plus Additive Alternatives 1-3 (Items 1 through 14)).



DECLARATION OF BIDDER RE: LICENSE QUALIFICATIONS

Bidder certifies he/she possesses a license in accordance with a State Act providing for the registration of Contractors. License No. : _____ Class: _____ Expiration date: _____

In accordance with California Labor Code (SB 854), bidder certifies that he/she is registered with the Department of Industrial Relations. Registration No.: _____

ALL OF THE INFORMATION CONTAINED IN THIS BID PROPOSAL IS TRUE AND CORRECT AND IS EXECUTED UNDER PENALTY OF PERJURY IN

_____ COUNTY, CALIFORNIA, ON _____, 201_____.

Name of Firm: _____

Address: _____

Telephone: _____

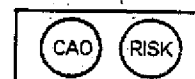
Email: _____

(If firm is an individual, so state. If a firm or co-partnership, state the firm name and give the names of person authorized to execute the declaration on its behalf.)

FAILURE TO PROVIDE ANY OF THE INFORMATION REQUIRED HEREIN INCLUDING CONTRACTOR SIGNATURES MAY RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE

Signature

Printed Name and Title



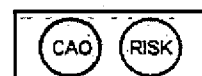
ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall list below any and all addenda issued for this project. Failure to list issued addenda will result in a non-responsive bid:

ADDENDA

DATE RECEIVED

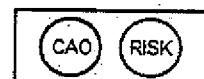
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____



BIDDER'S STATEMENT OF QUALIFICATIONS

The Bidder shall list below a minimum of three (3) jobs of a similar nature recently completed by Bidder's organization:

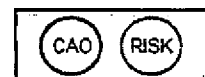
Project Name	Owner Name	Address	Telephone Number/Email	Contact Name



SUB-CONTRACTOR'S LIST

The Bidder shall list below the name, the location of the place of business, and the California contractor license number of any subcontractors proposed to perform work or labor or render service on this project, or a subcontractor licensed by the State of California who will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications of this project, whose work is in excess of one-half of 1 percent of the Bidder's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater:

Name of Subcontractor	California Contractor License Number	California DIR Registration Number	Location of Place of Business	Trade or Portion of Work



NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

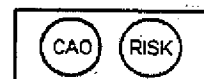
The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, disqualification, or determination of ineligibility by any state, federal, or local agency;
- Has not been suspended, debarred, voluntarily excluded, disqualified or determined ineligible by any state, federal, or local agency within the past 3 years;
- Does not have a proposed debarment or disqualification pending; and
- Has not be indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

I declare under penalty of perjury that the foregoing is true and correct and that this certification is signed this _____ day of _____, 201__ in _____ [city], _____ County, California.

Signature

Printed Name and Title



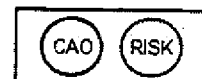
CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Prime Contractor - To be Submitted with Bid)

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the company on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



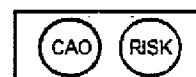
CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Subcontractor – To be Completed by Subcontractor After Bid is Awarded)

I, _____, a licensed contractor, or responsible managing officer, of the company known as _____, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place of residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the contractor on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.

Signature

Printed Name and Title

Date



BID BOND
(To Be Submitted with Bid)

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto the **City of Monterey** ("the Obligee") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as: **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**.

WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the Basis of Award or grand total of the base bid.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for ninety (90) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and fees incurred by the Obligee in connection therewith, including without limitation, attorney's fees.

[CONTINUED NEXT PAGE]



IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20____ by their duly authorized agents or representatives.

(Bidder/Principal Name)

By: _____
(Signature)

(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

(Contact Name)

(Street Address)

(City, State & Zip Code)

() _____ () _____
Telephone Fax

(Email address)



CERTIFICATION OF WORKERS' COMPENSATION INSURANCE

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

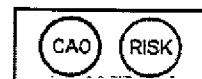
"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

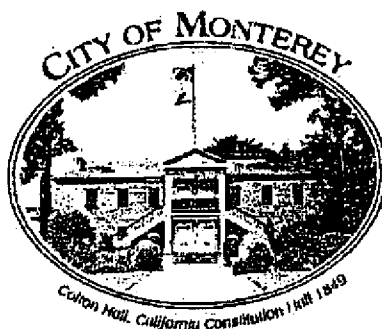
- c. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- d. By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

3. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

(Contractor Name)

By: _____
(Signature)





DEPARTMENT OF PLANS AND PUBLIC WORKS
ENGINEERING DIVISION

DATE: June 22, 2016
TO: All Bidders
SUBJECT: Lighthouse Avenue Adaptive Traffic Control System Project
Bid proposals due on Tuesday, July 12, 2016 at 2:00 p.m.
Sent Via: EbidBoard

The Specifications are amended as follows:

Part II, Page 10: BID ITEM DESCRIPTION: ADDITIVE ALTERNATIVE 2

Replace Bid Item 13: Lighthouse Avenue and Irving Avenue with the following text:

13. Lighthouse Avenue and Irving Avenue

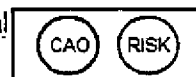
Measurement and payment for this item shall be on a lump sum (LS) basis. The work shall include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved including the installation, integration, configuration, and testing of equipment necessary to implement the SCOOT adaptive system at this intersection.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work including the installation, integration, configuration, testing and training of the video detection system including the video detection camera, cabling, mountings, controller cards, and any and all connections and terminations in the field and the controller cabinets complete and in place for a fully operational video detection system.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the removal, salvaging of the existing City controller cabinet, disposal of foundation, and conduits, as well as sidewalk replacement and other necessary items for a complete removal of the existing cabinet and foundation.

The work shall also include, but not be limited to, the furnishing of all labor, materials, tools, equipment, and incidentals for all the work involved in the installation of the City furnished Type P cabinet on a new contractor-furnished foundation, including conduits, cabling, re-wiring, splicing, terminations, cabinet equipment relocation, and any and all connections and terminations from the existing cabinet to the new cabinet complete and in place for a fully operational cabinet and controller system.

The work shall also include, but not be limited to, the furnishing of all labor, material ent, and



incidentals for all the work involved in the installation of cat 5e cable and fabric innerduct with mule tape within existing conduits and any and all connections and terminations complete and in place and as shown on the plans and as directed by the Engineer.

The work shall also include any additional costs associated with Mobilization/Demobilization, Storm Water Compliance, and Traffic Control at this location.

The Plans are amended as follows:

Replace Sheet TS02 in its entirety with the attached Sheet TS02, noted with Revision No. 1 dated 6/21/2016.

All other conditions of the Specifications remain the same. Acknowledge this addendum and all others in your bid in Appendix A of the Specifications.

Sealed unbound bid proposals will be received in the office of the City Clerk, attention Finance Director, 580 Pacific Street, Room 6, City of Monterey, California, until 2:00 p.m., July 12, 2016.

If you have additional questions, please contact Andrea Renny by email at engineering-admin@monterey.org.

