

THE CITY OF
POMONA

Public Works Department
City Engineer



CONTRACT DOCUMENTS
AND
SPECIFICATIONS
FOR

MAJOR STREET REHABILITATION-CITYWIDE (FY 13-14 TO FY 15-16);

PROJECT NO. 428-2590-XXXXX-68548

**PRIORITY IMPLEMENTATION FOR DOWNTOWN BICYCLE AND PEDESTRIAN
IMPROVEMENTS; PROJECT NO. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**

BIDS DUE: JUNE 8, 2017 AT 11:00 A.M.

City Hall, 505 So. Garey Ave., Box 660, Pomona, CA 91769 (909) 620-2261 Fax (909) 620-2269

Addendum 1

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PART 1

NOTICE INVITING BIDS

**CITY OF POMONA
NOTICE INVITING SEALED BIDS**

FOR

MAJOR STREET REHABILITATION-CITYWIDE (FY 13-14 TO FY 15-16);

PROJECT NO. 428-2590-XXXXX-68548

**PRIORITY IMPLEMENTATION FOR DOWNTOWN BICYCLE AND PEDESTRIAN
IMPROVEMENTS; PROJECT NO. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**

RECEIPT OF PROPOSALS: Sealed proposals will be received at the City's Clerk's Office, City Hall, Pomona, California, until **11:00 AM on June 8, 2017** for the furnishing of all plant, labor, materials, equipment and incidentals for the: "**Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**". It is the bidder's sole responsibility to see that the proposal is received in proper time. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened.

The words "**Bid: "Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135"** - to be opened on **11:00 AM, June 8, 2017**" shall appear on the envelope of each sealed bid and each sealed envelope shall be addressed to the City Clerk's Office, City Hall, Pomona, California. The proposals will be publicly opened and read in the City Clerk Department, City Hall, Pomona, California at **11:00 AM** on the aforementioned date.

Submittal Instructions:

Proposals shall be submitted in sealed envelopes and marked "**Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**". One (1) original proposal must be received in the City Clerk's Office before the time of **11:00 AM, on June 8, 2017**. Mail or deliver bids to: City of Pomona City Clerk Department, P.O. Box 660, 505 South Garey Ave. Pomona, CA 91769. The above time and date are fixed and extensions will not be granted. The City of Pomona does not recognize the U.S. Postal Service, FedEx, UPS or any other carrier as its agent for purposes of receiving proposals. All proposals received after the deadline shown will be rejected.

DESCRIPTION OF WORK: The work to be done consists of furnishing all materials, equipment, tools, labor and incidentals as required in the specifications and contract documents, for the following project(s):

"Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135".

POTENTIAL BIDDER REGISTRATION: Potential bidders must register with the City by providing their contact information: Name of Firm potentially bidding, complete Address, Phone Number, Name of Contact person, and the Specific Project "Major Street Rehabilitation-

Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135” they may wish to bid. This information shall be e-mailed to pwengineering@ci.pomona.ca.us (include “Potential Bidder” in subject line) and call (909) 620-2281 to verify receipt of same.

COMPLETION OF WORK:. All work to be done under this contract shall be completed within ~~one-hundred forty (140)~~ **one-hundred fifty (150) consecutive working days**, beginning on the date stipulated in the written "Notice to Proceed" issued by the City Engineer. In addition to the above working day requirements, the following work parts shall be completed within the stated durations:

1. Potholing for traffic signal foundations, 10 consecutive working days
2. Ordering/waiting for traffic signal equipment and other long lead items, ~~70~~ **80** consecutive working days measured from the end of the 10 consecutive working days for the completion of potholing.
3. Completion of an individual intersection as measured from the Contractor’s scheduled starting date at each intersection (not including potholing or utility coordination), after the “ordering/waiting” period, 35 consecutive working days.
4. Completion of all intersections after the “ordering/waiting” period, 60 consecutive working days.

ENGINEER’S ESTIMATE: \$2,500,000

OBTAINING CONTRACT DOCUMENTS: Specifications and all contract documents may be obtained on City’s website: <http://www.ci.pomona.ca.us/index.php/businesses/requests-for-bids-and-proposals/construction-bids> or at the office of the City Engineer, City Hall, Pomona, California, upon payment of **\$150.00** for each set (NON-REFUNDABLE). Add **\$30.00** if mailing is requested. Hard copies will not be available until after May 25, 2017.

PRE-BID INQUIRIES: Pre-Bid inquiries related to the Plans and Specifications must be submitted in writing to the City of Pomona, Engineering Department, 505 South Garey Avenue, Pomona, CA 91766, Telephone No. (909) 620-2281 or (909) 620-2282.

The contractor shall carefully examine this Contract and Specifications and any addenda that may be posted on the City’s website www.ci.pomona.ca.us. The contractor shall seek clarification of any ambiguity, conflict, omission or other error in this document in writing. If the answer materially affects this document, the information will be incorporated into an addendum and distributed via the City’s website. All addenda will be numbered in sequence, dated as of the date of issue, and posted. It shall be the contractor’s responsibility to check the City’s website to determine if any addenda have been posted prior to the bid opening.

To check for addenda:

- Visit the City’s website at www.ci.pomona.ca.us
- From the City Homepage, click on “Business”
- Click on “Current Bids & RFPs”, “Construction Bids”
- Download the RFP file or Addendum file, if applicable

If you encounter any technical problems, call the Public Works Dept., Engineering at - (909) 620-2281 or (909) 620-2282.

PROPOSAL GUARANTY: Each proposal must be accompanied by cash or by a cashier's or certified check or by a bid bond in the amount of **ten percent (10%)** of the amount of bid price payable to the City Clerk City of Pomona as a guarantee that the bidder, if his proposal is accepted, will promptly execute the contract, secure payment of workman's compensation insurance and furnish a satisfactory faithful performance bond in the amount of **one hundred percent (100%)** of the total bid price and a labor and material bond in the amount of **one hundred percent (100%)** of the total bid price.

WAGE RATES: Pursuant to applicable provisions of the Labor Code of the State of California, not less than the general prevailing rate of per diem wages including legal holidays, and overtime work for each craft or type of workman needed to execute the work contemplated under this agreement shall be paid to all workman employed on the work to be done according to this contract by the Contractor, or any Subcontractor and shall be deemed to include employer payments for health and welfare, pension, vacation and similar purposes. The City Engineer has on file the prevailing rate of per diem wages and will furnish same to be posted at the job site.

Furthermore, minimum wage rates for this project as predetermined by the Secretary of Labor (Federal) are set forth in the Special Provisions. If there is a difference between the minimum wage rates predetermined by the State of California for similar classifications of labor, the Contractor and his subcontractors shall pay not less than the higher wage rate. **THIS CONTRACT IS SUBJECT TO COMPLIANCE WITH DAVIS-BACON SB854, SB7, AND RELATED ACT REQUIREMENTS.**

CONTRACTOR'S LICENSE: At the time of Bid Opening, the Prime Contractor **must** have a valid California State Contractor's License with a classification of "A".

AFFIRMATIVE ACTION: The City of Pomona hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, minority owned and woman owned business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of sex, race, color, or national origin in consideration for an award.

UTILIZATION OF LOCAL BUSINESS AND LABOR: The Contractor is encouraged to make a good faith effort to subcontract with businesses located in the City of Pomona and to employ Pomona residents to perform the necessary work relating to this Capital Improvement Project. The goal of the City Council is to stimulate business within the City and to provide employment and training for local residents.

CITY'S RIGHTS RESERVED: The City of Pomona reserves the right to reject any and all proposals or bids or to waive any irregularities or informalities in any bids or in the bidding, should it deem this necessary for the public good, and further the city reserves the right to reject the bid any bidder who has been delinquent or unfaithful in any former contract with the City of Pomona. No bidder may withdraw his bid for a period of Ninety (90) calendar days after the opening of proposal thereof.

TRENCH AND PIPELINE SAFETY: If this project requires construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet or deeper, the bids must contain, as a bid item, adequate sheeting, shoring, and bracing, or other methods to assure worker safety.

ENVIRONMENTALLY SENSITIVE MATERIALS:

This Invitation for Bids **does not** specify locations of possible materials, such as a borrow pit or gravel bed, for use in the proposed construction project which would be subject to Section 1603 of the Fish and Game Code.

This Invitation for Bids **does** specify locations of possible materials, such as a borrow pit or gravel bed, for use in the proposed construction project and is subject to the following conditions imposed pursuant to Section 1603 of the Fish and Game Code:

PRE-BID MEETING:

A mandatory pre-bid meeting will be held at _____ am/pm on _____, 20____ at _____ (later than 5 days after publication of Notice Inviting Bids)

No mandatory pre-bid meeting is required.

Bond Requirements: The successful contractor will be required to file with the City at the time of execution of the contract, a Payment Bond (Labor and Materials Bond) in the amount of 100% of the bid amount and a Performance Security in the amount of 100% of the bid amount. Prior to acceptance of the work by the City, the contractor will be required to file a Warranty Security in the amount of 50% of the bid amount with the City. All bonds and securities must be on City provided forms.

Equivalent Securities: Pursuant to California Public Contract Code Section 22300, substitution of eligible and equivalent securities for any moneys withheld to ensure performance under the contract for the work to be performed will be permitted at the request and expense of the successful bidder.

CITY OF POMONA, CALIFORNIA

DATED: _____

BY: _____

PART 2

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

FORM OF PROPOSAL: All proposals under these specifications shall be submitted on the blank forms supplied herewith or which may be obtained at the **Office of the Purchasing Manager of the City of Pomona, 505 South Garey Avenue, Pomona, California.**

DELIVERY OF PROPOSALS: The proposal shall be delivered by the time and to the place stipulated in the "**Notice Inviting Sealed Bids**". It is the bidder's sole responsibility to see that the proposal is received in proper time. Any proposal received after the scheduled closing time for receipt of proposals will be returned to the bidder unopened. Bidders or their authorized agents are invited to be present.

MODIFICATIONS AND ALTERNATIVE PROPOSALS: Unauthorized conditions, limitations or provisos attached to a proposal will render it non-responsive and may cause its rejection. The complete proposal forms shall be without interlineations, alterations or erasures, unless each correction is suitably authenticated by affixing in the margin immediately opposite the correction, the initials of the person or persons signing the bid. Alternative proposals will not be considered unless called for. No oral, telegraphic or telephonic proposals or modifications will be considered.

WITHDRAWAL OF PROPOSAL: The proposal may be withdrawn upon request by the bidder without prejudice to himself prior to, but not after the time fixed for opening of bids, provided that the request is in writing, has been executed and notarized by the bidder or his duly authorized representative and is filed with the City Clerk. **No proposal may be withdrawn during the period of ninety (90) calendar days after the opening of proposals.**

PROPOSAL GUARANTY: Each proposal shall be accompanied by cash or a cashier's or certified check or by a bid bond in the amount of not less than **ten percent (10%)** of the amount named in the proposal. Said check or bond shall be made payable to the City Clerk City of Pomona and shall be given as a guarantee that the bidder, if awarded the work, will enter into a contract within **fifteen (15) calendar days** after written notice of the award of the contract and will furnish the necessary bonds as hereinafter provided. In case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be forfeited to the City. No bidder's bond will be accepted unless it conforms substantially to the form furnished by the City, which is bound herein, and is properly filled out and executed.

DISCREPANCIES IN PROPOSALS: If the unit price and the total amount named by a Bidder for any bid item are not in agreement, the unit price shall be considered as representing the Bidders intention, and the totals will be corrected by the Engineer to conform thereto. The estimated quantities are for the purpose of comparison of bids only.

COMPETENCY OF BIDDERS: In selecting the lowest responsible bidder, consideration will be given not only to the financial standing but also to the general competency of the bidder for the performance of the work covered by the proposal. To this end, each proposal shall be supported by a statement of the bidder's experience on the form entitled "**Information Required of Bidders**" bound herein. **BIDDERS MUST MEET THE MINIMUM EXPERIENCE REQUIREMENTS CONTAINED IN THE Information Required of Bidders.** No proposal for this work will be accepted from a Contractor who is not licensed in accordance with the laws of the State of California under applicable provisions of the Business and Professions Code. The Contractor will include the Contractor's license number, license classification, and license expiration date on the form furnished herein entitled "**Contractor License Affidavit**". The licensing requirements for Contractors shall also apply to Subcontractors.

BIDDER'S EXAMINATION OF SITE: Each bidder shall examine carefully the site of the proposed work and the contract documents herein. It will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered; as to the character, quality and quantity of the materials to be furnished; and as to the requirements of the contract, specifications and drawings. The name of the individual who examined the site of the work and the date of such examination shall be stated in the form entitled "**Information Required of Bidders**" in the space provided therefore.

DISQUALIFICATION OF BIDDERS: More than one proposal from an individual, firm partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is reason for believing that collusion exists among the bidders, all bids will be rejected and none of the participants in such collusion will be considered in future proposals.

The Bidder agrees, in submitting this Bid, to perform, with its own organization, work amounting to at least fifty percent (50%) of the bid amount except that any designated "specialty item" may be performed by subcontract and may be deducted from the bid amount before computing the amount of work required to be performed by the Bidder. If the Bidder, after computing the amount of work required, fails to meet at least fifty percent (50%) of the amount of work required with its own forces, the Bid will be considered non-responsive and will be rejected with no further consideration.

RETURN OF PROPOSAL GUARANTIES: Within fifteen (15) calendar days after written notice of the award of the contract, the City will return the proposal guaranties accompanying each of the proposals that are not to be considered in making the award. All other proposal guaranties will be held until the contract has been finally executed. They will then be returned to the respective bidders whose proposals they accompany.

ALTERNATES: The Contract will be awarded to the lowest responsible bidder based on the base bid schedule A. At the election of the governing board the alternate bid schedule, or portions of the alternate bid schedule, may be added to the base bid contract upon award of the contract to the lowest responsible bidder.

AWARD PROCESS: Once all Bids are opened and reviewed to determine the APPARENT lowest responsive and responsible Bidder, the City Council may award the contract. Within 48 hours after Award of Contract by the City Council, the apparent successful Bidder will be sent a written Notice of Award and a **Conditional Notice to Proceed (Conditional NTP)**, to begin preparing the following documents: (1) the Performance Bond; (2) the Payment (Labor and Materials) Bond; (3) the required insurance certificates and endorsements; (4) Shop drawings and submittals, (5) construction schedule; (6) Traffic control plans; (7) Storage yard with yard agreement for use between contractor and yard owner; and (8) Haul routes. The Bidder will have fifteen (15) calendar days after written notice of the award of the contract to supply the City with all of the required documents and certifications listed above. Upon City Engineer acceptance and approval of the required documents and certifications listed in Conditional NTP, the City may issue a **Full Notice to Proceed** to commence work to the successful Bidder.

The Contractor shall not mobilize until the Full NTP is issued by the City.

The duration of the **Conditional NTP** period is planned to span one month or less; however, the review, revise and submit cycle is repeated until all the submittal is approved and accepted to the City. The City shall review submissions by the Contractor and return them to the Contractor with approvals or requests

for revisions within seven (7) calendar days. The Contractor shall submit revisions requested by the City within seven (7) calendar days of receipt of the request for revision. The Conditional NTP period shall not exceed forty-five (45) calendar days. Contractor shall make every effort to reduce and minimize the timeframes above.

FAILURE TO SUCCESSFULLY PREPARE THE REQUIRED SUBMITTALS: Failure to submit the required submittals within the times specified and obtain City approval of submittals which conform to the requirements of the Plans and Specifications will be deemed a material breach of the contract, and may result in termination of the contract and award to the second lowest bidder or rebidding of the contract.

AWARD OF CONTRACT: ~~Bids will be compared on the basis of the lowest possible cost and the contract, if awarded, will be awarded to a responsible bidder whose proposal complies with the requirements of these specifications (proposal must also be responsive). The award, if made, will be made within ninety (90) calendar days after the opening of the proposals, provided that the award may be made after said period if the successful bidder shall not have given the City written notice of the withdrawal of his bid.~~ **Contractor bids received will be compared based upon the lowest combined Sum Total of: Project Base bid and All listed Additive Alternates. The construction contract if awarded will, at the discretion of the City Council, include the Base bid, and may include one or more Additive Alternates or portion thereof as funds are available. Submittals not including all bid unit prices for all Additive Alternates will be deemed non-responsive.** The Contract, if awarded, will be awarded to the lowest responsible and responsive bidder whose proposal complies with the requirements of these specifications. The award, if made, will be made within **ninety (90) calendar days** after the opening of the proposals, provided that the award may be made after said period if the successful bidder shall not have given the City written notice of the withdrawal of his bid.