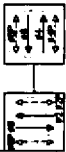
Sincerely,



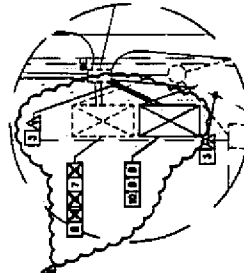
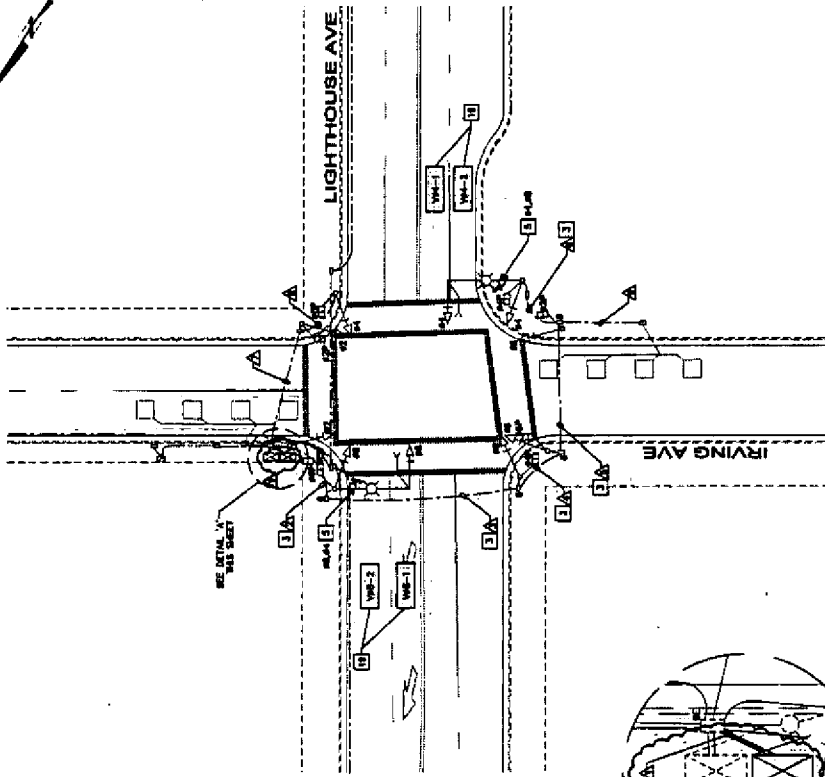
Andrea Renny, P.E., P.T.O.E
Associate Civil Engineer



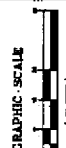
STEADY DEMAND SEQUENCE



EXISTING PHASE DIAGRAM



DETAIL 'A'
1"=4'



CONDUCTOR SCHEDULE		NUMBER OF CONDUCTORS	
LINE OR CABLE	CONDUCTOR DESIGNATION	CONDUCTORS	CABLES
NO. 14	14-1	1	1
	14-2	1	1
	14-3	1	1
	14-4	1	1
	14-5	1	1
	14-6	1	1
	14-7	1	1
	14-8	1	1
	14-9	1	1
	14-10	1	1
NO. 10	10-1	1	1
	10-2	1	1
	10-3	1	1
	10-4	1	1
	10-5	1	1
	10-6	1	1
	10-7	1	1
	10-8	1	1
	10-9	1	1
	10-10	1	1
TOTAL NO. 14		10	10
TOTAL NO. 10		10	10
TOTAL NO. OF CONDUCTORS		20	20
TOTAL NO. OF CABLES		20	20

ALL CONDUCTORS AND CABLES ARE SHOWN UNLESS NOTED OTHERWISE.
ALL CONDUCTORS ARE EXISTING UNLESS NOTED OTHERWISE.
F - DESIGNATED NEW CONDUIT OR CABLE.

CONSTRUCTION NOTES:

1. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
2. TURNER AND INSTALL FIBER OPTIC WINDROCKET MUST WEAR EXTENSION CAMERA ON LUMINAIRE AND SEE DETAIL 'C' ON SHEET 'P&I'.
3. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
4. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
5. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
6. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
7. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
8. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
9. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.
10. REMOVE AND INSTALL FABRIC INTERLOCK AND CAT 5E CABLES IN EXISTING CONDUIT FOR CONDUCTOR SCHEDULE. INSTALL ALL CAT 5E CABLES IN A SINGLE FABRIC WINDROCKET CELL.

CAO RISK

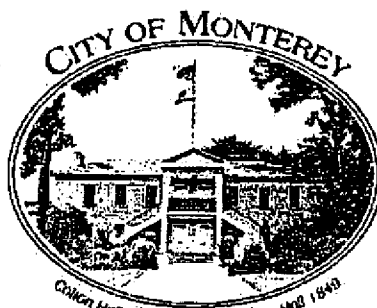


CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS
 580 PACIFIC STREET, MONTEREY, CA 93940
 TEL: 831.648.3921 WEBSITE: WWW.MONTEREY.ORG

DESIGNED BY	DATE	REVISION
CHECKED BY	DATE	DESCRIPTION
APPROVED BY	DATE	DESCRIPTION

LIGHTHOUSE AVENUE ADAPTIVE SYSTEM
 LIGHTHOUSE AVE AND IRVING AVE

1502
 SHEET 1 OF 1



DEPARTMENT OF PLANS AND PUBLIC WORKS
ENGINEERING DIVISION

DATE: July 6th, 2016
 TO: All Bidders
 SUBJECT: Lighthouse Avenue Adaptive Traffic Control System Project
 Bid proposals due on Tuesday, July 12, 2016 at 2:00 p.m.
 Sent Via: EbidBoard

The Specifications are amended as follows.

Replace PART IV: TIME LIMITS with the revised section below:

TIME LIMITS

Within fifteen (15) calendar days after written notice that a contract has been awarded (Notice of Award), the Contractor shall submit two (2) signed original contracts, required bonds or alternative security, evidence of insurance that conforms to the contract, and City of Monterey Business License or evidence of application for said license.

A Notice to Proceed will be issued upon receipt of the foregoing documents. The Contractor shall begin work within **fourteen (14) calendar days** after the effective date of the Notice to Proceed.

The Contractor shall diligently prosecute the contract to substantial completion on or before the expiration of one hundred and fifty (150) calendar days from the effective date of the Notice to Proceed.

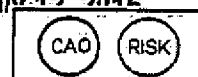
Substantial completion is defined as:

- All vehicle detection is installed and operational;
- The SCOOT system is operational, i.e., servers and software are setup and operational;
- All intersections awarded are in communication and functional with SCOOT;
- Graphics are completed;
- Initial system operation training

All items of work shall be completed on or before one hundred (100) days after the substantial completion date.

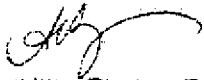
All other conditions of the Specifications remain the same. Acknowledge this addendum and all others in your bid in Appendix A of the Specifications.

Sealed unbound bid proposals will be received in the office of the City Clerk, attention Finance Director, 580 Pacific Street, Room 6, City of Monterey, California, until 2:00 p.m., July 12, 2016.



If you have additional questions, please contact Andrea Renny by email at engineering-admin@monterey.org.

Sincerely,



Andrea Renny, P.E., P.T.O.E
Associate Civil Engineer



APPENDIX A: BID PROPOSAL FORMS



CITY OF MONTEREY
DEPARTMENT OF PLANS AND PUBLIC WORKS

BID PROPOSAL COVER SHEET

FOR

LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

Submit the following items unbound:

ITEM


INCLUDED

- | | |
|--|--------------|
| 1. Bid Proposal Cover Sheet (this sheet) | <u> X </u> |
| 2. Proposal and Bid Schedule | <u> X </u> |
| 3. Declaration of Bidder | <u> X </u> |
| 4. Acknowledgement of Addenda (if applicable) | <u> X </u> |
| 5. Bidder's Statement of Qualifications | <u> X </u> |
| 6. Subcontractor's List | <u> X </u> |
| 7. Noncollusion Declaration | <u> X </u> |
| 8. Debarment and Suspension Certification | <u> X </u> |
| 9. Certification of Good-Faith Effort (Prime) | <u> X </u> |
| 10. Bid Bond | <u> X </u> |
| 11. Certification of Workers' Compensation Insurance | <u> X </u> |

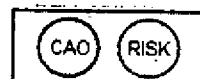
Failure to include required items, included those identified above may result in your bid being deemed non-responsive resulting in rejection of your bid.

The undersigned Bidder submits the following documents for consideration of the project. The Bidder certifies that all statements and information set forth below are true and accurate.

By: Siemens Industry, Inc., ITS
Company Name


Signature

7/11/2016
Date



LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)

CITY OF MONTEREY

To the Honorable City Council
 City of Monterey
 City Hall
 Monterey, California

The undersigned declares to have carefully examined the location of the proposed work, that the Plans and Specifications as set forth herein have been examined, and hereby proposes to furnish all materials and equipment and do all the work required to complete the said work in accordance with said Plans and Specifications for the lump sums and unit prices set forth in the following schedule:

BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
1	Mobilization and Demobilization	1	LS	\$5,974.00	\$5,974.00
2	Storm Water Compliance	1	LS	\$4,377.00	\$4,377.00
3	Traffic Control	1	LS	\$15,741.00	\$15,741.00
4	Furnish and Install SCOOT Adaptive System	1	LS	\$366,785.00	\$366,785.00
5	Lighthouse Avenue and Hoffman Avenue	1	LS	\$7,978.00	\$7,978.00
6	Lighthouse Avenue and McClellan Avenue	1	LS	\$6,786.00	\$6,786.00
7	Lighthouse Avenue and Drake Avenue	1	LS	\$24,137.00	\$24,137.00
8	Lighthouse Avenue and Dickman Avenue	1	LS	\$4,923.00	\$4,923.00
9	Lighthouse Avenue and Reeside Avenue	1	LS	\$13,940.00	\$13,940.00
10	Lighthouse Avenue and Del Monte Avenue	1	LS	\$49,445.00	\$49,445.00
11	Record Drawings	1	LS	\$8,943.00	\$8,943.00
TOTAL BASE BID (ITEMS 1 THROUGH 11) (In words)					(In Figures)
<u>Five hundred-nine thousand, twenty-nine dollars and no cents</u>					\$ 509,029.00



ADDITIVE ALTERNATIVE 1 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
12	Lighthouse Avenue and David Avenue	1	LS	\$32,842.00	\$32,842.00
TOTAL ALTERNATIVE 1 BID (ITEM 12) (In Words)					(In Figures)
<u>Thirty-two thousand, eight hundred forty-two dollars and no cents</u>					\$ 32,842.00

ADDITIVE ALTERNATIVE 2 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
13	Lighthouse Avenue and Irving Avenue	1	LS	\$59,337.00	\$59,337.00
TOTAL ALTERNATIVE 2 BID (ITEM 13) (In Words)					(In Figures)
<u>Fifty-nine thousand, three hundred thirty-seven dollars and no cents</u>					\$ 59,337.00

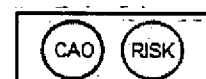
ADDITIVE ALTERNATIVE 3 - BID SCHEDULE

Item No.	Description	Approx. Quantity	Unit	Unit Price	Amount
14	Lighthouse Avenue and Prescott Avenue	1	LS	\$52,542.00	\$52,542.00
TOTAL ALTERNATIVE 3 BID (ITEM 14) (In Words)					(In Figures)
<u>Fifty-two thousand, five hundred forty-two dollars and no cents</u>					\$ 52,542.00

GRAND TOTAL BID (BASE BID PLUS ADDITIVE ALTERNATIVES 1-3 (ITEMS 1-14)) (In Words)					(In Figures)
<u>Six hundred fifty-three thousand, seven hundred fifty dollars and no cents</u>					\$ 653,750.00

BASIS OF AWARD

Award of contract, if any be made, shall be made to the Contractor with the lowest responsive responsible bid based on the Grand Total Bid (Base Bid plus Additive Alternatives 1-3 (Items 1 through 14)).



DECLARATION OF BIDDER RE: LICENSE QUALIFICATIONS

Bidder certifies he/she possesses a license in accordance with a State Act providing for the registration of Contractors. License No.: 758796, Class: B, C10, C20, C16, Expiration date: 2/28/2017

In accordance with California Labor Code (SB 854), bidder certifies that he/she is registered with the Department of Industrial Relations. Registration No.: 100002447

ALL OF THE INFORMATION CONTAINED IN THIS BID PROPOSAL IS TRUE AND CORRECT AND IS EXECUTED UNDER PENALTY OF PERJURY IN

Travis COUNTY, TEXAS, ON July 11, 2016

Name of Firm: Siemens Industry, Inc., Intelligent Traffic Systems


Address: 9225 Bee Cave Rd. Bldg.B, Ste 101 Austin, TX 78733

Telephone: 512-837-8300

Email: bidadmin.mobility@siemens.com

(If firm is an individual, so state. If a firm or co-partnership, state the firm name and give the names of person authorized to execute the declaration on its behalf.)

FAILURE TO PROVIDE ANY OF THE INFORMATION REQUIRED HEREIN INCLUDING CONTRACTOR SIGNATURES MAY RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE



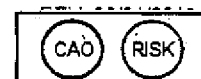
Signature

Rajarshi Ghosh, ITS CFO

Printed Name and Title

Persons Authorized to execute declaration on Siemens' behalf:

- Marcus Welz
- Rajarshi Ghosh
- Steve Gitkin
- Dimitrios Andrikos
- Craig Debevoise
- David Spence
- Sabine Andrikos



ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall list below any and all addenda issued for this project. Failure to list issued addenda will result in a non-responsive bid:

ADDENDA

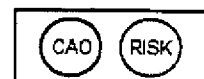
DATE RECEIVED

- 1. Addendum #1
- 2. Addendum #2
- 3. Addendum #3
- 4. _____
- 5. _____
- 6. _____

6/29/2016

6/29/2016

7/7/2016



BIDDER'S STATEMENT OF QUALIFICATIONS

The Bidder shall list below a minimum of three (3) jobs of a similar nature recently completed by Bidder's organization:

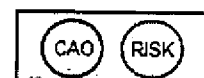
Project Name	Owner Name	Address	Telephone Number/Email	Contact Name
City of Anaheim Traffic Signal On-Call Response	City of Anaheim, CA	200 South Anaheim Blvd Anaheim, CA 92805	714-765-6908	Christopher Dahl
City of Santa Ana Installation & Modification of Intersection at McFadden & Euclid	City of Santa Ana, CA	20 Civic Center Plaza M-22 Santa Ana, CA 92701	714-647-5018	Edward Torres
City of Downey Pedestrian Countdown Heads Project Phase 2	City of Downey, CA	11111 Brookshire Ave Downey, CA 90241	562-904-7114	Edward Torres



SUB-CONTRACTOR'S LIST

The Bidder shall list below the name, the location of the place of business, and the California contractor license number of any subcontractors proposed to perform work or labor or render service on this project, or a subcontractor licensed by the State of California who will specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the plans and specifications of this project, whose work is in excess of one-half of 1 percent of the Bidder's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Bidder's total bid or ten thousand dollars (\$10,000), whichever is greater.

Name of Subcontractor	California Contractor License Number	California DIR Registration Number	Location of Place of Business	Trade or Portion of Work
N/A				



NONCOLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

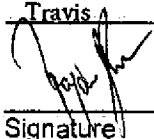
The undersigned declares:

I am the CFO of Siemens Industry, ITS, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

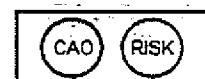
Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on this 11th day of July, 2011 in Austin [city], Travis County, Texas.