EXECUTION OF CONTRACT: The bidder to whom award is made shall execute a written contract with the City on the form agreement provided, and shall secure all insurance and bonds as herein provided within **fifteen (15) calendar days** after written notice of the award of the contract. Failure or refusal to enter into a contract as herein provided, or to conform to any of the stipulated requirements in connection therewith shall be just cause for the annulment of the award and the forfeiture of the proposal guaranty.

If the successful bidder refuses or fails to execute the contract or provide the required submittals, the City may award the contract to the second apparent lowest responsive and responsible bidder. If the second apparent lowest responsive and responsible bidder refuses or fails to execute the contract or provide the required submittals, the City may award the contract to the third apparent lowest responsive and responsible bidder. On the failure or refusal of such second or third apparent lowest responsive and responsible bidder to execute the contract, such bidder's guaranty shall be likewise forfeited to the City. The project may then be re-advertised.

INSURANCE AND BONDS: The Contractor shall not commence work under this contract until he has secured all insurance and bonds required under the Public Works Contract nor shall he allow any Subcontractor to commence work on this contract until all similar insurance and bonds required of the Subcontractor have been obtained, and the Full Notice to Proceed has been issued by the City.

EVIDENCE OF RESPONSIBILITY: Upon the request of the City, a bidder whose bid is under consideration for the award of the contract shall submit promptly to the City satisfactory evidence showing the bidder's financial resources, his construction experience and his organization and plant facilities available for the performance of the contract.

LISTING OF SUBCONTRACTORS: Each bidder shall submit a list of the proposed Subcontractors on this project as required by the Subletting and Subcontracting Fair Practice Act (Government Code Section 4100 and following). Forms for this purpose are furnished herein entitled "**Information Required of Bidders**".

EMPLOYMENT OF APPRENTICES: Attention is directed to the provisions in Sections 1777.5 and 1777.6 of the California Labor Code concerning employment of apprentices by the Contractor or any Subcontractor under him. The Contractor and any Subcontractor under him shall comply with the requirements of said sections in the employment of apprentices; however, the Contractor shall have full responsibility for compliance with said Labor Code sections for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

WAGE RATES: The Contractor and/or Subcontractor shall pay wages at rates not less than those indicated in the "**Notice Inviting Sealed Bids**" section of these specifications.

SAFETY PERMIT: The City will not perform safety inspection for this project. Particular attention is called to Subsection 7-10.4.1 of the Standard Specifications for Public Works Construction, which requires compliance with orders issued by the California State Division of Industrial Safety. The Contractor shall secure all applicable permits for excavation and trenching from the Division of Industrial Safety and shall file a copy of such permit with the City Engineer prior to commencement of work.

SUBMITTAL OF SUBSTITUTIONS: The Contractor must submit to the City Engineer within ten (10) working days from the date of bid opening all requests for substitution of an Approved Equal for materials listed or specified in the contract documents and specifications. The Contractor must include with the request documentation to substantiate said claim, i.e. specifications, detailed drawings and/or technical data.

BIDDER'S QUALIFICATION STATEMENT AND QUESTIONNAIRE: The City reserves the right, after reviewing the qualification statements, to award a contract to the "Responsive and Lowest Responsible Bidder" as defined by Pomona City Code Sec-2-961. In determining the "Responsive and Lowest Responsible Bidder", consideration will be determined by consideration of the following factors:

- (1) The quality, availability and suitability of the supplies, equipment or services to the particular use required.
- (2) The ability, capacity and skill of the bidder to perform the service required.
- (3) Whether the bidder has the financial resources and facilities to perform or provide the service promptly, or within the time specified, without delay or interference.
- (4) The character, integrity, reputation, judgment, experience and efficiency of the bidder.
- (5) The bidder's record of performance or previous contracts or services, including compliance by the bidder with laws and ordinances relating to such contracts or services.
- (6) The ability of the bidder to provide future maintenance and service for the use of the equipment or materials to be purchased.

(7) The scope of conditions attached to the bid by the bidder.

Contractors, or officers thereof, previously debarred from public agency bidding, are deemed non – responsible.

OTHER PERMITS, FEES AND LICENSES: The Contractor shall, prior to the start of construction, obtain, pay, and comply with all necessary permits as required as the result of its work, including but not limited to the permit(s) described herein and as attached in the appendix .

In addition to the requirements above noted, the Contractor **shall possess a valid City of Pomona business license** at the time of application for the Construction Permit and for the duration of the contract. The fee for said business license shall be based upon the total amount bid for the contract in accordance with Chapter 14 of the Pomona City Code. Amount of fee may be obtained from the City of Pomona, Finance Department, Revenue Management Division, Business License Unit at (909) 620-2292.

DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION: Under California Labor Code section 1771.1, as amended by SB 854, unless registered with the **Department of Industrial Relations (DIR)**, a contractor may not be, nor be listed as a subcontractor, for any bid proposal submitted for public works project on or after **April 1, 2015**.

Beginning July 1, 2014, a contractor or subcontractor must register with DIR, pay and initial nonrefundable registration fee, and meet certain eligibility requirements. A registered public work contractor must:

- (1) Maintain worker's compensation coverage for all employees;
- (2) Only hire subcontractors who are also registered public works contractors;
- (3) Hold a Contractor State License Board license, if required for their trade;
- (4) Not be debarred from working on public works by the State or Federal Government; and
- (5) Have no delinquent wage or penalty assessments due to any enforcement agency or employee.

PART 3

BIDDER'S PROPOSAL

PROPOSAL FORM

FIRM NAME _____

ADDRESS _____

TELEPHONE _____

FAX NUMBER _____

FOR

MAJOR STREET REHABILITATION-CITYWIDE (FY 13-14 TO FY 15-16);

PROJECT NO. 428-2590-XXXXX-68548

**PRIORITY IMPLEMENTATION FOR DOWNTOWN BICYCLE AND PEDESTRIAN
IMPROVEMENTS; PROJECT NO. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**

FOR

CITY OF POMONA

POMONA, CALIFORNIA

(One copy shall be filled in and submitted as the
bid; the other shall be the bidder's file copy.)

PROPOSAL
FOR
MAJOR STREET REHABILITATION-CITYWIDE (FY 13-14 TO FY 15-16);
PROJECT NO. 428-2590-XXXXX-68548
PRIORITY IMPLEMENTATION FOR DOWNTOWN BICYCLE AND PEDESTRIAN
IMPROVEMENTS; PROJECT NO. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

TO THE HONORABLE MAYOR AND
CITY COUNCIL OF THE CITY OF POMONA

In compliance with the annexed "Notice Inviting Sealed Bids", the undersigned hereby proposes and agrees to perform all the work and improvements therein described, and to furnish all labor and materials, equipment and incident insurance necessary therefore in accordance with the specifications therefore, known as **"Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135"**, which are on file in the office of the City Engineer of the City of Pomona. The undersigned agrees to perform the work and improvements therein mentioned to the satisfaction of and under the supervision of the City Engineer of the City of Pomona, duly appointed for said work in the matter of the construction and installation of **"Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135"**, as designated on the specifications known as **"Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135"**, on file in the office of the City Engineer of the City of Pomona, and further agrees to enter into a contract therefore in the time, form and manner provided by law at the following prices.

Each line item bid shall contain all costs and expenses for the work described in the same numbered bid item in the Technical Provisions of the Contract Documents.

BASE BID SCHEDULE

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|---------------------------|--|-----------------|-------------------|--------------------|
| CONTRACT BID ITEMS | | | | |
| 1. | Mobilization, including Quality Assurance Plan Compliance (Bid Price Shall be 2% of the Total Base Bid) | 1 LS | \$ _____ | \$ _____ |
| 2. | Construction Survey & Monument Preservation | 1 LS | \$ _____ | \$ _____ |
| 3. | NPDES/Water Pollution Control | 1 LS | \$ _____ | \$ _____ |
| 4. | Project Signs | 16 EA | \$ _____ | \$ _____ |
| 5. | Caltrans Encroachment Permitting – Foothill Boulevard SR-66 | 1 LS | \$ _____ | \$ _____ |
| 6. | Traffic Control & Electronic Message Signs | 1 LS | \$ _____ | \$ _____ |
| 7. | Punch List (Bid Price Shall be 2% of the Total Base Bid) | 1 LS | \$ _____ | \$ _____ |
| 8. | Cold Plane Existing AC Pavement 1.5” per Detail Sheet 2 of Plans | 4,800 SY | \$ _____ | \$ _____ |
| 9. | Asphalt Rubber Hot Mix (ARHM-GG-C PG 64-16) | 750 TON | \$ _____ | \$ _____ |
| 10. | Dense Graded Asphalt Concrete (DGAC) Pavement (Type B PG 70-10) (10% Max. RAP) | 1,250 TON | \$ _____ | \$ _____ |
| 11. | Slurry Seal – Type I (CQS-1h), Including Crack Seal & Weed Abate | 2,000 SY | \$ _____ | \$ _____ |
| 12. | Sawcut & Remove Ex. and Construct PCC Driveway per SPPWC Std. Plan No. 110-2 (Type and Thickness per Plan) over 6” CMB | 1,150 SF | \$ _____ | \$ _____ |
| 13. | Sawcut & Remove Ex. and Construct PCC Curb & Gutter Type “D” (24”) per City of Pomona Std. No. A-3-64 (Modified to Variable Curb Face) | 1,575 SF | \$ _____ | \$ _____ |
| 14. | Sawcut & Remove Ex. and Construct PCC Curb & Gutter Type “D” (18”) per City of Pomona Std. No. A-3-64 (Modified to Variable Curb Face) | 160 LF | \$ _____ | \$ _____ |

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|------|---|-----------|------------|-------------|
| 15. | Sawcut & Remove Ex. and Construct New PCC Curb & Gutter per Caltrans Std. Plan No. A87A Type "A2-8" (Modified to Variable Curb Face) | 40 LF | \$ _____ | \$ _____ |
| 16. | Sawcut and Remove Ex. and construct PCC Median Island per Detail on Sheet 3 of 32 | 20 SF | \$ _____ | \$ _____ |
| 17. | Sawcut & Remove Ex. and Construct New 4" PCC Sidewalk per City of Pomona Std. Nos. A-7-02, A-7-61 & A-7-66 | 15,000 SF | \$ _____ | \$ _____ |
| 18. | Sawcut & Remove Ex. and Construct New 4" PCC Sidewalk per Caltrans Std. Plan No. A88A | 440 SF | \$ _____ | \$ _____ |
| 19. | Sawcut & Remove Ex. and Construct PCC Curb Ramp per SPPWC Std. Plan No. 111-5, with Retaining Curb & Detectable Warning Devices per Federal & State ADA Guidelines (Case & Type per Plan) | 15 EA | \$ _____ | \$ _____ |
| 20. | Sawcut & Remove Ex. and Construct PCC Curb Ramp per Caltrans Std. Plan No. A88A Case per Plan | 25 EA | \$ _____ | \$ _____ |
| 21. | Sawcut & Remove Ex. and Construct PCC Cross Gutter per City of Pomona Std. Plan No. A-4-74 over 6" CMB | 2,950 SF | \$ _____ | \$ _____ |
| 22. | Sawcut & Remove Ex. and Construct PCC Cross Gutter per SPPWC Std. Plan No. 123-2 over 6" CMB | 400 SF | \$ _____ | \$ _____ |
| 23. | Construct Local Depression per SPPWC Std. Plan No. 313-3 and per Detail on Plans | 70 SF | \$ _____ | \$ _____ |
| 24. | Construct 9" PCC Pavement over Compacted Native (95%) | 1,700 SF | \$ _____ | \$ _____ |
| 25. | Sawcut and Remove Ex. and construct PCC Bus Pad per Pomona Std. No. A-31-10 | 220 SF | \$ _____ | \$ _____ |
| 26. | Adjust Well Monument Frame & Cover to Grade per City and Caltrans Requirements | 1 EA | \$ _____ | \$ _____ |
| 27. | Remove & Replace Ex. Electric or Street Light Pull Box with New Traffic Rated Pull Box & Adjust to Grade | 30 EA | \$ _____ | \$ _____ |

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|-------------|---|-----------------|-------------------|--------------------|
| 28. | Remove & Replace Ex. Water Meter Box and Cover with New Water Meter Box and Cover & Adjust to Grade | 3 EA | \$ _____ | \$ _____ |
| 29. | Remove & Replace Ex. Water Valve Can & Cover with New Water Valve Can & Cover & Adjust to Grade per City of Pomona Water Std. No. 6 (Double Adjust) | 25 EA | \$ _____ | \$ _____ |
| 30. | Install and Remove Fire Hydrant | 2 EA | \$ _____ | \$ _____ |
| 31. | Adjust Sewer or Storm Drain Manhole Frame & Cover to Grade per City of Pomona Std. No. B-14-68 (Double Adjust) | 3 EA | \$ _____ | \$ _____ |
| 32. | Install Curb Drain per SPPWC Std. Plan No. 150-3 | 3 EA | \$ _____ | \$ _____ |
| 33. | Install Parkway Drain per SPPWC Std. Plan No. 151-2 | 1 EA | \$ _____ | \$ _____ |
| 34. | Over-excavation at Bulbouts/Sidewalk Planters | 1 LS | \$ _____ | \$ _____ |
| 35. | Furnish & Install Imported Class A Topsoil | 75 CY | \$ _____ | \$ _____ |
| 36. | Furnish & Install Arizona River Rock (Mortared) per Plans | 1 LS | \$ _____ | \$ _____ |
| 37. | Furnish & Install Gravel Mulch per Plans | 1 LS | \$ _____ | \$ _____ |
| 38. | Furnish & Install Boulders per Plans | 1 LS | \$ _____ | \$ _____ |
| 39. | Furnish & Install Irrigation System per Plans | 1 LS | \$ _____ | \$ _____ |
| 40. | Furnish & Install 5 Gallon Shrubs | 233 EA | \$ _____ | \$ _____ |
| 41. | Furnish & Perform 90 Day Landscape Establishment | 1 LS | \$ _____ | \$ _____ |
| 42. | Furnish and Install Permeable Concrete Pavers | 750 SF | \$ _____ | \$ _____ |
| 43. | Traffic Signal Modification – Garey Avenue & Foothill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| 44. | Traffic Signal Modification – Garey Avenue & Bonita Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| 45. | Traffic Signal Modification – Garey Avenue & Arrow Highway Intersection | 1 LS | \$ _____ | \$ _____ |

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|-------------|--|-----------------|-------------------|--------------------|
| 46. | Traffic Signal Modification – Garey Avenue & Alvarado Street Intersection | 1 LS | \$ _____ | \$ _____ |
| 47. | Traffic Signal Modification – Holt Avenue & Hamilton Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| 48. | Traffic Signal Modification – Holt Avenue & Towne Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| 49. | Traffic Signal Modification – Holt Avenue & San Antonio Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| 50. | Traffic Signal Modification – San Bernardino Avenue & Indian Hill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| 51. | Furnish & Install Type D or E Traffic Detector Loop and Replace DLC | 131 EA | \$ _____ | \$ _____ |
| 52. | Traffic Signing, Thermoplastic Striping, Markings & Raised Pavement Markers at All Intersections | 1 LS | \$ _____ | \$ _____ |
| 53. | Adjust Existing Bench to Grade | 1 EA | _____ | _____ |

TOTAL BASE BID AMOUNT: \$ _____

TOTAL BASE BID AMOUNT IN WORDS:

ADDITIVE ALTERNATIVE BID SCHEDULE

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|---------------------------|--|-----------------|-------------------|--------------------|
| CONTRACT BID ITEMS | | | | |
| A-1. | Video Detection System – Holt Avenue & Hamilton Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-2. | Video Detection System – Holt Avenue & San Antonio Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-3. | Video Detection System – San Bernardino Avenue & Indian Hill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-4. | Accessible Pedestrian Signal System (APS) – Holt Avenue & Hamilton Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-5. | Accessible Pedestrian Signal System (APS) – Holt Avenue & Towne Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-6. | Accessible Pedestrian Signal System (APS) – Holt Avenue & San Antonio Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-7. | Accessible Pedestrian Signal System (APS) – San Bernardino Avenue & Indian Hill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-8. | LED Luminaires – Holt Avenue & Hamilton Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-9. | LED Luminaires – Holt Avenue & Towne Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-10. | LED Luminaires – Holt Avenue & San Antonio Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-11. | LED Luminaires – San Bernardino Avenue & Indian Hill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-12. | DEDUCT - Furnish & Install Type D or E Traffic Detector Loop | 70 EA | \$ _____ | \$ _____ |
| A-13. | Furnish & Install 2070E ATC controller with Omni EX– Holt Avenue & Hamilton Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-14. | Furnish & Install 2070E ATC controller with Omni EX – Holt Avenue & San Antonio Avenue Intersection | 1 LS | \$ _____ | \$ _____ |

Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16);

Project No. 428-2590-XXXXX-68548

Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135

| ITEM | DESCRIPTION | QUANTITY | UNIT PRICE | TOTAL PRICE |
|-------|---|------------------------------|------------|-------------|
| A-15. | Furnish & Install 2070E ATC controller with Omni EX – Holt Avenue & Towne Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-16. | Furnish & Install 2070E ATC controller with Omni EX – San Bernardino Avenue & Indian Hill Boulevard Intersection | 1 LS | \$ _____ | \$ _____ |
| A-17. | Furnish & Install 2070E ATC controller with Omni EX – Garey Avenue & Bonita Avenue Intersection | 1 LS | \$ _____ | \$ _____ |
| A-18. | Furnish & Install 2070E ATC controller with Omni EX – Garey Avenue & Arrow Highway Intersection | 1 LS | \$ _____ | \$ _____ |
| A-19. | Furnish & Install 2070E ATC controller with Omni EX – Garey Avenue & Alvarado Street Intersection | 1 LS | \$ _____ | \$ _____ |
| A-20. | Full Depth Pavement Repair (Remove and Replace) 6” min AC with ^{3/4”} mix <u>Dense Graded Asphalt Concrete (DGAC) Pavement (Type B PG 70-10) (10% Max. RAP), as-directed per the Engineer to be split equally among the 8 intersections</u> | 800 <u>1,600</u> Tons | \$ _____ | \$ _____ |

TOTAL ADDITIVE ALTERNATIVE BID AMOUNT: \$ _____

TOTAL ADDITIVE ALTERNATIVE BID AMOUNT IN WORDS:

PROPOSAL BID SECURITY

BIDDER'S GUARANTY: Attached is bidder's bond, certified check or Cashier's Check No. _____ of the _____ Bank, for \$ _____ payable to the **City Clerk of the City of Pomona, California**, which is not less than ten percent (10%) of this bid, and which is given as a guarantee that the undersigned will enter into the contract, if awarded to the undersigned. The undersigned further agrees that in case of default in executing the required contract with the necessary bonds and submittals, within the time limits specified, said bond or check and the money payable therein shall be forfeited to and become the property of the City of Pomona, California.