Signature

Rajarshi Ghosh, Siemens ITS CFO
Printed Name and Title



DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, disqualification, or determination of ineligibility by any state, federal, or local agency;
- Has not been suspended, debarred, voluntarily excluded, disqualified or determined ineligible by any state, federal, or local agency within the past 3 years;
- Does not have a proposed debarment or disqualification pending; and
- Has not be indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

None


Exceptions will not necessarily result in denial of award, but will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

N/A

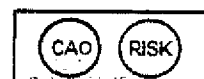
Notes: Providing false information may result in criminal prosecution or administrative sanctions.

I declare under penalty of perjury that the foregoing is true and correct and that this certification is signed this

11th day of July, 2011 in Austin [city], Travis County, Texas.


Signature

Rajarshi Ghosh, Siemens ITS CEO
Printed Name and Title



CERTIFICATION OF GOOD-FAITH EFFORT TO HIRE MONTEREY BAY AREA RESIDENTS
(Prime Contractor – To be Submitted with Bid)

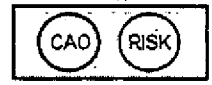
I, Rajarshi Ghosh, a licensed contractor, or responsible managing officer, of the company known as Siemens Industry, Inc., ITS, do hereby certify, under penalty of perjury, that I have met, or made a good-faith effort to meet, the requirements set forth in Monterey City Code Article 2 of Chapter 28. Further, I certify that during the performance of the contract, I shall keep an accurate record on a standardized form showing the name, place or residence, trade classification, hours employed, proof of qualified individual status, per diem wages and benefits of each person employed by the company on the specific public works project, including full-time, part-time, permanent, and temporary employees, and provide such records to the City upon request, within five working days. I understand that I am responsible for insuring that any subcontractor working under my direction, complies with this ordinance, including submitting a Certification of Good Faith Effort to Hire Monterey Bay Residents, and to keeping accurate records as described above.



Signature

Rajarshi Ghosh, Siemens ITS CFO
Printed Name and Title

7/11/2016
Date



BID BOND
(To Be Submitted with Bid)

KNOW ALL MEN BY THESE PRESENTS that we, Federal Insurance Company, as Surety and Siemens Industry Inc., as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto the City of Monterey ("the Obligee") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as: **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM (37N1225, 37N1444)**.

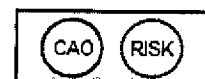
WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the Basis of Award or grand total of the base bid.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for ninety (90) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Call for Bids, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

In the event suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and fees incurred by the Obligee in connection therewith, including without limitation, attorney's fees.

[CONTINUED NEXT PAGE]



IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this 12th day of July, 20 16 by their duly authorized agents or representatives.

Siemens Industry Inc.

 (Bidder/Principal Name)

By: [Signature]

 (Signature)

Rajiv Ghosh

 (Typed or Printed Name)

Title: ITS, CFO

(Attach Notary Public Acknowledgement of Principal's Signature)

Federal Insurance Company

 (Surety Name)

By: [Signature]

 (Signature of Attorney-In-Fact for Surety)

Cynthia L. Choren, Attorney-In-Fact

 (Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

Federal Insurance Company

 (Contact Name)

15 Mountain View Rd

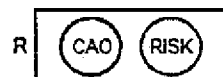
 (Street Address)

Warren, NJ 07059

 (City, State & Zip Code)

(908) 903-3493 (908) 903-3656
 Telephone Fax
 surety@chubb.com

 (Email address)



ACKNOWLEDGEMENT BY SIEMENS

State of Texas


County of Travis

City of Austin

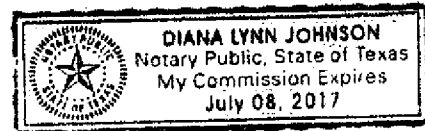
On this 11th day of July, 2016, before me personally appeared Ranjarshi Ghosh
known to me to be the CEO of Siemens Industry, Inc.,
Intelligent Traffic Systems, the corporation that executed the within instrument, and
acknowledged to me that such corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, at my office in the
aforesaid County, the day and year in this certificate first above written.

My commission expired July 17, 2017.

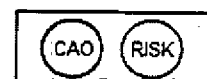


Diana Johnson



Notary Public in the State of Texas

Commission # 12948162-0



ACKNOWLEDGMENT BY SURETY

STATE OF Missouri
City of St. Louis } ss.

On this 12th day of July, 2016, before me personally appeared Cynthia L. Choren, known to me to be the Attorney-in-Fact of Federal Insurance Company

_____, the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

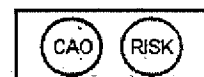
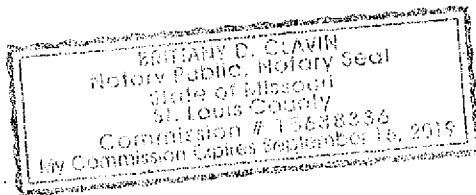
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the aforesaid County, the day and year in this certificate first above written.

Brittany D. Clavin

My Commission Expires: September 16, 2019

(Seal)

Brittany D. Clavin
Notary Public in the State of Missouri
County of St. Louis
Commission # 15638336





Chubb
Surety

POWER
OF
ATTORNEY

Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company

Exhibit B
Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Pamela A. Beelman, Cynthia L. Choren, Brittany D. Clavin, Joann R. Frank, Sandra L. Ham, Heidi A. Notheisen, Karen L. Roeder and Debra C. Schneider of St. Louis, Missouri

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations. In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 1st day of March, 2016.

Dawn M. Chloros, Assistant Secretary

David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

ss.

County of Somerset

On this 1st day of March, 2016 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2318885
Commission Expires July 16, 2019

Notary Public

CERTIFICATION

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"Except as otherwise provided in these By-Laws or by law or as otherwise directed by the Board of Directors, the President or any Vice President shall be authorized to execute and deliver, in the name and on behalf of the Corporation, all agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and the seal of the Corporation, if appropriate, shall be affixed thereto by any of such officers or the Secretary or an Assistant Secretary. The Board of Directors, the President or any Vice President designated by the Board of Directors may authorize any other officer, employee or agent to execute and deliver, in the name and on behalf of the Corporation, agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and, if appropriate, to affix the seal of the Corporation thereto. The grant of such authority by the Board or any such officer may be general or confined to specific instances."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

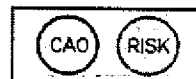
- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 12th day of July, 2016.



Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903-3493 - Fax (908) 903-3656 e-mail: surety@chubb.com



CERTIFICATION OF WORKERS' COMPENSATION INSURANCE

I, Rajarshi Ghosh the Chief Financial Officer of
(Name) (Title)

Siemens Industry, Inc., ITS declare, state and certify that:
(Contractor Name)

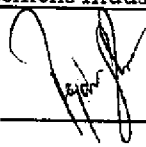
1. I am aware that California Labor Code § 3700(a) and (b) provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- c. By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- d. By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

3. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

Siemens Industry, Inc., ITS
(Contractor Name)

By: 
(Signature)

7/11/2016



City of Monterey Lighthouse Avenue Adaptive Traffic Control System (37N1225, 37N144)

www.usa.siemens.com

SIEMENS
Ingenuity for life

Proposed to:

The City of Monterey, CA

Proposed by:

Siemens Industry Inc. ITS

975 Pease Ave. #4

Bedford, MA 01830

Phone: 781.434.1000

Fax: 781.434.1001

City of Monterey

City of Monterey

City of Monterey

City of Monterey

City of Monterey

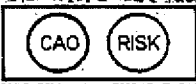
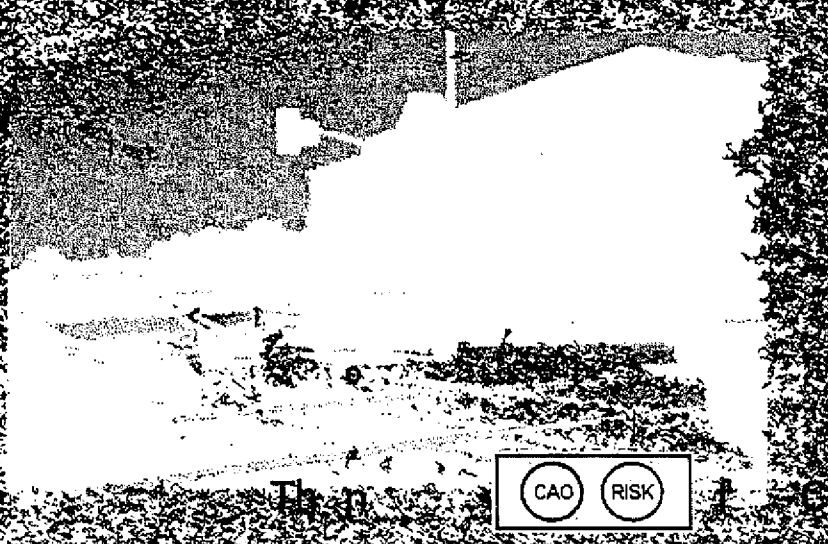
City of Monterey

City of Monterey

City of Monterey

City of Monterey

City of Monterey



Siemens as a Responsible Bidder

1. Standards of Responsibility

- a. Siemens has the appropriate financial, material, equipment, adequate capacity and personnel resources, including all required certifications, licenses and expertise necessary to meet all contractual requirements, including adequate workforce to meet multiple critical work schedules at once; and the ability to start projects on the commencement dates set by the City and to complete them within the allotted timeframe.

Financial	As a world leader in Intelligent Traffic Solutions, Siemens Industry, Intelligent Traffic Systems is uniquely qualified to implement a solution for Lighthouse Avenue in the City of Monterey. Siemens has been actively involved in ITS in the United States for over 40 years. Siemens worldwide revenues exceed \$100 billion dollars annually and we employ over 400,000 individuals globally.
Material	Siemens has sufficient finances and resources to procure the needed materials, as well as the large inventory of additional materials we keep on hand in our warehouses.
Equipment	Siemens maintains an extensive inventory of traffic signal equipment including controllers, cabinets, load switches, signal heads, poles, service cabinets and other miscellaneous parts. This inventory combined with our vast experience and testing facilities enable Siemens to repair or replace damaged equipment expeditiously and professionally. Numerous spare parts are stored in our California storage facility. Inventory levels are maintained in order to accommodate each individual Agency's needs.
Personnel	For this project the assigned Project Manager will be Goutham Lingannagari, who has managed multiple projects within CA. David Scott, our Regional Operations Manager will be providing daily oversight. Siemens has 52 locations in California. Additional personnel that may be needed beyond Siemens staff will be hired from Local Labor Union 234.
Licenses & Certifications	Siemens personnel as well as the Local Labor Union staff that will be utilized will possess the needed licenses and certifications to perform this type of work, as laid out in the RFB.
Expertise	At Siemens we employ only the finest Project Managers, Engineers, and Field Technicians. We pride ourselves on the high level of training, education and certification of all our team members. Customers expect their projects to be managed in an excellent, innovative and responsible way, and this applies to all of our projects from large multi-million dollar projects all the way to smaller turnkey projects. Our project management processes and certifications are models for project management and certifications around the globe. Professional project management is a vital success factor for Siemens.

Project Schedule	Siemens has prepared a detailed project schedule based upon the RFB and the revised timeline laid out in Appendix 3 of 150 days, with 100 days to substantial completion.
-------------------------	---

- b. Siemens has a satisfactory record of performance.
- c. Siemens has the ability to provide the needed bonding and to meet insurance requirements.
- d. Siemens has a good record of integrity, diligence, and professionalism.
- e. Siemens possesses the legal qualifications to contract with the City.
- f. Siemens will supply all information requested by the City in connection with the inquiry concerning responsibility.

PERFORMANCE BOND

BOND NO. 8244-77-48/9227233

PREMIUM: \$2,499.00

WHEREAS, The City of Monterey, (hereinafter designated as "Obligee") and Siemens Industry Inc. (hereinafter designated as "Principal") have entered into an agreement whereby principal agrees to install and complete certain designated public improvements, which said agreement, dated September 1, 2016, and identified as project Lighthouse Avenue Traffic Control System is hereby referred to and made a part hereof; and 37N1225.37N1444

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

Federal Insurance Company and
Fidelity and Deposit Company of

NOW, THEREFORE, We, the principal and Maryland as surety, are held and firmly bound into the hereinafter called "The Obligee," in the penal sum of Five Hundred Nine Thousand Twenty-Nine No/Cents dollars (\$ 509,029) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by county in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named, on

Siemens Industry Inc.

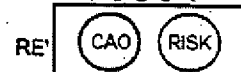
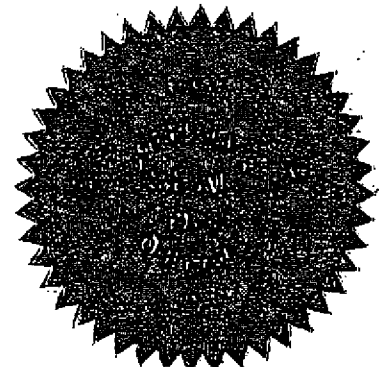
By: [Signature]
PRINCIPAL STEVEN TEAL, DIRECTOR OF SERVICE

By: [Signature]
PRINCIPAL MICHAEL HUTCHENS, OPERATIONS MANAGER

Federal Insurance Company and Fidelity and Deposit Company of Maryland

By: [Signature]
ATTORNEY-IN-FACT

Cynthia L. Choren, Attorney-In-Fact



ACKNOWLEDGMENT BY SURETY

STATE OF Missouri
City of St. Louis } ss.

On this 1st day of September, 2016, before me personally appeared Cynthia L. Choren, known to me to be the Attorney-in-Fact of Federal Insurance Company and Fidelity and Deposit Company of Maryland

_____ , the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

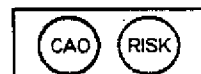
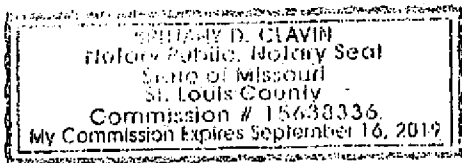
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the aforesaid County, the day and year in this certificate first above written.

Brittany D. Clavin

Brittany D. Clavin
Notary Public in the State of Missouri
County of St. Louis
Commission # 15638336

My Commission Expires: September 16, 2019

(Seal)





Chubb
Surety

POWER
OF
ATTORNEY

Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company

Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint Pamela A. Beelman, Cynthia L. Choren, Brittany D. Clavin, Joann R. Frank, Sandra L. Ham, Heidi A. Notheisen, Karen L. Roeder and Debra C. Schneider of St. Louis, Missouri

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations. In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 1st day of March, 2016.

Dawn M. Chloros
Dawn M. Chloros, Assistant Secretary

David B. Norris, Jr.
David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

ss.

County of Somerset

On this 1st day of March, 2016 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros, being by me duly sworn, did depose and say that she is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2318885
Commission Expires July 18, 2019

Katherine J. Adelaar
Notary Public

CERTIFICATION

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"Except as otherwise provided in these By-Laws or by law or as otherwise directed by the Board of Directors, the President or any Vice President shall be authorized to execute and deliver, in the name and on behalf of the Corporation, all agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and the seal of the Corporation, if appropriate, shall be affixed thereto by any of such officers or the Secretary or an Assistant Secretary. The Board of Directors, the President or any Vice President designated by the Board of Directors may authorize any other officer, employee or agent to execute and deliver, in the name and on behalf of the Corporation, agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and, if appropriate, to affix the seal of the Corporation thereto. The grant of such authority by the Board or any such officer may be general or confined to specific instances."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

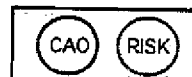
- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 1st day of September, 2016.



Dawn M. Chloros
Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903-3493 Fax (908) 903-3858 e-mail: surety@chubb.com



FEDERAL INSURANCE COMPANY

STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

DECEMBER 31, 2015

(in thousands of dollars)

<u>ASSETS</u>		<u>LIABILITIES AND SURPLUS TO POLICYHOLDERS</u>	
Cash and Short Term Investments.....	\$ 687,917	Outstanding Losses and Loss Expenses.....	\$ 12,174,848
United States Government, State and Municipal Bonds.....	9,544,097	Unearned Premiums.....	3,726,665
Other Bonds.....	4,491,238	Dividends Payable to Stockholder.....	1,400,000
Stocks.....	692,901	Ceded Reinsurance Premiums Payable.....	329,694
Other Invested Assets.....	<u>2,187,839</u>	Provision for Reinsurance.....	35,560
		Other Liabilities.....	<u>1,295,093</u>
TOTAL INVESTMENTS.....	<u>17,603,992</u>	TOTAL LIABILITIES.....	<u>18,961,860</u>
Investments in Affiliates:		Capital Stock.....	20,980
Chubb Investment Holdings, Inc.....	3,679,770	Paid-In Surplus.....	3,106,809
Pacific Indemnity Company.....	2,930,246	Unassigned Funds.....	<u>10,150,916</u>
Executive Risk Indemnity Inc.....	1,267,144		
Chubb Insurance Investment Holdings Ltd....	1,020,650		
CC Canada Holdings Ltd.....	590,955		
Great Northern Insurance Company.....	469,230		
Chubb Insurance Company of Australia Ltd.	404,845		
Vigilant Insurance Company.....	306,232		
Chubb European Investment Holdings SLP..	294,200		
Other Affiliates.....	666,480		
Premiums Receivable.....	1,659,749		
Other Assets.....	<u>1,447,072</u>		
TOTAL ADMITTED ASSETS.....	<u>\$ 32,240,565</u>	TOTAL LIABILITIES AND SURPLUS TO POLICYHOLDERS.....	<u>\$ 32,240,565</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners. At December 31, 2015, investments with a carrying value of \$546,611,273 were deposited with government authorities as required by law.

State, County & City of New York, - ss:

Dawn M. Chloros, Assistant Secretary of the Federal Insurance Company

being duly sworn, deposes and says that the foregoing Statement of Assets, Liabilities and Surplus to Policyholders of said Federal Insurance Company on December 31, 2015 is true and correct and is a true abstract of the Annual Statement of said Company as filed with the Secretary of the Treasury of the United States for the 12 months ending December 31, 2015.

Subscribed and sworn to before me
this March 11, 2016.

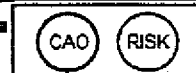
Jeanette Shipsey

Notary Public

JEANETTE SHIPSEY
Notary Public, State of New York
No. 02SH5074142
Qualified in Nassau County
Commission Expires March 10, 2019

Dawn M. Chloros

Assistant Secretary



ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by Thomas O. McClellan, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Cynthia L. Choren of St. Louis, Missouri, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed; any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 14th day of October, A.D. 2015.



ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

Thomas O. McClellan

Eric D. Barnes

By: Thomas O. McClellan
Vice President

By: Eric D. Barnes
Secretary

State of Maryland
County of Baltimore

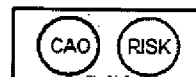
On this 14th day of October, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Thomas O. McClellan, Vice President and Eric D. Barnes, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn

By: Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

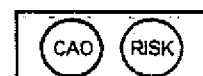
RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies,
this 1st day of September, 2016



Gerald F. Haley

By: Gerald F. Haley, Vice President



FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

Statement of Financial Condition As Of December 31, 2015

ASSETS

Bonds	\$ 142,878,497
Stocks	22,315,096
Cash and Short Term Investments	337,835
Reinsurance Recoverable	24,731,651
Other Accounts Receivable	19,935,844
TOTAL ADMITTED ASSETS	\$ 210,198,923

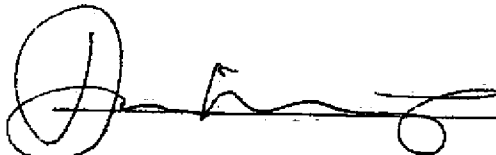
LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses	\$ 46,436
Ceded Reinsurance Premiums Payable	40,456,309
Securities Lending Collateral Liability	0
TOTAL LIABILITIES	\$ 40,502,745
Capital Stock, Paid Up	\$ 5,000,000
Surplus	164,696,178
Surplus as regards Policyholders	169,696,178
TOTAL	\$ 210,198,923

Securities carried at \$57,996,983 in the above statement are deposited with various states as required by law.

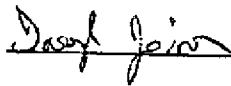
Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2015 would be \$212,137,795 and surplus as regards policyholders \$171,635,049.

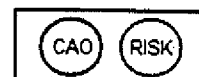
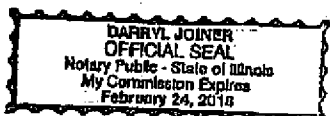
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2015.


Corporate Secretary

State of Illinois }
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.


Notary Public



CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1180

State of California

County of Riverside

On September 1st, 2016 before me, Candace Gallaher - Notary Public

personally appeared Steven Teal and Michael Hutchens

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Candace Gallaher



Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document:

Document Date: Number of Pages:

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer(s)

Signer's Name:

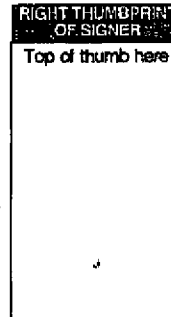
- Corporate Officer - Title(s):
Individual
Partner - Limited General
Attorney in Fact
Trustee
Guardian or Conservator
Other:



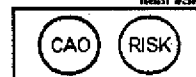
Signer Is Representing:

Signer's Name:

- Corporate Officer - Title(s):
Individual
Partner - Limited General
Attorney in Fact
Trustee
Guardian or Conservator
Other:



Signer Is Representing:



PAYMENT (LABOR AND MATERIALS) BOND

BOND NO.: 8244-77-48/9227233

KNOW ALL MEN/WOMEN BY THESE PRESENT that we, Siemens Industry Inc. as Principal (also referred to herein as "CONTRACTOR"), and Federal Insurance Company and Fidelity and Deposit Company of Maryland as Surety, are held and firmly bound unto City of Monterey, hereinafter called "OWNER," in the sum of Five Hundred Nine Thousand Twenty-Nine No/Cents Dollars (\$ 509,029.00), for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into the annexed Contract with the City of Monterey for the **LIGHTHOUSE AVENUE ADAPTIVE TRAFFIC CONTROL SYSTEM**, in accordance with OWNER's Call for Bids documents and Principal's Bid Dated September 1, 2016, and to which reference is hereby made for all particulars, and is required by said City of Monterey to give this bond in connection with the execution of said Contract;

NOW, THEREFORE, if said CONTRACTOR, its Subcontractors, its heirs, executors, administrators, successors, or assigns, shall fail to pay (a) for any materials, provisions, equipment, or other supplies used in, upon, for or about the performance of the WORK contracted to be done under the Contract, or (b) for any work or labor thereon of any kind contracted to be done under the Contract, or (c) for amounts due under the Unemployment Insurance Code with respect to work or labor performed pursuant to the Contract, or (d) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the CONTRACTOR and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to such work and labor, in each case, as required by the provisions of Sections 9550-9566 inclusive, of the Civil Code of the State of California and acts amendatory thereof, and sections of other codes of the State of California referred to therein and acts amendatory thereof, and provided that the persons, companies, corporations or other entities so furnishing said materials, provisions, provender, equipment, or other supplies, appliances, or power used in, upon, for, or about performance of the Work contracted to be executed or performed, or any person, company, corporation or entity renting or hiring implements or machinery or power for or contributing to said Work to be done, or any person who performs work or labor upon the same, or any person, company, corporation or entity who supplies both work and materials therefor, shall have complied with the provisions of said laws, then said Surety will pay in full the same in an amount not exceeding the sum hereinabove set forth and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee, as shall be fixed by the Court. This bond shall inure to the benefit of any and all persons named in Section 9100 of the Civil Code of the State of California so as to give a right of action to them or their assigns in any suit brought upon this bond.

PROVIDED, that any alterations in the WORK to be done or the materials to be furnished, or changes in the time of completion, which may be made pursuant to the terms of said Contract Documents, shall not in any way release said CONTRACTOR or said Surety thereunder, nor shall any extensions of time granted under the provisions of said Contract Documents release either said CONTRACTOR or said Surety, and notice of such alterations or extensions of the Agreement is hereby waived by said Surety.



IN WITNESS WHEREOF, the Principal and the Surety have executed this instrument in duplicate this

1st day of September, 2016

Federal Insurance Company and Fidelity and Deposit Company of Maryland

Siemens Industry Inc.

Surety

Principal

By: Cynthia L. Choren

By: [Signature]

Cynthia L. Choren, Attorney-in-Fact

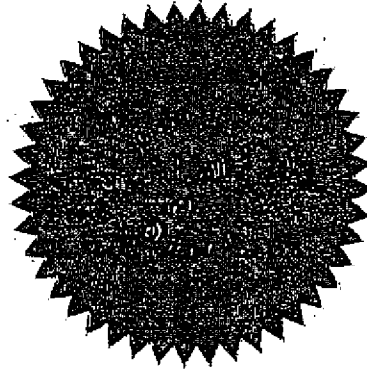
STEVEN TEAL, DIRECTOR OF SERVICE

Print Name

Print Name/Title

445 South Street, Morristown, NJ 07962

Address



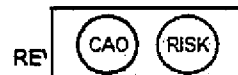
973) 401-5024

Telephone Number

973) 401-6380

FAX Telephone Number

NOTARIAL CERTIFICATE OF ATTORNEY IN FACT AND SEAL OF SURETY MUST BE ATTACHED.



ACKNOWLEDGMENT BY SURETY

STATE

OF

Missouri

City of

St. Louis

} ss.

On this 1st day of September, 2016, before me personally appeared Cynthia L. Choren, known to me to be the Attorney-in-Fact of Federal Insurance Company and Fidelity and Deposit Company of Maryland

the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

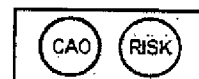
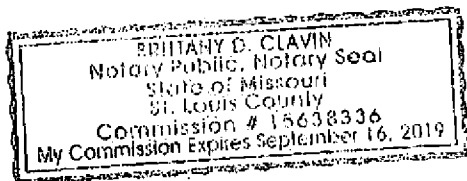
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the aforesaid County, the day and year in this certificate first above written.

Brittany D. Clavin

Brittany D. Clavin
Notary Public in the State of Missouri
County of St. Louis
Commission # 15638336

My Commission Expires: September 16, 2019

(Seal)





**Chubb
Surety**

**POWER
OF
ATTORNEY**

**Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company**

**Attn: Surety Department
15 Mountain View Road
Warren, NJ 07059**

Know All by These Presents, That **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, and **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, do each hereby constitute and appoint Pamela A. Beelman, Cynthia L. Choren, Brittany D. Clavin, Joann R. Frank, Sandra L. Ham, Heidi A. Notheisen, Karen L. Roider and Debra C. Schneider of St. Louis, Missouri

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations. In Witness Whereof, said **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** have each executed and attested these presents and affixed their corporate seals on this 1st day of **March, 2016**.

Dawn M. Chioros
Dawn M. Chioros, Assistant Secretary

David B. Norris, Jr.
David B. Norris, Jr., Vice President



STATE OF NEW JERSEY

County of Somerset

On this 1st day of **March, 2016** before me, a Notary Public of New Jersey, personally came Dawn M. Chioros, to me known to be Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY**, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chioros, being by me duly sworn, did depose and say that she is Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that she signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that she is acquainted with David B. Norris, Jr., and knows him to be Vice President of said Companies; and that the signature of David B. Norris, Jr., subscribed to said Power of Attorney is in the genuine handwriting of David B. Norris, Jr., and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2318685
Commission Expires July 16, 2019

Katherine J. Adelaar
Notary Public

CERTIFICATION

Extract from the By-Laws of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY**:

"Except as otherwise provided in these By-Laws or by law or as otherwise directed by the Board of Directors, the President or any Vice President shall be authorized to execute and deliver, in the name and on behalf of the Corporation, all agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and the seal of the Corporation, if appropriate, shall be affixed thereto by any of such officers or the Secretary or an Assistant Secretary. The Board of Directors, the President or any Vice President designated by the Board of Directors may authorize any other officer, employee or agent to execute and deliver, in the name and on behalf of the Corporation, agreements, bonds, contracts, deeds, mortgages, and other instruments, either for the Corporation's own account or in a fiduciary or other capacity, and, if appropriate, to affix the seal of the Corporation thereto. The grant of such authority by the Board or any such officer may be general or confined to specific instances."

I, Dawn M. Chioros, Assistant Secretary of **FEDERAL INSURANCE COMPANY**, **VIGILANT INSURANCE COMPANY**, and **PACIFIC INDEMNITY COMPANY** (the "Companies") do hereby certify that

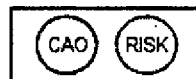
- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U.S. Treasury Department; further, Federal and Vigilant are licensed in the U.S. Virgin Islands, and Federal is licensed in Guam, Puerto Rico, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 1st day of September, 2016.