The Council of the City of Pomona reserves the right to reject any and all bids.

The undersigned further agrees, in case of award, to execute the contract and provide all submittals required for the within described work and improvements, within **fifteen (15) calendar days** after written notice of the award of the contract. All work to be done under this contract shall be completed within ~~one hundred forty (140)~~ **one hundred fifty (150) consecutive working days**, beginning on the date stipulated in the written Notice to Proceed issued by the City Engineer. In addition to the above working day requirements, the following work parts shall be completed within the stated durations:

1. Potholing for traffic signal foundations, 10 consecutive working days
2. Ordering/waiting for traffic signal equipment and other long lead items, ~~70~~ **80** consecutive working days measured from the end of the 10 consecutive working days for the completion of potholing.
3. Completion of an individual intersection as measured from the Contractor's scheduled starting date at each intersection (not including potholing or utility coordination), after the "ordering/waiting" period, 35 consecutive working days.
4. Completion of all intersections after the "ordering/waiting" period, 60 consecutive working days.

The bid is submitted in response to Notice Inviting Sealed Bids attached hereto, and pursuant to all of the proceedings of the Council of the City of Pomona heretofore had and taken to date.

The undersigned hereby certifies that he/she has received addenda number(s) ____, ____, ____, ____, ____, and that this bid includes the cost of all additional work specified thereon.

The names of all persons, firms and corporations interested in the foregoing Proposal as principals are as follows:

The undersigned shall satisfy the Council of the City of Pomona of their ability, experience,

qualifications, and resources to perform the contract for the proposed work and improvements in accordance with the requirements of the Contract Documents.

Dated _____

Signature of Bidder

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California, each bidder shall provide: (a) the name, ~~and~~ the location of the place of business, **and California Contractor License Number** and (b) the work to be performed by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If no subcontractor is specified, for a portion of the work, or if more than one subcontractor is specified for the same portion of Work, to be performed under the Contract in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater if the work involves streets or highways, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that Work, and that it shall perform that portion itself.

| Work To Be Performed: | Subcontractor and License No. | Location of Business | % of the Work |
|------------------------------|--------------------------------------|-----------------------------|----------------------|
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The total percentage of the work performed by all subcontractors shall not exceed fifty percent (50%) of the total bid amount.

Name of Bidder _____
 Signature _____
 Name and Title _____
 Date _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE _____ **as PRINCIPAL**, and _____ **as SURETY**, are held and firmly bound unto the **CITY OF POMONA, CALIFORNIA**, hereinafter referred to as the "**City**", in the sum of ten percent (10%) of the total amount of the bid of the Principal above named, submitted by said Principal to said City, for the work described below, for payment of which sum in lawful money of the United States of America, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

In no case shall the liability of the surety hereunder exceed the sum of \$ _____.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that whereas, said Principal has submitted the same mentioned bid to said City, for construction of work under the City's specification entitled "**Major Street Rehabilitation-Citywide (FY 13-14 to FY 15-16); Project No. 428-2590-XXXX-68548, Priority Implementation for Downtown Bicycle and Pedestrian Improvements; Project No. ATPL-5070 (032) (ATP01-07-127S) LA0G1135**", for which bids are to be opened in the City Engineer's office, City Hall of said City at **11:00 AM on June 8, 2017**.

NOW, THEREFORE, if said Principal is awarded the contract, and within the time and manner required under the heading "**Instructions to Bidders**", after the prescribed forms are presented to him for signature, enters into a written contract, in the form of agreement bound herein, in accordance with the bid, submits and obtains City approval of required submittals, and files the two (2) bonds with said City, one to guarantee faithful performance and the other to guarantee payment for labor and materials, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect.

In the event suit is brought upon this bond by the Obligee and judgement is recovered, said Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the Court.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

Principal

Surety

By: _____

(SEAL)

BID BOND

ACKNOWLEDGMENT OF SURETY

STATE OF _____)
COUNTY OF _____)ss.

On this _____ day of _____, **20**____, **A.D.**, _____ personally appeared before me, a

(Notary Public, Judge or Other Officer)

in and for _____ **County, State of** _____ known to me to be the _____ of the corporation that executed the foregoing instrument and, upon oath, did depose that he is the officer of said corporation as above designated; that he is acquainted with the seal of said corporation and the seal affixed to said instrument is the corporate seal of said corporation; that the signatures to said instrument were made by officers of said corporation as indicated after said signatures; and that the said corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

(Notary Public, Judge or Other Officer)

INFORMATION REQUIRED OF BIDDERS

CONTRACTOR LICENSE AFFIDAVIT
(To Be Executed By Bidder and Submitted With Bid)

STATE OF _____)
COUNTY OF _____) ss.

_____, being first duly sworn, deposes
NAME
and says that he or she is _____
TITLE
of _____, the party
NAME OF FIRM

making the foregoing bid, is a licensed Contractor, or a duly authorized partner of a Joint Venture which holds a license as a Partnership, or is a duly authorized principle and/or representative of a Corporation which holds a license as a Corporation and that he or she understands that the information shown below shall be included with the bid, and understands that any bid not containing this information, or if this information is subsequently proven to be false, shall be considered non-responsive and shall be rejected by the City of Pomona.

Contractor's State License Number and Classification

License Expiration Date

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.
Subscribed at:

_____, _____
City and County State

on _____, _____
Date

NOTARY TO AFFIX
SEAL AND

CERTIFICATE OF
ACKNOWLEDGMENT

Signature

State License Number and Classification

Street Address

City State Zip

Telephone Number: _____

NONCOLLUSION AFFIDAVIT

(To Be Executed By Bidder and Submitted With Bid)

State of _____)
County of _____) **ss.**

_____, being first duly sworn, deposes and says that he or she is _____ of _____ the party making the foregoing bid; that the bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; has not directly or indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signature of Bidder

Subscribed and sworn to before me this
_____ day of _____, 20__.

NOTARY TO AFFIX
SEAL AND CERTIFICATE OF
ACKNOWLEDGMENT

RESOLUTION OF CONSTRUCTION CLAIMS

(To Be Executed By Bidder and Submitted With Bid)

In all Public Works claims which may arise between the Contractor and the City of Pomona which do not exceed the sum of three hundred seventy-five thousand dollars (\$375,000), the requirements of California Public Contract Code, Sections 20104 through 20104.8, inclusive, shall apply. Said Code Sections shall apply for the purpose of filing claims and civil actions for claims as defined in Section 20104 of the Public Contract Code.

The bidder's signature is required to verify he/she has reviewed the Code Sections.

(Signature of Bidder)

Dated

INFORMATION REQUIRED OF BIDDERS
The bidder is required to supply the following information.
(Additional sheets may be attached if necessary.)

- (1) Address:
- (2) Telephone:
- (3) Type of Firm:

Individual, Partnership, or Corporation
- (4) Corporation organized under the laws of the State of:
- (5) Is 51% or more of the business owned by: American Indian (), Asian (), Black (), Hispanic (), Female (), Other (Specify) _____.
- (6) List the names and addresses of all members of the firm or names and titles of all officers of the corporation.
- (7) Number of years experience as a Contractor in construction work.

(8) List of all projects completed within last three years:

If you do not have enough space in a box, keep moving to the next lower box until all information in that column is completed. When finished with all information for a project, skip a row of boxes and start the next project in the left column.

| <u>Original Bid Contract Amount</u> | <u>Class (Type) of Work</u> | <u>Date Completed</u> | <u>Describe any Claims, Mediation, Arbitration or lawsuits, amount and results</u> | <u>Amount and Type of Change Orders</u> | <u>Name, Contact, Address and Telephone of Owner</u> |
|---|-----------------------------|---------------------------|--|---|--|
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| <u>Original Bid Contract Amount</u> | <u>Class (Type) of Work</u> | <u>Date Completed</u> | <u>Describe any Claims, Mediation, Arbitration or lawsuits, amount and results</u> | <u>Amount and Type of Change Orders</u> | <u>Name, Contact, Address and Telephone of Owner</u> |
|---|-----------------------------|---------------------------|--|---|--|
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| <u>Original Bid Contract Amount</u> | <u>Class (Type) of Work</u> | <u>Date Completed</u> | <u>Describe any Claims, Mediation, Arbitration or lawsuits, amount and results</u> | <u>Amount and Type of Change Orders</u> | <u>Name, Contact, Address and Telephone of Owner</u> |
|---|-----------------------------|---------------------------|--|---|--|
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| <u>Original Bid Contract Amount</u> | <u>Class (Type) of Work</u> | <u>Date Completed</u> | <u>Describe any Claims, Mediation, Arbitration or lawsuits, amount and results</u> | <u>Amount and Type of Change Orders</u> | <u>Name, Contact, Address and Telephone of Owner</u> |
|---|-----------------------------|---------------------------|--|---|--|
| | | | | | |

Contractor's failure to provide a complete list will result in automatic disqualification.

(9) List the name of the person(s) who inspected the site of the proposed work for your firm:

Name _____ Date of Inspection: _____

(10) The Contractor shall furnish the following information concerning bid depository or registry services used in obtaining Subcontractor bid figures for this Proposal. Additional sheets may be attached if necessary.

1. Were bid depository or registry services use in obtaining Subcontractor bid figures in order to compute your bid?
Yes () No ()
2. If the answer to No. 1 is "yes", forward a copy of the rules of each bid depository you used in the preparation of this Proposal.
3. Did you have any source of Subcontractors' bids other than bid depositories?
Yes () No ()
4. Has any person or group threatened you with Subcontractor boycotts, union boycotts or other sanctions to attempt to convince you to use the services or abide by the rules of one or more bid depositories? Yes () No ()
5. If the answer to No. 4 is "yes", please explain the following details:
 - (a) Date:
 - (b) Name of person or group:
 - (c) Job involved (if applicable):
 - (d) Nature of threats:
 - (e) Additional comments:

(TO ACCOMPANY PROPOSAL)

The bidder shall answer each of the questions below with full disclosure, under penalty of perjury. This information will be used in the determination of whether the Bidder is a Responsible Bidder or a Non-Responsible. One additional page per question may be attached to the Proposal as bidder deems necessary to explain his or her circumstance.

QUESTIONNAIRE

Bankruptcy

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been adjudged bankrupt in any voluntary or involuntary bankruptcy proceeding?

Yes No

If yes, when and where?

Debarment

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been debarred, disqualified, removed, or otherwise prevented from bidding on, or completing a Federal, State, or local government project? Yes No

If yes, provide a description of the case, the court location, case number and the outcome for each lawsuit a full explanation below.

Claims and Litigation

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever had any claims filed against them by any "owner" (including a public agency owner), bonding company, subcontractor or supplier? Yes No

If yes, describe the nature of each claim and its resolution.

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been sued by any "owner" (including a public agency owner), or bonding company insuring said "owner" for default on a contract? Yes No

If yes, provide a description of the case, the court location, case number and the outcome for each lawsuit a full explanation below.

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been sued by a subcontractor or material supplier for default on a contract? Yes No

If yes, provide a description of the case, the court location, case number and the outcome for each lawsuit.

During the past 5 years, has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, been a defendant in any professional related lawsuit besides those described in the paragraphs above? Yes No

If yes, provide a description of the case, the court location, case number and the outcome for each lawsuit.

Contractor as Claimant or Plaintiff

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever filed a claim against an "owner" (including any public agency owner) or a bonding company insuring an "owner" for any claims arising under any contract? Yes No

If yes, provide details as to the nature, date and resolution of any such claim.

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever filed a lawsuit against an "owner" (including any public agency owner) or a bonding company insuring an "owner" for any disputes arising under any contract? Yes No

If yes, provide a description of the case, the court location, case number and the outcome for each lawsuit.

Binding Arbitration

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever had to submit to binding arbitration to resolve a dispute arising from a contract?

Yes No

If yes, what were the circumstances and outcome of such arbitration?

Bonding

Has any bonding company ever refused to bond the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder for a contract? Yes No
If yes, what were the circumstances?

Has any bonding company ever been required to pay on a bond issued to the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder for a contract?
 Yes No
If yes, what were the circumstances?

Prevailing Wages

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been a) sued for, or b) penalized by any court, regulatory agency, or similar entity, for failure to pay prevailing wages to any persons performing work under a contract, including subcontractors?
 Yes No
If yes, what were the circumstances?

I declare under penalty perjury of the laws of the State of California that the information contained in this Questionnaire beginning on Page E-9 are true and correct to the best of my knowledge, and that this declaration was executed on _____, at _____, California.

(signature)

(printed name)

(title)

PART 4

AGREEMENT

Between

The City of Pomona

and

For

Project No. 428-68548

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PUBLIC WORKS CONTRACT

Major Street Rehabilitation, PROJECT NO. 428-68548

THIS CONTRACT ("Contract") is made and entered into on _____, in the County of Los Angeles, State of California, by and between the City of Pomona, hereinafter called City, and _____, hereinafter called Contractor. The City and the Contractor for the considerations stated herein agree as follows:

ARTICLE 1. SCOPE OF WORK.

The Contractor shall perform all Work within the time stipulated in the Contract and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 4 below for the following Projects:

Major Street Rehabilitation, PROJECT NO. 428-68548

The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION.

The Work shall be commenced on the date stated in the City's Full Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within one-hundred fifty (150) consecutive working days from the commencement date stated in the Full Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work. In addition to the above working day requirements, the following work parts shall be completed within the stated durations:

- 1. Potholing for traffic signal foundations, 10 consecutive working days**
- 2. Ordering/waiting for traffic signal equipment and other long lead items, 80 consecutive working days measured from the end of the 10 consecutive working days for the completion of potholing.**
- 3. Completion of an individual intersection as measured from the Contractor's scheduled starting date at each intersection (not including potholing or utility coordination), after the "ordering/waiting" period, 35 consecutive working days.**
- 4. Completion of all intersections after the "ordering/waiting" period, 60 consecutive working days.**

ARTICLE 3. CONTRACT PRICE.

Sec. 3.1 Contract Price.

The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all

applicable taxes and costs, the sum of _____ Dollars (\$ _____).

Sec. 3.2 Payment Terms

Payment shall be made as set forth in the Section 9 of Special Provisions.

ARTICLE 4. COMPONENT PARTS OF THE CONTRACT.

The “Contract Documents” include the following:

Notice Inviting Bids

Instructions to Bidders

Contractor's Bid Forms

Contractor’s Certificate Regarding Workers’ Compensation

Bid Bond

Designation of Subcontractors

Information Required of Bidders

Non-Collusion Affidavit form

Agreement for Indemnification by Contractor and Acceptance and Acknowledgement of Procurement Practices of the City of Pomona

Public Works Contract

Performance Bond

Payment (Labor and Materials) Bond

Worker’s Compensation/Employers Liability Endorsement

General Liability Endorsement

Automobile Liability Endorsement

Special Provisions (or Special Conditions)

Technical Specifications

Green book Standard Specifications (Sections 1-9 Excluded, except as specifically referenced herein)

Addenda

Plans and Contract Drawings

Approved and fully executed change orders

Any other documents contained in or incorporated, by reference or amendment, into the Contract

The Contactor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Public Works Contract (the “Contract”) shall supersede any prior agreement of the parties.

In the event of inconsistency among the Contract Documents, the Contract Documents shall have the following order of preference:

- 1. Permits issued by jurisdictional regulatory agencies.**
- 2. Change orders and Supplemental Agreements; which occurs last.**
- 3. This Contract.**

4. Addenda.
5. Bid/Proposal.
6. Technical Provisions.
7. Special Provisions.
8. Plans.
9. Standard Plans
10. Standard Specifications.
11. Reference Specifications.

ARTICLE 5. PROVISIONS REQUIRED BY LAW.

Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Project. Such laws, rules and regulations shall include, but not be limited to the following.

Sec. 5.1 Contractors License.

The Contractor shall possess a type "A" or "C-10" California Contractor's license at the time of award of the Contract.

Sec. 5.2 Ineligible Contractor Prohibited.

Any contractor or subcontractor who is ineligible to perform work on a public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code is prohibited from performing work under this Contract. Contractor, and its subcontractors, shall be registered with the California Department of Industrial Relations as a contractor eligible to work on Public Works Projects.

Sec. 5.3 Unfair Business Practices Claims.

The Contractor or subcontractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2, (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the City renders final payment to the Contractor without further acknowledgment by the parties. (California Public Contract Code Section 7103.5).

Sec. 5.4 Trenches, Excavations and Unknown Conditions.

Pursuant to California Public Contract Code Section 7104, in the event the work included in this Contract requires excavations more than four (4) feet in depth, the following shall apply.

(a) Contractor shall promptly, and before the following conditions are disturbed, notify City, in writing, of any: (1) material that Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; (2) Subsurface or latent physical conditions at the site different from those indicated; or (3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily

encountered and generally recognized as inherent in work of the character provided for in the contract.

(b) City shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order per Section 3 of the Special Provisions.

(c) That, in the event that a dispute arises between City and Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in Contractor's cost of, or time required for, performance of any part of the work, Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

Sec. 5.5 Trench and Pipeline Safety.

If this Contract is for more than \$25,000 and involves excavation of any trench five feet or more in depth, the Contractor shall submit a detailed plan of shoring, bracing, sloping or other provisions to be made for worker protection in accordance with Labor Code Section 6705. Such plan shall be approved by a qualified representative of the City. In addition, the Contractor, in accordance with California Code Labor Sections 6500, 6501 and 6502, shall submit a Permit Application Form to State of California, Department of Industrial Relation, Division of Occupational Safety & Health for a permit.

Sec. 5.6 Utility Relocation.

City is responsible for removal, relocation, or protection of existing main or trunk line utilities to the extent such utilities were not identified in the invitation for bids or specifications. City shall reimburse contractor for any costs incurred in locating, repairing damage not caused by contractor and removing or relocating such unidentified utility facilities, including equipment idled during such work. Contractor shall not be assessed liquidated damages for delay arising from the removal or relocation of such unidentified utility facilities.

Sec. 5.7 Third Party Claims Notification.

The City shall timely notify the Contractor in writing of any third party claims relating to the contract.

ARTICLE 6. INSURANCE, BONDS AND INDEMNIFICATION.

Insurance. All insurance issued in compliance with this section shall be issued in the form, and by an insurer or insurers, satisfactory to and first approved by the City in writing. Certificates of insurance in the amounts required shall be furnished by the Contractor to the City prior to the commencement of work.

The Contractor shall maintain adequate workman's compensation insurance under the laws of the State of California for all labor employed by him or by any Subcontractor under him who may come within the protection of such workman's compensation insurance laws. At the time of

execution of the Contract, the Contractor shall provide the certificate in substantially the following form: "I am aware of the provisions of Section 3700 of the Labor Code which 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 the work of this contract." (California Labor Code Sections 1860 and 1861).

The Contractor shall maintain during the life of this Contract public liability and property damage insurance in which the City shall be named as an additional insured, and which shall protect the Contractor or any subcontractor performing work covered by the contract from claims for personal injury, including accidental death as well as for claims for personal damages and property damages which may arise from the operations under any contract entered into whether such operations shall be performed by the Contractor or any subcontractor, or by anyone directly or indirectly employed by any one of them. The City of Pomona and its elected or appointed officials, directors, officers, agents, employees, volunteers, or contractors shall be named as an "Additional Insured" under public liability and property damage insurance. The issuing insurance company must have A.M. Best rating no less than A:-VII. All said insurance policies, as described in this section, shall provide that the same is non-cancelable except upon thirty (30) calendar days' written notice to the City.

The limit of liability for such insurance shall be as follows:

1. General Liability:

| | <u>Each Person</u> | <u>Each Occurrence</u> | <u>Aggregate</u> |
|------------------------|--------------------|------------------------|--------------------|
| <u>Bodily Injury</u> | <u>\$500,000</u> | <u>\$1,000,000</u> | <u>\$2,000,000</u> |
| <u>Property Damage</u> | <u>---</u> | <u>\$1,000,000</u> | <u>\$2,000,000</u> |

A combined single limit policy with aggregate limits in the amount of \$2,000,000 will be considered equivalent to the above minimum limits.

2. Automobile Liability

Any vehicle, combined single limit \$1,000,000

Bonds. The Contractor shall secure with a responsible corporate surety or corporate sureties, satisfactory bonds conditioned upon faithful performance by the Contractor of all requirements under the contract and upon the payment of claims of material, men and laborers there-under. The Faithful Performance Bond shall be in the sum of not less than one hundred percent (100%) of the estimated aggregate amount of the payments to be made under the contract computed on the basis of the prices stated in the proposal. The Faithful Performance Bond shall convert to a Warranty Bond in the amount of Fifty (50%) percent of the amount of the contract price plus all change orders, and shall cover warranty the work and materials for a period of one year after the recordation of the Notice of Completion. The Labor and Material Bond shall be in the sum of not less than one hundred percent (100%) of the estimated aggregate amount of the payments to be made under the contract computed on the basis of the prices stated in the proposal. Both bonds shall be on forms provided by the City. At the time of submitting the Faithful Performance Bond and the Labor and Material bond the insurer shall submit to the City the following:

(a) the original, or certified copy of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond; or

(b) a certified copy of the certificate of authority of the insurer issued by the Insurance Commissioner; or

(c) a certificate from the Los Angeles County Clerk stating that the certificate of authority of the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed authority has been granted; or

(d) copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code, Department of Insurance pursuant to Article 10 (commencing with Section 900) of Chapter 1 of Part 2 of Division 1 of the Insurance Code.

Indemnity. Contractor hereby agrees to indemnify, including the cost to defend City, and its officers, officials, agents, employees, and volunteers, from any and all losses, claims, liens, demands, liability, and causes of action of every kind and character including, but not limited to, the amounts of judgment, interests, court costs, legal fees, expert costs, expert fees and other all expenses incurred by the City to the maximum extent allowed by law arising in favor of any party, that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of Contractor, its agents, subcontractor's or subcontractor's agents, in the performance of services under this contract, but this indemnity does not apply to liability for damages for death or bodily injury to persons, injury to property, or other loss, arising from the sole negligence, willful misconduct or defects in design by City or the agents, servants, or independent contractors who are directly responsible to City, or arising from the active negligence of City.

ARTICLE 7. LABOR AND WAGE PROVISIONS.

Sec. 7.1 Prevailing Wages.

Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City Engineer's office or may be obtained online at <http://www.dir.ca.gov/dlsr> and which must be posted at the job site. The prevailing wage rates to be used shall be the first (oldest) update that occurs within ten (10) days prior to the bid due date, or if there are no updates within 10 days prior to the bid due date then the most recent update shall be used.

Sec. 7.2 Apprentices Program.

The Contractor's attention is directed to the provisions of Sections 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any Subcontractor under him. The Contractor and any Subcontractor under him shall comply with the requirements of said sections in the employment of apprentices.

Information relative to apprenticeship standards and administration of the apprenticeship program may be obtained from the Director of Industrial Relations, P.O. Box 603, San Francisco, California 94101 or from the Division of Apprenticeship Standards and its branch office.

Sec. 7.3 Legal Hours of Work and Overtime.

Pursuant to Labor Code Section 1810 et seq., eight hours of work is a legal days work, and hours worked in excess of that amount must be paid as overtime at a rate of not less than one and one-half time the basic rate of pay. The Contractor and subcontractors shall keep an accurate record showing the name and actual hours worked for each calendar day and week for each workman. The Contractor shall pay a penalty of \$25 per day for each violation of these wage provisions.

Sec. 7.4 Payroll Records.

(a) The Contractor's attention is directed to the following provisions of Labor Code Section 1776. The Contractor shall be responsible for compliance with its provisions by Contractor and his Subcontractors.

(b) Each Contractor and Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

- (1) The information contained in the payroll record is true and correct.**
- (2) The employer has complied with the requirements of Sections 1771, 1811 and 1815 for any work performed by his or her employees on the public works project.**

(c) The payroll records enumerated under subdivision (b) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (b) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (b) shall be made available upon request to the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

(d) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

(e) Each Contractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested such records within 10 days after receipt of a written request.

(f) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the contract or performing the contract shall not be marked or obliterated.

(g) The Contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (b), including the street address, city and county, and shall, within five (5) working days, provide a notice of a change of location and address.

(h) The contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the contractor must comply with this section. In the event that the contractor fails to comply within the 10 day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

(i) The Contractor and Subcontractors shall submit to the City Engineer certified payrolls and copies of all payroll checks and pay stubs showing all itemized deductions for each employee on a weekly basis during the term of this contract.

ARTICLE 8. COORDINATION OF WORK

Sec. 8.1 Representative of Contractor.

The following principals of Contractor are hereby designated as being the principals and representatives of Contractor authorized to act on its behalf with respect to the work specified herein and make all decisions in connection therewith:

Name / Title:

Company / Firm:

Address:

City/State/Zip:

Phone/Email:

It is expressly understood that the experience, knowledge, capability and reputation of the foregoing principals were a substantial inducement for City to enter into this Contract. Therefore, the foregoing principals shall be responsible during the term of this Contract for directing all activities of Contractor and devoting sufficient time to personally supervise the services hereunder. For purposes of this Contract, the foregoing principals may not be replaced nor may their responsibilities be substantially reduced by Contractor without the express written approval of City.

Sec. 8.2 Contracting Officer.

The Contracting Officer shall be such person as may be designated by the City Manager. It shall be the Contractor's responsibility to assure that the Contract Officer is kept informed of the progress of the performance of the services and the Contractor shall refer any decisions which must be made by City to the Contract Officer. Unless otherwise specified herein, any approval of City required hereunder shall mean the approval of the Contract Officer. The Contract Officer shall have authority to sign all documents on behalf of the City required hereunder to carry out the terms of this Contract.

Sec. 8.3 Prohibition Against Assignment.

The experience, knowledge, capability and reputation of Contractor, its principals and employees were a substantial inducement for the City to enter into this Contract. Neither this Contract nor any interest herein may be transferred, assigned, conveyed, hypothecated or encumbered voluntarily or by operation of law, whether for the benefit of creditors or otherwise, without the prior written approval of City. Transfers restricted hereunder shall include the transfer to any person or group of persons acting in concert of more than twenty five percent (25%) of the present ownership and/or control of Contractor, taking all transfers into account on a cumulative basis. In the event of any such unapproved transfer, including any bankruptcy proceeding, the City may terminate this contract. No approved transfer shall release the Contractor or any surety of Contractor of any liability hereunder without the express consent of City.

Sec. 8.4 Independent Contractor.

The Contractor is and shall at all times remain as to the City, a wholly independent contractor. Neither the City nor any of its officers, employees, or agents, shall have any control over the manner, mode or means by which Contractor, its subcontractors, agents or employees, performs the services required herein, except as otherwise set forth herein. City shall have no voice in the selection, discharge, supervision or control of Contractor's employees, subcontractors, servants, representatives or agents, or in fixing their number, compensation or hours of service. Contractor shall perform all services required herein as an independent contractor of City and shall remain at all times as to City a wholly independent contractor with only such obligations as are consistent with that role. Contractor shall not at any time or in any manner represent that it or any of its subcontractors, agents or employees are agents or employees of City. City shall not in any way or for any purpose become or be deemed to be a partner of Contractor in its business or otherwise or a joint venture or a member of any joint enterprise with Contractor. City officers, employees or, agents shall not be deemed the officers, employees, or agents of Contractor as a result of this Agreement.

Sec. 8.5 Identity of Persons Performing Work.

Contractor represents that it employs or will employ at its own expense all personnel required for the satisfactory performance of any and all tasks and services set forth herein. Contractor represents that the tasks and services required herein will be performed by Contractor or under its direct supervision, and that all personnel engaged in such work shall be fully qualified and shall be authorized and permitted under applicable State and local law to perform such tasks and services.

ARTICLE 9. ENFORCEMENT OF CONTRACT

Sec. 9.1 California Law.

This Contract shall be construed and interpreted both as to validity and as to performance of the parties in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in relation to this Contract shall be instituted in the Superior Court of the County of Los Angeles, State of California, or any other appropriate court in such county, and Contractor covenants and agrees to submit to the personal jurisdiction of such court in the event of such action.

Sec. 9.2 Disputes.

In the event either party fails to perform its obligations hereunder, the non-defaulting party shall provide the defaulting party written notice of such default. The defaulting party shall have ten (10) days to cure the default; provided that, if the default is not reasonably susceptible to being cured within said ten (10) day period, the defaulting party shall have a reasonable time to cure the default, not to exceed a maximum of thirty (30) days, so long as the defaulting party commences to cure such default within ten (10) days of service of such notice and diligently prosecutes the cure to completion; provided further that if the default is an immediate danger to the health, safety and general welfare, the defaulting party shall take such immediate action as may be necessary. Notwithstanding the foregoing, the non-defaulting party may, in its sole and absolute discretion, grant a longer cure period. Should the defaulting party fail to cure the default within the time period provided in this Section, the non-defaulting party shall have the right, in addition to any other rights the non-defaulting party may have at law or in equity, to terminate this Contract. Compliance with the provisions of this Section 9.2 shall be a condition precedent to bringing any legal action, and such compliance shall not be a waiver of any party's right to take legal action in the event that the dispute is not cured.

Sec. 9.3 Waiver.

No delay or omission in the exercise of any right or remedy by a non-defaulting party on any default shall impair such right or remedy or be construed as a waiver. A party's consent to or approval of any act by the other party requiring the party's consent or approval shall not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Contract.

Sec. 9.4 Rights and Remedies are Cumulative.

Except with respect to rights and remedies expressly declared to be exclusive in this Contract, the rights and remedies of the parties are cumulative and the exercise by either party of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the other party.

Sec. 9.5 Legal Action.

In addition to any other rights or remedies, either party may take legal action, in law or in equity, to cure, correct or remedy any default, to recover damages for any default, to compel

specific performance of this Contract, to obtain declaratory or injunctive relief, or to obtain any other remedy consistent with the purposes of this Contract.

Sec. 9.6 Termination for Default of Contractor.

If termination is due to the failure of the Contractor to fulfill its obligations under this Contract, Contractor shall vacate any City owned property which Contractor is permitted to occupy hereunder and City may, after compliance with the provisions of Section 9.2, take over the work and prosecute the same to completion by contract or otherwise, and the Contractor shall be liable to the extent that the total cost for completion of the services required hereunder exceeds the compensation herein stipulated (provided that the City shall use reasonable efforts to mitigate such damages), and City may withhold any payments to the Contractor for the purpose of setoff or partial payment of the amounts owed the City as previously stated.

Sec. 9.7 Termination for Convenience.

The City may terminate this Contract without cause for the convenience of the City upon giving contractor 30 days prior written notice of termination of the Contract. Upon receipt of the notice of termination, the Contractor shall cease all further work pursuant to the Contract unless otherwise indicated in the notice. Upon such termination by the City, the Contractor shall not be entitled to any other remedies, claims, actions, profits, or damages except as provided in this paragraph. Upon the receipt of such notice of termination, Contractor shall be entitled to the following compensation:

- (a) The contract value of the work completed to the City's satisfaction (as solely determined by the City), up to and including the termination date indicated in the notice of termination, less the amount of progress payments received by contractor.
- (b) Actual move-off costs including labor, rental fees, equipment transportation costs, the costs of maintaining on-site construction office for supervising the mover-off.
- (c) The cost of materials custom-made for this Contract which cannot be used by the Contractor in the normal course of his business, and which has not been paid for by City in progress payments.
- (d) All costs shall not include any markups as might otherwise be allowed by any plans or specifications which were a part of the Contract.

The provisions of this Section 9.7 shall supersede any other provision of the Contract or any provision of any plans, specification, addendums or other documents which are or may become a part of this Contract. City and Contractor agree that the provisions of this paragraph are a substantive part of the consideration for this Contract.

Sec. 9.8 Termination: Compensation and Acceptance of Work

Termination of the Contract and the total compensation payable to the Contractor in the event of termination shall be governed by the following:

(1) The City Engineer will issue the Contractor a written notice specifying that the contract is to be terminated. Upon receipt of said written notice and, except as otherwise directed in writing by the City Engineer, the Contractor shall:

- a. Stop all work under the contract, except that specifically directed to be completed prior to acceptance.
- b. Perform work the City Engineer deems necessary to secure the project for termination.
- c. Remove equipment and plan from the site of the work.
- d. Take such action as is necessary to protect materials from damage.
- e. Notify all Subcontractors and suppliers that the contract is being terminated and that their contracts of orders are not to be further performed unless otherwise authorized in writing by the City Engineer.
- f. Provide the City Engineer with an inventory list of all materials previously produced, purchased or ordered from suppliers for use in the work and not yet used in the work, including its storage location and such other information as the City Engineer may request.
- g. Dispose of materials not yet used in the work as directed by City Engineer. It shall be the Contractor's responsibility to provide the City with good title to all materials purchased by the City hereunder, including materials for which partial payment has been made as provided in Subsection 9-3.2 of the Standard Specifications, and with bills of sale or other documents of title for such materials.
- h. Subject to the prior written approval of the City Engineer, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the City Engineer, the Contractor shall assign to the City all the right title and interest of the Contractor under subcontracts or orders for materials terminated hereunder.
- i. Furnish the City Engineer with the documentation required to be furnished by the Contractor under the provisions of the contract including, on projects as to which Federal funds are involved, all documentation required under the Federal requirements included in the contract.
- j. Take such other actions as the City Engineer may direct.

(2) The total compensation to be paid to the Contractor shall be determined by the City Engineer on the basis of the following:

- a. The reasonable cost to the Contractor, without profit, for all work performed under the contract, including mobilization, demobilization and work done to secure the project for termination. Reasonable cost will include a reasonable allowance for project overhead and general administrative overhead not to exceed a total of seven percent (7%) of direct costs of such work.

When in the opinion of the City Engineer, the cost of a contract item of work is excessively high due to costs incurred to remedy or replace

defective or rejected work, the reasonable cost to be allowed will be the estimated reasonable cost of performing such work in compliance with the requirements of the plans and specifications and the excessive actual cost shall be disallowed.

- b. A reasonable allowance for profit on the cost of the work performed as determined under Subsection (a), provided the Contractor establishes to the satisfaction of the City Engineer that it is reasonably probable that he would have made a profit had the contract been completed and provided further that the profit allowed shall in no event exceed four percent (4%) of said cost.
- c. The reasonable cost to the Contractor of handling material returned to the vendor, delivered to the City or otherwise disposed of as directed by the City Engineer
- d. A reasonable allowance for the Contractor's administrative costs in determining the amount payable due to termination of the contract.

(3) All records of the Contractor and his Subcontractors, necessary to determine compensation in accordance with the provisions of this Section 9.8, shall be open to inspection or audit by representatives of the City at all times after issuance of the notice that the contract is to be terminated and for a period of three years, and such records shall be retained for that period.

(4) Acceptance of Work

- a. When the City Engineer determines that the Contractor has completed the work under the contract directed to be completed prior to termination and such other work as may have been ordered to secure the project for termination, the City Engineer will recommend that the City formally accept the contract, and immediately upon and after such acceptance by the City Engineer, the Contractor will not be required to perform any further work thereon and shall be relieved of his contractual responsibilities for injury to persons or property which occurs after the formal acceptance of the project by the City Engineer.
- b. After acceptance of the work by the City Engineer, the City Engineer may make payments on the basis of interim estimates pending issuance of the Final Estimate when in his opinion the amount thus paid, together with all amounts previously paid allowed, will not result in total compensation in excess of that to which the Contractor will be entitled. All payments, including payment upon the Final Estimate shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the contract.

- (5) Acceptance of the Contract as hereinafter specified shall not relieve the Contractor of responsibility for damage to materials except as follows:
- a. The Contractor's responsibility for damage to materials for which partial payment has been made as provided in Subsection 9-3.2 of the Standard Specifications, and for materials furnished by the City for use in the work and unused, shall terminate when the City Engineer certifies that such materials have been stored in the manner and at the locations he has directed.
 - b. The Contractor's responsibility for damage to materials purchased by the City subsequent to the issuance of the notice that the contract is to be terminated shall terminate when title and delivery of the materials has been taken by the City.

Sec. 9.9 Attorneys' Fees.

If either party to this Contract is required to initiate or defend or made a party to any action or proceeding in any way connected with this Contract, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorney's fees. Attorneys' fees shall include attorneys' fees on any appeal, and in addition, a party entitled to attorney's fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation. All such fees shall be deemed to have accrued on commencement of such action and shall be enforceable whether or not such action is prosecuted to judgment.

Sec. 9.10 Legal Actions Against the City

In the event litigation is brought against the City concerning compliance by the City with State or Federal laws, rules or regulations applicable to highway work, the provisions of this section shall apply.

- (a) If, pursuant to court order, the City prohibits the Contractor from performing all or any portion of the work, the delay will be considered a right of way delay within the meaning of Subsection 6-6 of the Standard Specification unless the contract is terminated as hereinafter provided, in which event compensation payable to the Contractor shall be determined in accordance with said termination provisions.
- (b) If, pursuant to court order (other than an order to show cause) the City is prohibited from requiring the Contractor to perform all or any portion of the work, the City may, if it so elects, eliminate the enjoined work pursuant to Section 3 of the Standard Specifications or terminate the contract in accordance with Subsections 6-3 and 6-5 of the Standard Specifications.
- (c) If the final judgment in the action prohibits the City from requiring the Contractor to perform all or any portion of the work, the City will either eliminate the enjoined work pursuant to Sections 3 of the Standard Specifications or terminate the contract in accordance with Subsections 6-3 and 6-5 of the Standard Specifications.

ARTICLE 10. CITY OFFICERS AND EMPLOYEES, NONDISCRIMINATION

Sec. 10.1 Non-liability of City Officers and Employees.

No officer or employee of the City shall be personally liable to the Contractor, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Contractor or to its successor, or for breach of any obligation of the terms of this Contract.

Sec. 10.2 Conflict of Interest.

The Contractor warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Contract.

Sec. 10.3 Covenant Against Discrimination.

Contractor covenants that, by and for itself, its heirs, executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin, or ancestry in the performance of this Contract. To the extent required by law, Contractor shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, national origin, or ancestry.

Any Contractor who shall be found in violation of the nondiscrimination provisions of the State of California Fair Employment Practices Act or similar provisions of Federal law or executive order in the performance of any contract with the City, thereby shall be found in material breach of such contract and thereupon the City shall have power to cancel or suspend the contractor, in whole or in part, or to deduct from the amount payable to such Contractor the sum of twenty-five dollars (\$25.00) for each person for each calendar day during which such person was discriminated against, as damages for said breach of contract; or both. Only a finding of the State of California Fair Employment Practices Commission or the equivalent Federal agency or officer shall constitute evidence of a violation of contract under this section.

ARTICLE 11. MISCELLANEOUS PROVISIONS

Sec. 11.1 Notice.

Any notice, demand, request, document, consent, approval, or communication either party desires or is required to give to the other party or any other person shall be in writing and shall be deemed to be given when served personally or deposited in the U.S. Mail, prepaid, first-class mail, return receipt requested, addressed as follows:

**To City: City of Pomona
Public Works Department, Engineering Division
City Hall, 505 S. Garey Ave., Box 660
Pomona, CA 91769
Attention: City Engineer**

To Contractor: Name, Title:

Company Firm:

Address:

City/State/ZC:

The above address of Contractor is designated as the place to which all notices, letters and other communications to the Contractor shall be mailed or delivered. The mailing to or delivering at the above named place of any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor. The date of said service shall be the date of such mailing or delivery. Such address may be changed at any time by a written notice signed by the Contractor and delivered to the Engineer.

Sec. 11.2 Interpretation.

The terms of this Contract shall be construed in accordance with the meaning of the language used. This Contract shall not be construed for or against either party by reason of the authorship of this Contract or any other rule of construction which might otherwise apply. This Contract shall be governed and construed in accordance with the laws of the State of California. Headings appearing at the commencement of each section are only for description and convenience, and shall not control or govern the construction of this Contract.

Sec. 11.3 Integration; Amendment.

It is understood that there are no oral agreements between the parties hereto affecting this Contract and this Contract supersedes and cancels any and all previous negotiations, arrangements, agreements and understandings, if any, between the parties, and none shall be used to interpret this Contract. This Contract may be amended at any time by the mutual consent of the parties by an instrument in writing.

Sec. 11.4 Severability.

In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Contract shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Contract which are hereby declared as severable and shall be interpreted to carry out the intent of the parties hereunder unless the invalid provision is so material that its invalidity deprives either party of the basic benefit of their bargain or renders this Contract meaningless.

Sec. 11.5 Hiring of Undocumented Workers Prohibited

Contractor shall not hire or employ any person to perform work within the City of Pomona or allow any person to perform work required under this Contract unless such person is properly documented and legally entitled to be employed within the United States.

Sec. 11.6 Corporate Authority

The persons executing this Contract on behalf of the parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Contract on behalf of said party, (iii) by so executing this Contract, such party is formally bound to the provisions of this Contract, and (iv) the entering into this Contract does not violate any provision of any other Agreement to which said party is bound.

Sec. 11.7 Legal Responsibilities.

The Contractor shall keep itself informed of City, State, and Federal laws, ordinances and regulations, which may in any manner affect the performance of its services pursuant to this Contract. The Contractor shall at all times observe and comply with all such laws, ordinances and regulations. Neither the City, nor its officers, agents, or employees, shall be liable at law or in equity as a result of the Contractor's failure to comply with this section.

Sec. 11.8 Sales or Use Taxes:

Except as may be otherwise specifically provided herein, all sales or use taxes, or both, assessed by Federal, State or local authorities on materials used or furnished by the Contractor in performing the work hereunder shall be paid by the Contractor.

This Contract is executed by the CITY pursuant to the approval by its Governing Body in session on _____, 20____, authorizing the same, and CONTRACTOR has caused this Contract to be duly executed.

CITY OF POMONA CALIFORNIA

Contractor: _____

**By: _____
City Manager**

By: _____

Name: _____

**ATTEST:

City Clerk**

**Title:
_____**

Date: _____

Approved as to form:

**_____
City Attorney**

**(Attach acknowledgment for Authorized Representative of Contractor.)
(Use of City Bond Form is Required)**

(Use of City Bond Form is Required)

FAITHFUL PERFORMANCE BOND
PUBLIC WORK (CALIFORNIA)

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, _____ (the Principal) and the City of Pomona (the Obligee) have entered into a written contract, hereinafter called the Contract, a copy of which is or may be attached hereto, dated the _____ day of _____, 2017, referred to and made a part hereof for Major Street Rehabilitation - Citywide (FY 13/14), PROJECT NO. 428-68548 and all appurtenant work in accordance with Project No. 428-68548, which agreement requires the Principal to provide Obligee with this bond.

NOW THEREFORE, we, _____ (as Principal) and _____ (as Surety) a corporation organized under the laws of _____, and duly authorized to transact business in the State of California, as Surety, are held firmly bound unto the City of Pomona (as Obligee) in the sum of _____ Dollars (\$ _____), lawful money of the United States of America, for the payment whereof well and truly to be made the Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

The address at which the Surety may be served with notices, papers and other documents is:

The address at which the Principal may be served with notices, papers and other documents is:

The condition of the foregoing obligation is such that if the Principal, his or its heirs, executors, administrators, successors or assigns, and each of his or its subcontractors shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the obligee 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 specifications accompanying the same shall in any way 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.

This document is signed by the respective parties on the dates next to their names.

(The Principal and Surety must attach Notary Acknowledgements, as well as proof of signature authorization or Power of Attorney.)

PRINCIPAL

Signature: _____ **Date:** _____

Name and Title (Print): _____

SURETY

I declare under penalty of perjury under the laws of the State of California that the contents of the above Faithful Performance Bond are true and correct, and that I have been duly authorized to sign this Faithful Performance Bond on behalf of Surety. This Declaration is signed on _____, in the City of _____, State of California.

Signature: _____ **Date:** _____

Name and Title (Print): _____

Name and License Number as stated on the California Department of Insurance Licensee Database:

APPROVED AS TO FORM:

Arnold M. Alvarez-Glasman, City Attorney

(Use of City Bond Form is Required)

LABOR AND MATERIAL PAYMENT BOND
PUBLIC WORK (CALIFORNIA)

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, _____ **(as Principal) has entered into**
a contract dated _____ **, (the "Contract") with the City of Pomona (Obligee)**
referred to and made a part hereof to perform the following work of public improvement, to wit:
Major Street Rehabilitation - Citywide (FY 13/14), PROJECT NO. 428-68548 and all appurtenant
work in accordance with the plans and specifications for Project No. 428-68548, which requires
Principal to file this bond to secure claims made under Civil Code Section 8000, et seq.

NOW THEREFORE, we, _____ **(as Principal) and**
_____ **(as Surety) a corporation organized under the**
laws of _____ **and duly authorized to transact business in the State of**
California, are held firmly bound unto the City of Pomona (as Obligee), and all subcontractors,
laborers, material persons and other persons employed in the performance of the referenced
agreement, _____ **in** _____ **the** _____ **sum** _____ **of**
_____ **Dollars**
(\$ _____ **), lawful money of the United States of America, which is 100% of the**
amount of the Contract, for the payment whereof well and truly to be made the Principal and
Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and
severally, firmly by these presents.

The address at which the Surety may be served with notices, papers and other documents is:

The address at which the Principal may be served with notices, papers and other documents is:

If the above bounden Principal, his or its heirs, executors, administrators, successors,
assigns, or any of his or its subcontractors, fails to pay for any materials, provisions, provender, or
other supplies, or teams, implements or machinery, used in, upon, for or about the performance of
the work contracted to be done, or for any work or labor to persons named in Section 9100 of the
Civil Code, or for amounts due under the Unemployment Insurance Code with respect to such
work or labor performed under the Contract, or 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 subcontractors pursuant to Section 13020 of the Unemployment
Insurance Code, then the Surety on this bond will pay the same, in an amount not exceeding the
sum specified in this bond, and also, in case suit is brought upon this bond, a reasonable attorney's

fee, which shall be awarded by the court to the prevailing party in said suit, said attorney's fee to be taxed as costs in said suit and to be included in the judgment herein rendered.

As part of the obligation secured hereby, the Surety shall not be exonerated or released from the obligation of the bond by any change, alteration, or modification in or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement or pertaining or relating to the furnishing of labor, materials, or equipment therefor, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme of work of improvement, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement, or under the bond, nor, where the bond is given for the benefit of claimants, by any fraud practiced by any person other than the claimant seeking to recover on the bond.

This bond shall inure to the benefit of any and all persons, companies and corporations named in Civil Code Section 9100 so as to give them a right of action in a suit on this bond.

This bond is executed for the purpose of complying with the laws of the State of California designated as Title 3, Chapter 5, Works of Improvement, commencing with Section 9550 of the Civil Code of the State of California and all amendments thereto, and shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code of the State of California.

This document is signed by the respective parties on the dates next to their names.

(The Principal and Surety must attach Notary Acknowledgements, as well as proof of signature authorization or Power of Attorney.)

PRINCIPAL

Signature: _____ **Date:** _____

Name and Title (Print): _____

SURETY

I declare under penalty of perjury under the laws of the State of California that the contents of the above Labor and Material Payment Bond are true and correct, and that I have been duly authorized to sign this Labor and Material Payment Bond on behalf of Surety. This Declaration is signed on _____, in the City of _____, State of California.

Signature: _____ **Date:** _____

Name and Title (Print): _____

Name and License Number as stated on the California Department of Insurance Licensee Database:

APPROVED AS TO FORM:

Arnold M. Alvarez-Glasman, City Attorney

**CONTRACTOR'S CERTIFICATE
REGARDING WORKMEN'S COMPENSATION**

Labor Code Section 3700

"Every employer except the State and all political subdivisions of institutions thereof, shall secure the payment or 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, 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 employees."

I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workmen's 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 the work of this contract.

CONTRACTOR:

Name of Contractor

By: _____

Date: _____

(printed name of signer)

(In accordance with Article 5 {commencing at Section 1860}, Chapter 1, Part 7, Division 2, of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this contract.)

CITY OF POMONA

CONTRACT RETENTION POLICY

(To be completed when escrow account is requested)

Pursuant to Section 22300 of the Public Contract Code of the State of California, the City of Pomona offers the attached Escrow Agreement for Security Deposits in Lieu of Retention with the following specifications:

1. The Escrow Agent shall be the **Citizens Business Bank** located at 1095 N. Garey Avenue, Pomona, CA 91767.
2. The City (Owner) shall receive monthly statements from the Escrow Agent on any retention payments to the Escrow Agent and shall reconcile the balance of the account to the City's general ledger retention liability account each month. A copy of the Escrow statement shall be provided to the Contractor upon request.
3. The retention account will be closed by the Owner and the balance therein released to the Contractor thirty-five (35) days after the Notice of Completion is recorded by the Los Angeles County Recorder. If, however, the Owner receives claims for any amount held in retention, or the Owner identifies valid unpaid notices, the Owner shall retain amounts necessary to address such claims and notices.

CONTRACTOR

Signature: _____ Date: _____

Name and Title: _____

CITY OF POMONA

Signature: _____ Date: _____

Name and Title: _____

ESCROW AGENT

Signature: _____ Date: _____

Name and Title: _____

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between:

- 1) The **CITY OF POMONA**, whose address is 505 S. Garey Avenue, Pomona, CA 91769, hereinafter called "**Owner**," whose address is 505 S. Garey Avenue, Pomona, CA 91769;
- 2) _____, hereinafter called "**Contractor**," whose address is _____; and
- 3) **Citizens Business Bank**, hereinafter called "**Escrow Agent**," whose address is 1095 North Garey Avenue, Pomona, CA 91767.

For the consideration hereinafter set forth, the Owner, Contractor and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _____ in the amount of \$ _____, dated _____ (hereinafter referred to as the "**Contract**"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contractor earnings, the Escrow Agent shall notify the Owner within ten (10) days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of City of Pomona, and shall designate the Contractor as the beneficial owner. All securities used as a substitute for retention earnings will be in compliance with the California State Government Code Section 16430.
2. The Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
3. When the Owner makes payment of retention earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.
4. Contractor shall be responsible for paying all fees for the expenses incurred by the Escrow Agent in administrating the Escrow Account and all expenses of the Owner. The expenses and payment terms shall be determined by the Owner and Contractor.
5. The interest earned on the securities or the money market accounts held in Escrow and all interest earned on the interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied with written authorization from the Owner to

the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven (7) days' written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.
8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, the Escrow Agent shall release to Contractor all securities and interest on deposit, less escrow fees and charges of the Escrow Account. If the Owner determines that any portion of the securities (and interest) on deposit shall be retained in response to third party claims (and any related notices), the Owner shall provide the Escrow Agent with written notice of said retention. The Escrow Agent shall withhold amounts from release pursuant to said notice. The Escrow Account shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.
9. The Escrow Agent shall rely on the written notification from the Owner and Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.
10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

[Intentionally left blank – signatures follow on the next page.]

On Behalf of Owner:

Signature: _____
Onyx Jones, Finance Director
City of Pomona
505 S. Garey Avenue
Pomona, CA 91769

On Behalf of Contractor:

Signature: _____

Name and Title: _____

Address: _____

On Behalf of Escrow Agent:

Signature: _____

Name and Title: _____

Address: 1095 N. Garey Avenue, Pomona, CA 91767

At the time of escrow account if opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the dates first set forth above.

OWNER

Signature: _____ Date: _____
Onyx Jones, Finance Director

CONTRACTOR

Signature: _____ Date: _____

Name and Title: _____

APPROVED AS TO FORM

Signature: _____ Date: _____
City Attorney

NOTICE

Labor Code, Division 2, Part 7, Chapter 1, Article 2, Section 1773.3 states:

"An awarding agency whose public works contract falls within the jurisdiction of Section 1777.5 shall, within five (5) calendar days of the award, send a copy of the award to the Division of Apprenticeship Standards. When specifically requested by a local joint apprenticeship committee, the division shall notify the local joint apprenticeship committee making the request. Within five (5) calendar days of a finding of any discrepancy regarding the ratio of apprentices to journeymen, pursuant to the certificated fixed number of apprentices to journeymen, the awarding agency shall notify the Division of Apprenticeship Standards."

(Added by Stats. 1978, Ch. 1249.)

Submission of the "Extract of Public Works Contract Award" (see Appendix, Part 7 for sample of this document) will satisfy the above noted requirement.

Also note Labor Code Sections 1776(g), 1777.5 and 1777.7.

NOTICE

THE CONTRACTOR WILL BE REQUIRED TO FURNISH THE CITY OF POMONA WITH THE CLASSIFICATIONS OF LABORERS TO BE USED FOR THE COMPLETION OF THIS PROJECT WITHIN THREE (3) WORKING DAYS AFTER NOTIFICATION OF AWARDING OF CONTRACT.

RELEASE

OWNER:

CONTRACTOR:

PROJECT:

In consideration of final payment of undisputed Contract amounts relating to all labor, services, equipment or material furnished to Owner on the above referenced Project, Contractor hereby waives and releases any right to a stop notice, mechanic's lien, or against a labor and materials bond on the Project and hereby releases Owner from any and all claims for payment on the Project except for the disputed work and the disputed amounts both of which are set forth below:

| DESCRIPTION OF DISPUTED WORK | DISPUTED AMOUNTS |
|------------------------------|----------------------|
| CHECK IF NONE: _____ | CHECK IF NONE: _____ |

Contractor acknowledges that it has been advised by its attorneys concerning, and is familiar with, the provisions of California Civil Code Section 1542, which provides as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.

Contractor, in that connection, acknowledges that it may have sustained damages, loss, cost, or expense

that is presently unknown or unsuspected, and that such damages, loss, cost, or expense as may have been sustained, may give rise to additional damages, loss, cost, or expense in the future. Nevertheless, Contractor acknowledges that this Release has been negotiated and agreed upon in light of that situation, and hereby expressly waives any and all rights which it may have under California Civil Code Section 1542 or under any other state or federal statutes or common law principle of similar effect.

Date: _____

CONTRACTOR

By: _____
(signature)

Typed Name: _____

Title: _____

NOTICE: This document waives rights unconditionally and states that you have been paid for giving up those rights. This document is enforceable against you if you sign it, even if you have not been paid. If you have not been paid, use a conditional release form.

Local Agency Bidder-DBE (Construction Contracts)-Information

The successful bidder must execute and return the LOCAL AGENCY BIDDER – DBE INFORMATION form, even if no DBE participation will be reported.

AGENCY: _____ LOCATION: _____
 PROJECT DESCRIPTION: _____
 CONTRACT NUMBER: _____
 FEDERAL-AID PROJECT NUMBER: _____
 TOTAL CONTRACT AMOUNT: \$ _____
 FEDERAL SHARE (For local agency to complete) : \$ _____
 BID DATE: _____
 BIDDER'S NAME: _____

| CONTRACT ITEM NO. | ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED ² | DBE Cert. No. AND EXPIRATION DATE | NAME OF DBEs ¹ (Must be certified on the date bids are opened - include DBE address and phone number) | DOLLAR AMOUNT DBE ³ |
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| <p>IMPORTANT: Identify all DBE firms being participating in the project, regardless of tier. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed above should be consistent, where applicable, with the names and items of work in the "List of Subcontractors" submitted with your bid. Provide copies of the DBEs' quotes, and if applicable, a copy of joint venture agreements, pursuant to the Subcontractors Listing Law and the Special Provisions.</p> <p>1. Enter DBE prime and subcontractors certification number. Prime contractors shall indicate all work to be performed by DBEs including work performed by its own forces.</p> <p>2. If 100% of item is not to be performed or furnished by DBE, describe exact portion of item to be performed or furnished by DBE.</p> <p>3. See Section "Disadvantaged Business Enterprise (DBE)," of the Special Provisions (construction contracts); to determine how to count the participation of DBE firms.</p> | <p>Total Claimed Participation</p> <p>\$ _____</p> <p style="text-align: right;">%</p> |
| <p>Signature of Bidder _____</p> <p>Date _____ (Area Code) Tel. No. _____</p> <p>Person to Contact _____ (Please Type or Print)</p> | |

Local Agency Bidder - DBE Information (Rev 5/01/06)

- Distribution: (1) Copy - Fax immediately to the Caltrans District Local Assistance Engineer (DLAE) upon award.
 (2) Copy - Include in award package to Caltrans District Local Assistance
 (3) Original – Local agency files

**INSTRUCTIONS - LOCAL AGENCY BIDDER-DBE (CONSTRUCTION CONTRACTS)
INFORMATION FORM (Revised 11/06)**

DBE PROGRAM: The City of Pomona encourages the use of Disadvantaged Business Enterprises (DBE's) for all projects; this project is not federally funded and DBE participation is not required. The CONTRACTOR is encouraged to take all necessary and reasonable steps to ensure that DBE's have the opportunity to participate in the contract. The CONTRACTOR is encouraged to make work available to DBE's and select work parts consistent with available DBE subcontractors and suppliers. Should the Contractor choose a DBE subcontractor or supplier to participate as part of the project this form should be submitted to the City at the time of Contract Award. For a list of DBE's certified by the California Unified Certification Program, go to: http://www.dot.ca.gov/hq/bep/find_certified.htm.

The form requires specific information regarding the construction contract: Agency, Location, Project, Descriptions, Contract Number (assigned by local agency), Federal Aid Project Number (assigned by Caltrans - Local Assistance), Total Dollar Contract Amount, Bid Date, and Bidder's Name.

The form has a column for the Contract Item Number (or Item No's) and Item of Work and Description or Services to be Sub-contracted or Materials to be provided by DBEs. The DBE should provide a certification number to the Contractor. Notify the Contractor in writing with the date of the decertification if their status should change during the course of the contract. The form has a column for the Names of DBE certified contractors to perform the work (must be certified on the date bids are opened and include DBE address and phone number).

There is a column for the total DBE dollar amount. Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the Special Provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of time to be performed or furnished by the DBE.)

This form must be signed and dated by the person bidding. Also list a phone number in the space provided and print the name of the person to contact.

PART 5

SPECIAL PROVISIONS

(SUPPLEMENTS AND MODIFICATIONS TO
THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION)

SPECIAL PROVISIONS

The City adopts by reference as its Special Provisions for this Public Works Contract the following standard specifications. All work shall be performed in accordance with the provisions of the latest edition of the following standard specifications:

- STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK), including all Supplemental Amendments, as published by Building News, Inc., Los Angeles, California, which Specifications are hereinafter referred to as the "Standard Specifications (Greenbook)."
- STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, plus any supplements, which Specifications are hereinafter referred to as the "State Standard Specifications."

The Standard Specifications (Greenbook) shall govern the performance of the work except:

- (a) When the situation is not covered by the Standard Specifications (Greenbook), the situation shall be governed by the State Standard Specifications.
- (b) When a specific reference is made to different specifications, plans or drawings, those specific specifications, plans or drawings shall govern.
- (c) When a conflict exists between the Standard Specifications (Greenbook) and any other specifications, the Greenbook shall govern unless the reference to the other specification requires compliance to the other specification.
- (d) As modified by these Special Provisions, Technical Provisions, City of Pomona, State of California Standard Drawings, 2012 Standard Plans for Public Works Construction (SPPWC), and the Project Plans.

These Special Provisions supplement and revise the aforementioned Standard Specifications (Greenbook) as set forth below. Any reference to "Section" or "Subsection" in these Special Provisions shall refer to the aforementioned Standard Specifications unless noted otherwise.

SECTION 1 -- TERMS, DEFINITIONS, ABBREVIATIONS & SYMBOLS, UNITS OF MEASURE AND SYMBOLS

1-2 TERMS AND DEFINITIONS. Add or substitute the following:

In this subsection, substitute where applicable, or add the following:

| | |
|---------------|--|
| Agency | The City of Pomona, for which the work is being performed. |
| Board | The City Council of the City of Pomona, constituting the awarding authority of the City. |
| City | The City of Pomona. |

City Engineer (or)

Engineer The City Engineer of the City of Pomona or other person designated by the City Engineer acting either directly or through authorized agents.

Owner City of Pomona unless specified differently.

STD DWG City of Pomona Public Works Department Standard Drawings

STD Plans APWA Standard Plans for Public Works Construction, Latest Edition

Pomona Water

Standard Standard Specifications for Water Facility Construction by Pomona Water Division

Prime Contractor (or)

Contractor Contractor who contracts directly with the City.

SECTION 2 – SCOPE AND CONTROL OF WORK

2-1 AWARD AND EXECUTION OF CONTRACT. Add the following:

The Bidder is required to examine carefully the site of work, Proposal forms and all other Contract documents for the work contemplated. The Submission of a Bidder's Proposal shall be considered conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of work to be performed and materials to be furnished, and as to the requirements of all the above documents.

2-2 ASSIGNMENT. Delete the entire subsection and Refer to Section 8.3 of Public Works Contract

2-3.2 SELF PERFORMANCE. Delete the entire subsection and substitute the following:

The Prime Contractor shall perform, solely with its own organization, Contract work amounting to at least 35 percent of the awarded bid price contract work. When an entire item is subcontracted, the value of work subcontracted will be based on the Contract Unit Price. When a portion of an item is subcontracted, the value of the work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

2-4 CONTRACT BONDS. Add the following:

If during the continuance of the contract any of the sureties upon the faithful performance bond in the opinion of the City Engineer are or become insufficient, he may require additional sufficient sureties which the Contractor shall furnish to the satisfaction of the City Engineer within fifteen (15) calendar days after notice, and in default thereof the contract may be suspended and the work completed as provided in Section 6 of the Standard Specifications.

Consistent with the Standard Specifications, the Bond for Faithful Performance and the bond for Material Suppliers and Laborers shall each be in the amount of 100 percent of the Contract price. Said bonds shall insure the City during the life of the Contract.

The Faithful Performance Bond also shall insure the City during the life of the Contract and for the term of one (1) year (unless specifically stated otherwise in the Specifications) from the date of final acceptance of the work against faulty or improper materials or workmanship that may be discovered during that time.

2-5 PLANS AND SPECIFICATIONS.

2-5.1. General. Add the following:

Except as otherwise specified on the Plans or in these Special or Technical Provisions, all work relating to traffic signals and street lighting, including all equipment, materials, components, and the installation thereof, shall be in accordance with the latest edition of the State Standard Plans and Section 86, of the latest edition of the State Standard Specifications. The order of precedence for said State Standard Plans shall be lower than that of the Project Plans and Specifications but higher than that of the Standard Plans and Standard Specifications for Public Works Construction (Green Book).

If the contractor, in the course of the work, becomes aware of any claimed errors or omissions in the contract documents or in the City's field work, it shall immediately inform the City Engineer. The City Engineer shall promptly review the matter, and if he/she finds an error or omission has been made, he/she shall determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the Contract, the City shall issue an appropriate Change Order. After discovery of an error or omission identified by the Contractor, any related work performed by the Contractor shall be done at its risk unless authorized by the City Engineer.

2-5.2 Precedence of the Contract Documents. Delete the entire subsection and substitute the following:

If there is a conflict between any of the Contract Documents, the document highest in the order of precedence shall control. The order of precedence, from highest to lowest, shall be as follows:

- a) Permit issued by jurisdictional regulatory agencies.
- b) Change Orders and Supplemental Agreements; whichever occurs last.
- c) Contract/Agreement.
- d) Addenda.
- e) Bid/Proposal.
- f) Technical Provisions.
- g) Special Provisions.
- h) Plans.
- i) Standard Plans.
- j) Standard Specifications.
- k) Reference Specifications.

Detail drawings shall take precedence over general drawings. The precedence of the notice inviting bids and instruction to bidders shall be as specified in the Special Provisions.

2-5.3.3 Shop Drawings and Submittals. Add the following:

Within **fifteen (15) calendar days** after issuance of **Conditional NTP** of the contract, the Contractor shall, at his or her expense, transmit to the Engineer for review and acceptance, all submittals, shop drawings and/or other available instructive and descriptive information from the manufacturer, when

and as required by the Plans and/or Specifications, or requested by the Engineer. Shop drawings will normally not be required for standard items in common use for which adequate manufacturers' literature is available.

Shop drawings for traffic signal poles, mast arms, and foundations will not be approved until the Contractor has potholed and confirmed there are no conflicts with the proposed traffic signal foundations.

The Contractor shall consecutively number, thoroughly check, approve and sign each Shop Drawing and transmit the Shop Drawings by letter to the Engineer for review. In the event that certain Shop Drawings are unacceptable to the City, they will be rejected by the Engineer. The Contractor shall thereafter, correct said drawings and resubmit same in within seven (7) calendar days.

In the event that in the process of development of the Shop Drawings, it is discovered that there are defects and/or errors on the Plans, resulting in conflict between said Plans and the Shop Drawings, or if the Shop Drawings show variation from the Plans and/or Contract requirements because of standard shop practice or other reasons, the Contractor shall thoroughly describe and explain said defects and/or conflicts in his transmittal letter to the Engineer.

The Engineer's review of the Shop Drawings will be for general design and arrangement only, and shall not relieve the Contractor from responsibility for errors of any sort in the Shop Drawings or of the responsibility for executing the work in accordance with the Contract. The Contractor shall be solely responsible for the correctness of the drawings, for shop fits and field connections, and for the results obtained by use of such drawings. The Contractor shall verify and be fully responsible for all dimensions and job-site conditions affecting the work and shall be responsible for furnishing and installing the proper materials required by the Contract, whether or not indicated on the Shop Drawings when reviewed.

When submitted for the Engineer's review, shop drawings shall be the Contractor's certification that he has reviewed, checked and approved the shop drawings and that these are in conformance with the requirements of the Contract Documents. The following Contractor's certification shall appear on all submittals:

“It is hereby certified that the (equipment, material) shown and marked in this submittal is that proposed to be incorporated into this project, is in compliance with the Contract Documents, can be installed in the allocated spaces, and is submitted for review.

Certified by (sign): _____

Certified by (print name): _____

Date: _____

A copy of each shop drawing and each sample as reviewed by the Engineer shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

The following procedures will apply to shop drawing submittals:

- A. The Contractor shall submit to the Engineer for review, eight (8) copies of all shop drawings. These drawings shall be complete, certified by the Contractor, and shall contain all required

information in detail. The Contractor shall make any corrections to shop drawings required by the Engineer.

- B. When reviewed by the Engineer, each copy of the drawings will be stamped signed, and dated by the Engineer.
- C. Three sets of said drawings will be returned to the Contractor.
- D. The review of the drawings shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory.
- E. Upon the Contractor's receipt of reviewed shop drawings, he shall furnish to the Engineer eight (8) copies of instruction and maintenance manuals and parts lists of all major equipment furnished. Data in these manuals shall cover completely all items as specified and as supplied.
- F. The Contractor agrees that if deviations, discrepancies, or conflicts between shop drawings submittals and the Contract Documents in the form of design drawings and specifications, except as particularly noted within the submittal, are discovered either prior to or after shop drawing submittals are processed by the Engineer, the design drawings and specifications shall control and shall be followed.

Revisions indicated on shop drawings shall be considered as changes necessary to meet the requirements of the Contract plans and specifications and shall not be taken as the basis of claims for extra work. The Contractor shall have no claims for damages or extension of time due to any delay resulting from making required revisions to shop drawings. The review of said drawings by the Engineer will apply to general design only and will in no way relieve the Contractor of responsibility for errors or omissions contained therein nor will such review operate to waive or modify any provisions or requirements contained in these Contract Specifications or on the Contract Drawings.

Shop fabrication drawings and lay sheets are required for all steel pipelines 16 inches and greater in diameter. The drawings and lay sheets shall fully illustrate horizontal station and vertical elevation of all joints and angle points, true angular deflection at locations of combined vertical and horizontal bends, and horizontal station for pipeline appurtenances.

Compliance certificates and weigh slips shall be provided for all aggregate base, asphalt concrete, Portland Cement Concrete, reinforcing steel, etc. Mix designs shall be submitted for asphalt concrete and Portland Cement Concrete mixes.

2-9 SURVEYING.

2-9.1 Permanent Survey Markers. Delete the entire subsection and substitute the following:

The Land Surveyors Act, Section 8771 of the Business and Professional Code, and Sections 732.5, 1492-5, and 1810-5 of the Streets and Highways Code require that survey monuments shall be protected and perpetuated.

The Contractor shall be responsible prior to the start of construction for locating, referencing, and

filing of Corner Records with the County Surveyor's office for survey control points/ monuments that exist as shown on recorded Tract Maps, Parcel Maps, Records of Surveys and Highway Maps which are going to be affected or disturbed by the proposed construction.

After the proposed completion of the proposed construction, said monuments and/or control survey points shall be reset to the new surface in accordance with current professional land surveying practices and per City of Pomona Standard A-9-65. Corner Records shall be filed with the County Surveyor, with a copy provided to the City, for all new monuments set.

2-9.2 Survey Service. Delete the entire subsection and substitute the following:

The Contractor shall pay and provide usual and customary construction staking. The Contractor shall submit to the City for approval, the qualifications of the Licensed Land Surveyor, prior to commencing the construction staking.

“All survey monuments, centerline ties and survey reference points shall be protected in place or reestablished where disturbed, in accordance with Section 8771 of the Professional Land Surveyor's Act (Business & Professions Code Section 8700 et seq.), prior to Project acceptance. This work will be the responsibility of the Contractor and shall be at the Contractor's sole cost and expense.”

All construction control surveying, **including verification of the existing surfaces required to establish control of line and grade for the finish surface**, shall be performed under the supervision of a Registered Civil Engineer or Licensed Land Surveyor at the expense of the Contractor.

Survey stakes shall be set and stationed by the Contractor's surveyor as follows:

- | | |
|-----------------|---|
| 1. Drains | 50' intervals and change of alignment or grade |
| 2. Water | 40' intervals and change of alignment or grade |
| 3. Sewer | 40' intervals and change of alignment or grade |
| 4. Structures | 4 corners with reference elevations |
| 5. Rough Grade | As required to achieve cut or fill to finished grade (or flow line) as indicated on a grade sheet (maximum interval of: 50' intervals, 50' grid pattern, and change of alignment or grade) |
| 6. Finish Grade | As required to achieve cut or fill to finished grade (or flow line) as indicated on a grade sheet (maximum interval of: 25' intervals, 25' grid pattern, and change of alignment or grade; as well as 15' intervals and 15' grid pattern for intersections and curb return areas) |

Offsets and locations shall be as agreed upon. The Contractor shall transfer grade hubs for construction as he may require. The Engineer shall have the right to verify the Contractor's survey extensions, and if found deficient, the Contractor shall pay the costs therefore.

2-9.4 Line and Grade. Delete the entire subsection and substitute the following:

“All work, including finished surfaces, shall during its progress and upon completion conform to the

lines, grades, cross-sections, elevations and dimensions shown on the Plans. All distances and measurements are given thereon and will be made in a horizontal plane. Three consecutive points shown on the same rate of slope must be used in common in order to detect any variation from a straight line. In the event any discrepancy exists, it must be reported to the City's Representative. Failure to make this report shall make the Contractor responsible for any error in the finished work. Minor deviations from approved plans, whenever required by the exigencies of construction, shall be determined in all cases by the City's Representative and authorized in writing."

2-11 INSPECTION. Add the following:

The City Engineer, or his/her authorized agent, shall at all times have access to work during construction, and shall be furnished with every reasonable facility for ascertaining full knowledge regarding the process, workmanship, and character or materials used and employed in the work. Whenever required, the Contractor shall furnish to the City for test, and free of charge, samples of any one of the materials proposed to be used in the work. Said samples shall be delivered by the Contractor at the place within the City of Pomona designated by the City Engineer. Rejected material must be immediately removed from the work by the Contractor and shall not again be brought back to the site of the improvement.

The Contractor shall notify the City Engineer of his authorized agent forty-eight (48) hours in advance when he will require inspection for material work to be done.

SECTION 3 – CHANGE IN WORK

3-3 EXTRA WORK.

3-3.1 General. Add the following:

The Contractor shall not perform any extra work prior to written authorization from the Engineer.

3-3.2.3 Markup. Delete the entire subsection and substitute the following:

a) **Work by Contractor.** When extra work is to be paid for on a force account basis, the labor, materials, equipment rental and other items of expenditures, the percentage of markup applied to the Contractor's direct cost for all overhead and profit shall be as follows:

- (1) Labor..... 20
- (2) Materials..... 15
- (3) Equipment Rental..... 15
- (4) Other Items and Expenditure..... 15

To the sum of the costs and markups provided for in this section, 1% shall be added as compensation for bonding.

b) **Work by Subcontractor.** When all or any part of the extra work is performed by a Subcontractor, the markup established above in this section shall be applied to the Subcontractor's actual cost of such work. A markup of 10 percent on the first \$5,000 of the subcontracted portion of the extra work and a markup of 5 percent on work added in excess of \$5,000 of the subcontracted

portion of the extra work may be added by the Contractor.

3-3.3 Daily Reports by Contractor. Add the following:

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily extra work reports, or if not available, they shall be submitted with subsequent daily extra work reports. When these daily extra work reports are agreed upon and signed by both parties, said reports shall become the basis of payment for the work performed.

3-5 DISPUTED WORK. Add the following:

All claims which do not exceed the sum of three hundred seventy-five thousand dollars(\$375,000) shall be resolved pursuant to the provisions of Public Contract Code Section 20104 through 20104.6, "Resolution of Construction Claims" as follows:

- (1) Informal negotiation between the City and general contractor.
- (2) Mediation with the general contractor.
- (3) Arbitration.
- (4) Court trial. If the party requesting the court trial does not prevail, then that party must pay all court costs and attorney's fees.

SECTION 4 – CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP.

4-1.3 Inspection Requirements.

4-1.3.3 Inspection by the Agency. Add the following:

In the event work is allowed by the City Engineer outside of the normal working hours, at the request of and for the benefit of the Contractor, inspection service fees will be levied against the Contractor at a rate of the city's actual cost, in addition to travel time where applicable. The above charge may also be levied if inspection services are deemed necessary by the City Engineer as a matter of public safety or to otherwise insure the quality of the work.

4-1.4 Tests of Materials. Amend to read as follow:

Before incorporation into the Work, the Contractor shall submit sample of materials, as the Engineer may require, at no cost to the Agency. The Contractor, as its expense, shall deliver the materials for testing to the place and at the time designated by the Engineer. Unless otherwise called for hereinafter in these Special Provisions, all testing will be performed by the City in such number and at such locations as deemed necessary by the Engineer to insure compliance with the Plans and Specifications; the cost of all initial testing will be borne by the City; the cost of all retesting will be borne by the Contractor, and the amount due the City for said retesting will be deducted from the Contractor's progress payments. If the Contractor is to provide and pay for testing, it will be so specified in the Special Provisions. For Private Contracts, the testing expense shall be borne by the permittee.

The Contractor shall notify the Engineer in writing, at least fifteen (15) calendar days in advance, of its intention to use materials for which tests are specified, to allow sufficient time to perform the tests. The Notice shall name the proposed supplier and source of material.

If the notice of intent to use is sent before the materials are available for testing or inspection, or is sent so far in advance that the materials on hand at the time will not last but will be replaced by a new lot prior to use on the Work, it will be the Contractor's responsibility to re-notify the Engineer when sample which are representative may be obtained.

4-1.6 Trade Names or Equals. Amend to read as follow:

The Contractor may supply any of the materials specified or offer an equivalent. The Engineer material offered is equivalent to that specified. Adequate time shall be allowed for the Engineer to make this determination.

A listing of materials is not intended to be comprehensive, or in order of preference. The Contractor may offer any material, process, or equipment considered to be equivalent to the indicated. Within ten (10) working days from the date of bid opening, the Contractor shall, at his expense, submit a written request to the Engineer for each desired substitution, accompanied by complete descriptive information from the manufacturer, samples as requested by the Engineer, complete detailed test results from a licensed independent testing laboratory of the City's choice if requested by the Engineer, and if requested by the Engineer, an evaluation report from a qualified licensed professional engineer, all for final evaluation by the Engineer. If in the Engineer's opinion, the requested substitution is of lesser quality or in variance with that specified, or if the information submitted is insufficient or incomplete, the requested substitution will be disallowed and the specified materials or equipment shall be furnished. Except as hereafter provided, no request for substitutions submitted, after the 10-working -day deadline specified will be considered.

The Contractor shall, at its expense, furnish data concerning items offered by its equivalent to those specified. The Contractor shall have the material tested as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, diminutions, service, and suitability are such that the item will fulfill its intended function.

Test methods shall be subject to the approval of the Engineer. Test results shall be reported promptly to the Engineer, who will evaluate the results and determine if the suitable item is equivalent. The Engineer's findings shall be final. Installation and use of a substitute item shall not be made until approved by the Engineer.

If a substitute offered by the Contractor is not found to be equal to the specified materials, the Contractor shall furnish and install the specified material.

The specified Contract completion time shall not be affected by any circumstance developing from the provisions of this subsection.

SECTION 5 – UTILITIES

5-1 LOCATION. Amend to read as follow:

Attention is directed to the possible existence of underground facilities not known to the owner or in

a location different from that which maybe indicated on the plans or in these Special Provisions and/or Technical Provisions.

The Contractor shall take steps to ascertain the exact location of all underground utility facilities prior to doing work that may damage such facilities or interfere with their service. Contractor shall call Underground Service Alert, [USA] 1-800-422-4133 to verify locations. Contractor shall locate all existing utilities, including storm and sewer laterals, within the project vicinity and shall exercise due care to ensure that existing utility facilities are not damaged during his operations. The existence of sewer mains or storm drains are evidenced by the manhole structures and catch basins. When in doubt, the Contractor shall contact the utility operator concerned before proceeding further.

The contractor shall determine the location and depth of all utilities by exploratory excavations, including service connections, which have been marked by the respective utility owners and which may affect or be affected by the Contractor's operations at least 10 working days prior to the start of any mainline or lateral trench construction. Full compensation for such work shall be considered as included in the prices bid for other items of work.

The sewer service laterals are owned by the property owners and will not be marked by the City. Sewer system atlas sheet is available upon request at the City Hall for contractor's reference. However, the City shall not guarantee the accuracy of the information. It shall be the Contractor's responsibility to locate and pothole all laterals. The Contractor at its expense shall repair sewer laterals that are damaged as the result of contractor's activities.

Where underground main distribution conduits such as water, gas, sewer, electric power, telephone, or cable television are shown on the Plans, the Contractor shall assume that every property parcel will be served by a service connection for each type of utility.

Pursuant to Section 4216 of the Government Code, at least 2 working days prior to commencing any excavation, the Contractor shall contact the regional notification center (Underground Service Alert of Southern California) and obtain an inquiry identification number.

Caltrans is not required be Section 4216 to become a member of the regional notification center. The Contractor shall contact Caltrans for the location of its subsurface installations.

The Contractor shall determine the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. Unless otherwise specified in the Special Provisions, payment shall be considered as included in the prices in the Bid for other items of work.

SECTION 6 – PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK.

6-1.1 Construction Schedule. Delete the entire subsection and substitute the following:

The Contractor must provide to the City Engineer within **fifteen (15) calendar days** after issuance of **Conditional NTP**, a construction schedule in the format of a Gantt Chart created using Microsoft Project 2003 and revised schedules thereafter as required by the Engineer when the Contractor's activities differ or are expected to differ from the latest existing schedule. **Failure to provide schedule**

updates or a revised baseline schedule could result in withholding all subsequent contract payments until an acceptable schedule is received.

Progress schedules will be required for this contract. Progress schedules shall utilize the Critical Path Method (CPM).

Definitions - The following definitions apply to this special provision:

Activity - Any task, or portion of a project which takes time to complete.

Work Progress – The progress of the work shall be at a rate sufficient to complete the contract within the time allowed. If it appears that the rate of progress is such that the contract will not be completed within the time allowed, or if the work is not being executed in a satisfactory manner, the City Engineer may order the Contractor to take such steps as necessary to complete the contract within the period of time specified or to prosecute the work in satisfactory manner. If the Contractor fails to comply with such order within 14 Calendar days after receipt of the order, the contract may be cancelled in accordance with section 6-4 of the latest edition of the STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).

Baseline Schedule - The initial CPM schedule representing the Contractor's original work plan, as accepted by the Engineer.

Critical Path Method - A graphic representation of the sequence of activities that shows the inter-relationships and interdependencies of the elements composing a project.

Early Completion Time - The difference in time between the current contract completion date and the Contractor's scheduled early completion date as shown on the accepted baseline schedule, or schedule updates and revisions.

Float - The amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activity or group of activities in the network.

Fragnet - A section or fragment of the network diagram comprised of a group of activities.

Hammock Activity - An activity added to the network to span an existing group of activities for summarizing purposes.

Milestone - A marker in a network which is typically used to mark a point in time or denote the beginning or end of a sequence of activities. A milestone has zero duration, but will otherwise function in the network as if it were an activity.

Revision - A change in the future portion of the schedule that modifies logic, adds or deletes activities, or alters activities, sequences, or durations.

Tabular Listing - A report showing schedule activities, their relationships, durations, scheduled and actual dates, and float.

Total Float - The amount of time that an activity may be delayed without affecting the total project duration of the critical path.

Update - The modification of the CPM progress schedule through a regular monthly review to incorporate actual progress to date by activity, approved time adjustments, and projected completion dates.

Add the following subsection:

6-1.1.1 Preconstruction Scheduling Conference. The Engineer will schedule and conduct a Preconstruction Scheduling Conference with the Contractor's Project Manager and Construction Scheduler within **fifteen (15) calendar days** after issuance of **Conditional NTP**. At this meeting, the requirements of this section of the specifications will be reviewed with the Contractor. The Contractor shall be prepared to discuss its schedule methodology, proposed sequence of operations, and any deviations it proposes to make from the Stage Construction Plans. At this meeting, the Contractor shall submit its structure and the activity identification system for labeling all work activities. The Engineer shall review and comment on the work breakdown structure within seven (7) calendar days after submission by the Contractor. The Contractor shall make all modifications to the proposed work breakdown structure, the coding structure and activity identification system that are requested by the Engineer, and shall employ that coding, structure and system in its baseline schedule submission.

Add the following subsection:

6-1.1.2 Baseline Schedule. Within **fifteen (15) calendar days** after issuance of **Conditional NTP**, the Contractor shall submit to the Engineer a baseline project schedule. The baseline schedule shall include the activities shown on the interim baseline schedule in the same order and logical relationship as shown in the interim baseline schedule. The baseline project schedule shall have a data date of the day prior to the first working day of the contract and shall not include any completed work to date. The baseline progress schedule shall meet interim target dates, milestones, stage construction requirements, internal time constraints, show logical sequence of activities, and must not extend beyond the number of days originally provided for in the contract.

The baseline CPM schedule submitted by the Contractor shall have a sufficient number of activities to assure adequate planning of the project and to permit monitoring and evaluation of progress and the analysis of time impacts. The baseline schedule shall depict how the Contractor plans to complete the whole work involved, and shall show all activities that define the critical path.

Critical or near critical paths shall be kept to a minimum. Near critical paths shall be defined as those paths having ten (10) working days or less of total float at the time of initial submission. A total of no more than 20% of the baseline schedule activities shall be critical or near critical.

The Contractor shall allow for non work days and inclement weather days in the CPM schedule calendar and the bid prices of the various items of work.

The Contractor shall employ the number of crews and more if needed to meet the required schedule, fully equipped and supported, for all work operations at all times during the duration of the contract to minimize the duration of disruptions to the intersection areas (project work areas).

Add the following subsection:

6-1.1.3 Project Schedule Reports. All schedules submitted to the Engineer including baseline and interim baseline schedules shall include time scaled network diagram(s). Network diagrams shall be based on early start and early finish dates of activities shown. The network diagrams shall be based on

early start and early finish generated mathematical analysis tabular reports for each activity included in the project schedule. Three different report sorts shall be provided: Early Start, Total Float, and Activity Number which shall show all predecessors and successors for each activity. Such mathematical analysis tabular reports (8-1/2" x 11" size) shall be submitted to the Engineer and shall include at a minimum, the following:

- Data date;
- Predecessor and successor activity numbers and descriptions;
- Activity number and description;
- Activity code(s);
- Schedule and actual/remaining duration for each activity;
- Earliest start date (by calendar date);
- Earliest finish date (by calendar date);
- Actual start date (by calendar date);
- Actual finish date (by calendar date);
- Latest start date (by calendar date);
- Latest finish date (by calendar date);
- Float, in work days;
- Percentage of activity complete and remaining duration for incomplete activities;
- Imposed constraints.

All networks shall be drafted time scaled to show a continuous flow of information from left to right. The primary path(s) of criticality shall be clearly and graphically identified on the network(s). The network diagram shall be prepared on (11" x 17") size sheets, shall have a title block in the lower right hand corner, and a timeline on each page. Exceptions to the size of the network sheets and the use of computer graphics to generate the networks shall be subject to the approval of the Engineer.

Schedule network diagrams and computer tabulations shall be submitted to the Engineer for acceptance in the following quantities:

- a. Two (2) sets of the Network Diagram(s);
- b. Three (3) copies of the computer tabulation reports (8-1/2" x 11" size).

Should the baseline schedule or Schedule Update, submitted for acceptance, show variances from the requirements of the Contract, the Contractor shall make specific mention of such variations in the letter of transmittal, in order that, if accepted, proper adjustments to the project schedule can be made. The Contractor will not be relieved of the responsibility for execution of the work in strict accordance with the requirements of the Contract Documents. In the event of a conflict between the requirements of the Contract Documents and the information provided or shown on an accepted schedule, the requirements of the Contract Documents shall take precedence.

Each schedule submitted to the Engineer shall comply with all limits imposed by the Contract, with all specified intermediate milestone and completion dates, and with all constraints, restraints or sequences included in the Contract. The degree of detail shall include factors to the satisfaction of the Engineer, including, but not limited to:

- Physical breakdown of the project;

- Contract milestones and completion dates, substantial completion dates, constraints, restraints, sequences of work shown in the contract, the planned substantial completion date, and the final completion date;
- Type of work to be performed, the sequences, and the major subcontractors involved;
- All purchase, submittals, submittal reviews, manufacture, tests, deliver, and installation activities for all major materials and equipment;
- Preparation, submittal and approval of shop and/or working drawings and material samples showing time, as specified elsewhere, for the Engineer's review. The same time frame shall be allowed for at least one (1) re-submittal on all major submittals so identified in the Contract Documents;
- Identification of interfaces and dependencies with preceding, concurrent and follow-on Contractors, Railroads, and Utilities as shown on the Plans or called out in the Specifications;
- Identification of each and every utility relocation and/or interface as a separate activity, including activity description and responsibility coding that identifies the type of utility and the name of the utility company involved;
- Actual tests, submission of test reports, and approval of test results;
- All start-up, testing, training, and assistance required under the Contract;
- Punchlist and final cleanup;
- Identification of any manpower, material, or equipment restrictions, as well as any activity requiring unusual shift work, such as two shifts, six (6) day weeks, specified overtime, or work at times other than regular days or hours; and
- Identification of each and every ramp closing and opening event as a separate one day activity, including designation by activity coding and description that it is a northbound, southbound, eastbound, westbound, and entry or exit ramp activity.
- Hammock activities shall be used to identify ramp closure, road closures and lane closures.

All on site construction activities shall have durations of not more than (20) working days, unless permitted otherwise by the Engineer. All activities in the schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor. The baseline schedule shall not attribute negative float to any activity. Float shall not be considered as time for the exclusive use of or benefit of either the State or the Contractor but shall be considered as a jointly owned, expiring resource available to the project and shall not be used to the financial detriment of either party. Any accepted schedule, revision, or update having an early completion date shall show the time between the early completion date and the current Contract Completion Date as 'project float.'

The Contractor shall be responsible for assuring that all work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include any element of work required for the performance of the contract in the network shall not relieve the Contractor from completing all work within the time limit specified for completion of the contract. If the Contractor fails to define any element of work, activity or logic, and the omission or error is discovered by either the Contractor or the Engineer, it shall be corrected by the Contractor at the next monthly update or revision of the schedule.

The Engineer shall be allowed (5) calendar days to review and accept or reject the interim baseline schedule submitted. Rejected schedules shall be resubmitted to the Engineer within (2) calendar days of receipt by Contractor of the Engineer's comments, at which time a new (5) calendar day review period

by the Engineer will begin.

The Engineer shall be allowed 5 calendar days to review and accept or reject the baseline project schedule submitted. Rejected schedules shall be resubmitted to the Engineer within (5) calendar days, at which time a new (5) calendar day review period by the Engineer will begin.

Add the following subsection:

6-1.1.4 Monthly Update Schedules. The Contractor shall submit the Monthly Update Schedule to the Engineer each month. The proposed update schedule prepared by the Contractor shall include all information available as of the **20th calendar day of the month**, or other date as established by the Engineer. A detailed list of all proposed schedule changes (logic, duration, lead/lag, additions, and deletions) shall be submitted with the update.

The monthly submittal to the Engineer shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float predictions, and an explanation of potential delays and/or problems and their estimated impact on performance, milestone completion dates, and the overall project completion date. In addition, alternatives for possible schedule recovery to mitigate any potential delay and/or cost increases shall be included for consideration by the Engineer. The report shall follow the outline set forth below:

Contractor's Schedule Narrative Report Outline:

- Contractor's Transmittal Letter
- Work completed during the period
- Description of the current critical path
- Description of problem areas
- Current and anticipated delays
- Cause of the delay
- Corrective action and schedule adjustments to correct the delay
- Impact of the delay on other activities, milestones, and completion dates
- Changes in construction sequences
- Pending items and status thereof
- Permits
- Change Orders
- Time Extensions
- Non-Compliance Notices
- Contract completion date(s) status
- Ahead of schedule and number of days
- Behind schedule and number of days
- Include updated Network Diagram and Reports

The Contractor shall provide to the Engineer printed copies of the network diagrams and tabular reports described under "Project Schedule Reports," and the Schedule Narrative Report.

The monthly update of the schedule shall be for the period from the last update to the current cut-off date, and for the remainder of the project. The current period's activities shall be reported as they actually took place and designated as actually complete, if actually completed, in the schedule updates.

Portions of the network diagram on which all activities are complete need not be reprinted and submitted in subsequent updates. However, the electronic disk file of the submitted schedule and the related reports shall constitute a clear record of progress of the work from award of contract to final completion.

The Contractor will be permitted to show early or late completion on schedule updates and revisions. The Engineer may use the updates and revisions, and other information available, in evaluating the effect of changes, delays, or time savings on the critical path and the accepted schedule current at the time to determine if there is an applicable adjustment of time, if any, to any target date or completion date due to the changes, delays, or time savings.

On a date determined by the Engineer, the Contractor shall meet with the Engineer to review the monthly schedule update. At the monthly progress meeting the Contractor and the Engineer will review the updated schedule and will discuss the content of the Narrative Report. The Engineer shall be allowed (5) working days after the meeting to review and accept or reject the update schedule submitted. Rejected schedules shall be resubmitted to the Engineer within (2) calendar days, at which time a new (5) calendar day review period by the Engineer will begin.

Add the following subsection:

6-1.1.5 Final Schedule Update. Within (20) calendar days after the Engineer’s acceptance of the work, the Contractor shall submit a final update of the schedule with actual start and actual finish dates for all activities. This schedule submission shall be accompanied by a certification, signed by an officer of the company and the Contractor’s Project Manager stating “To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the activities contained herein.” Submittal of the final Schedule Update and the Certification shall be a condition precedent to the release of any retained funds under the Contract.

Add the following subsection:

6-1.1.6 Schedule Revisions. No revision to the accepted baseline schedule or the schedule updates shall be made without the prior written approval of the Engineer. If the Contractor desires to make a change to the accepted schedule, the Contractor shall request permission from the Engineer in writing, stating the reasons for the change as well as the specifics, such as, revisions to activities, logic, durations, etc. The Engineer will provide a response within five (5) calendar days.

If the Engineer considers a schedule revision to be of a major nature, the Engineer may require the Contractor to revise and submit for acceptance all of the affected portion(s) of the project schedule and an analysis to show the effect on the entire project. The proposed revision and analysis shall be submitted to the Engineer within 2 days after the Engineer notifies the Contractor the revision is of a major nature. A change will be considered to be of a major nature if the time estimated for an activity or sequence of activities is varied from the original plan to the degree that there is reasonable doubt that milestone or Contract completion dates will be met, or if the schedule revision impacts the work of other contractors.

The Contractor shall submit a proposed revised schedule within (15) calendar days when requested by the Engineer when:

- a. There is a significant change in the Contractor’s operations that will affect the critical path;

- b. The current updated schedule indicates that the contract progress is (30) calendar days or more behind the planned schedule, as determined by the Engineer, or
- c. The Contractor or the Engineer considers that an approved or anticipated change will impact the critical path or contract progress.

The Engineer shall be allowed (5) calendar days to review and accept or reject a schedule revision. Rejected revision schedules shall be resubmitted to the Engineer within (2) calendar days at which time a new 5 calendar day review period by the Engineer will begin. Only upon approval of a change by the Engineer shall it be reflected in the next schedule update submitted by the Contractor.

Add the following subsection:

6-1.1.7 Schedule Time Extension Requests. When Change Orders or delays are experienced by the Contractor and a time extension is requested, the Contractor shall submit to the Engineer a written Time Impact Analysis illustrating the influence of each change or delay on the current Contract completion date, or milestone completion date, utilizing the current accepted schedule. Each Time Impact Analysis shall include a fragnet demonstrating how the Contractor proposes to incorporate the Change Order or delay into the current schedule. The fragnet shall include the sequence of new and/or existing activity revisions that are proposed to be added to the accepted baseline project schedule or current schedule in effect at the time the change or delay is encountered, to demonstrate the influence of the delay and the proposed method for incorporating the delay and its impact into the schedule.

Each Time Impact Analysis shall demonstrate the estimated time impact based on the events of delay, the anticipated or actual date of the Change Order work performance, the status of construction at that point in time, and the event time computation of all activities affected by the change or delay. The event times used in the analysis shall be those included in the latest update of the current schedule in effect at the time the change or delay was encountered.

Time extensions will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the critical path of activities at the time of actual delay, or at the time of the Change Order work performance. Float time is not for the exclusive use or benefit of the Engineer or the Contractor, but is an expiring resource available to all parties as needed to meet Contract milestones and the Contract Completion Date. Time extensions shall not be granted nor delay damages paid until:

- a. A delay occurs which is beyond the control and without the fault or negligence of the Contractor and its subcontractors or suppliers, at any tier; and,
- b. Which extends actual performance of the work beyond the applicable current Contract Completion Date and the most recent date predicted for completion of the project on the accepted schedule update current as of the time of the delay or as of the time of issuance of the Change Order.

Each Time Impact Analysis shall be submitted in triplicate within fifteen (15) calendar days after a delay occurs or issuance of the Preliminary Change Order. If the Contractor does not submit a Time Impact Analysis for a specific Change Order or delay within the specified period of time, the Contractor shall be deemed to have irrevocably waived any rights to additional time and cost.

Approval or rejection of each Time Impact Analysis by the Engineer shall be made within fifteen

(15) calendar days after receipt of each Time Impact Analysis, unless subsequent meetings and negotiations are necessary. Upon approval, a copy of a Time Impact Analysis, unless subsequent meetings and negotiations are necessary. Upon approval, a copy of a Time Impact Analysis signed by the Engineer shall be returned to the Contractor for incorporation into the schedule.

Upon mutual agreement by both parties, the accepted schedule revisions illustrating the influence of Change Orders and delays shall be incorporated into the project schedule during the first update after agreement is reached.

In the event the Contractor does not agree with the decision of the Engineer regarding the impact of a change or delay, notice shall be given in accordance with Section 9-1.04 of the State Standard Specifications.

Add the following subsection:

6-1.1.8 Payment. Payment for preparation and updating the progress schedule (critical path) shall be included in the various items of work and no additional compensation will be allowed.

The Contractor shall include revised/updated schedule with invoice submittal for all payments.

6-7 TIME OF COMPLETION.

6-7.2 Working Day. Add the following:

The following days have been designated as holidays by the City of Pomona:

| | |
|----------------------------|--------------------------|
| New Year's Day | January 1 |
| Martin Luther King, Jr Day | 3rd Monday in January |
| President's Day | 3rd Monday in February |
| Memorial Day | Last Monday in May |
| Independence Day | July 4 |
| Labor Day | 1st Monday in September |
| Veterans' Day | November 11 |
| Thanksgiving | 4th Thursday in November |
| Day after Thanksgiving | 4th Friday in November |
| Christmas Eve | December 24 |
| Christmas Day | December 25 |

If a holiday falls upon a Sunday, the following Monday shall be the day the holiday is observed, and if a holiday falls upon a Saturday, the preceding Friday shall be the day the holiday is observed.

Add the following subsection:

6-7.4 Work Hours. The normal work hours, outside of the traffic lane, shall be from 7:00 AM until 4:00 PM on all work days. Workdays are defined in Section 6-7.2 of the Standard Specifications. Work hours within traffic lanes are defined in Section 7-10.1. Work hours other than normal work hours will not be allowed without prior consent of the City Engineer, **or required by the approved traffic control plan.** If work is performed at night, the Contractor shall provide adequate light for proper prosecution of the work for the safety of the workmen and the public, and for proper inspection.

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY. Delete the entire subsection

and substitute the following:

The work will be inspected for acceptance by the City's Representative upon receipt of the Contractor's written assertion that the work has been completed. If, in the sole discretion of the City's Representative, the work has been completed and is ready for acceptance, the City's