Dawn M. Chioros
Dawn M. Chioros, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903-3493 Fax (908) 903-3650 e-mail: surety@chubb.com



FEDERAL INSURANCE COMPANY

STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

DECEMBER 31, 2015

(In thousands of dollars)

<u>ASSETS</u>		<u>LIABILITIES AND SURPLUS TO POLICYHOLDERS</u>	
Cash and Short Term Investments.....	\$ 687,917	Outstanding Losses and Loss Expenses	\$ 12,174,848
United States Government, State and Municipal Bonds	9,544,097	Unearned Premiums.....	3,726,665
Other Bonds.....	4,491,238	Dividends Payable to Stockholder	1,400,000
Stocks	692,901	Ceded Reinsurance Premiums Payable.....	329,694
Other Invested Assets.....	<u>2,187,839</u>	Provision for Reinsurance	35,560
		Other Liabilities.....	<u>1,295,093</u>
TOTAL INVESTMENTS	<u>17,603,992</u>	TOTAL LIABILITIES	<u>18,961,860</u>
Investments in Affiliates:		Capital Stock.....	20,980
Chubb Investment Holdings, Inc.	3,679,770	Paid-In Surplus.....	3,106,809
Pacific Indemnity Company.....	2,930,246	Unassigned Funds	<u>10,150,916</u>
Executive Risk Indemnity Inc.....	1,267,144		
Chubb Insurance Investment Holdings Ltd....	1,020,650		
CC Canada Holdings Ltd.....	590,955		
Great Northern Insurance Company	469,230		
Chubb Insurance Company of Australia Ltd.	404,845		
Vigilant Insurance Company.....	306,232		
Chubb European Investment Holdings SLP ..	294,200		
Other Affiliates	566,480		
Premiums Receivable	1,659,749		
Other Assets	<u>1,447,072</u>		
TOTAL ADMITTED ASSETS	<u>\$ 32,240,565</u>	TOTAL LIABILITIES AND SURPLUS TO POLICYHOLDERS.....	<u>\$ 32,240,565</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners. At December 31, 2015, investments with a carrying value of \$546,811,273 were deposited with government authorities as required by law.

State, County & City of New York, — ss:

Dawn M. Chloros, Assistant Secretary _____ of the Federal Insurance Company

being duly sworn, deposes and says that the foregoing Statement of Assets, Liabilities and Surplus to Policyholders of said Federal Insurance Company on December 31, 2015 is true and correct and is a true abstract of the Annual Statement of said Company as filed with the Secretary of the Treasury of the United States for the 12 months ending December 31, 2015.

Subscribed and sworn to before me
this March 11, 2016.

Jeanette Shipsey

Notary Public

JEANETTE SHIPSEY
Notary Public, State of New York
No. 02SH5074142
Qualified in Nassau County
Commission Expires March 10, 2019

Dawn M. Chloros

Assistant Secretary



ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by Thomas O. McClellan, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Cynthia L. Choren of St. Louis, Missouri, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York, the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 14th day of October, A.D. 2015.



ATTEST:
ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

Thomas O. McClellan

Eric D. Barnes

By: Thomas O. McClellan
Vice President

By: Eric D. Barnes
Secretary

State of Maryland
County of Baltimore

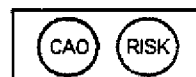
On this 14th day of October, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Thomas O. McClellan, Vice President and Eric D. Barnes, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.



Constance A. Dunn

By: Constance A. Dunn, Notary Public
My Commission Expires: July 9, 2019



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 1st day of September 2018



Gerald F. Haley

By: Gerald F. Haley, Vice President



FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

Statement of Financial Condition

As Of December 31, 2015

ASSETS

Bonds	\$ 142,878,497
Stocks	22,315,096
Cash and Short Term Investments	337,835
Reinsurance Recoverable	24,731,651
Other Accounts Receivable	19,935,844
TOTAL ADMITTED ASSETS	\$ 210,198,923

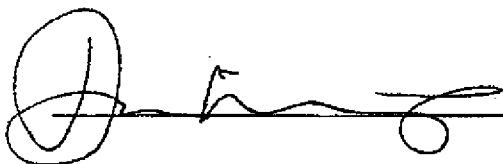
LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses	\$ 46,436
Ceded Reinsurance Premiums Payable	40,456,309
Securities Lending Collateral Liability	0
TOTAL LIABILITIES	\$ 40,502,745
Capital Stock, Paid Up	\$ 5,000,000
Surplus	164,696,178
Surplus as regards Policyholders	169,696,178
TOTAL	\$ 210,198,923

Securities carried at \$57,996,983 in the above statement are deposited with various states as required by law.

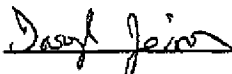
Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2015 would be \$212,137,795 and surplus as regards policyholders \$171,635,049.

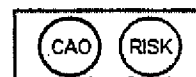
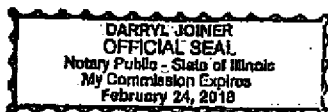
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2015.

 _____
Corporate Secretary

State of Illinois }
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2016.

 _____
Notary Public



CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California

County of Riverside

On September 1st 2014 before me, Candace Callaker - Notary Public

personally appeared Steven Teal

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Candace Callaker

Place Notary Seal Above

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Corporate Officer — Title(s): _____
- Individual
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

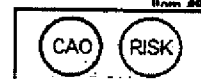
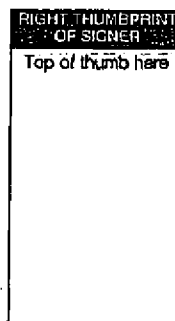
Signer is Representing: _____



Signer's Name: _____

- Corporate Officer — Title(s): _____
- Individual
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer is Representing: _____



NEIGHBORHOOD IMPROVEMENT PROGRAM		FISCAL YEAR: 2015/16
NEIGHBORHOOD: Monterey Vista	PROJECT TITLE: (MV-5) Via Chiquita Storm Drain Improvements Ph II	PROJECT CODE: 30N1220
TYPE OF WORK: Storm Drain	SCOPE OF WORK: Complete storm drain improvements along Via Chiquita between Herman and El Callejone.	TOTAL ESTIMATED PROJECT COST: \$90,000

FUNDING SUMMARY

	AMOUNT
Neighborhood Improvement Program Funding:	
Base Allocation:	\$ 85,000
Monterey Vista \$5,000	\$5,000
TOTAL:	\$ 90,000

PROJECT DESCRIPTION:
This will complete the funded storm drain improvements along Via Chiquita between Hermann Drive and El Callejone. The storm drain improvements include the installation of 12" storm drain line, slurry back fill and trench paving, one catch basin and modification of one existing drain inlet, earthwork and conform paving.



NEIGHBORHOOD IMPROVEMENT PROGRAM	FISCAL YEAR: 2012/13
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NEIGHBORHOOD: Monterey Vista	PROJECT TITLE: Sierra Vista Resurface/Drainage Improvements (MV-08)
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TYPE OF WORK: Construction - Street & Drainage	SCOPE OF WORK: Street Repair/Resurfacing Drainage Improvements	TOTAL ESTIMATED PROJECT COST: \$77,000
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FUNDING SUMMARY

	AMOUNT
NEIGHBORHOOD IMPROVEMENT PROGRAM POT \$	\$74,500
Base Allocation: Monterey Vista - \$2,500	\$2,500
TOTAL:	\$77,000

DESCRIPTION OF PROPOSED CONSTRUCTION:
 Street repair and resurfacing with cape seal on Sierra Vista between Monte Vista and Via Castanada. Pavement repair and road resurfacing to enhance the life of the existing pavement. Drainage channel improvements along 27, 31, and 32 Sierra Vista, to include adding AC berm in front of driveway at 32 Sierra Vista and AC swale on opposite side of street. By improving the drainage in this area, storm water will be conveyed down the street to the storm drain system.

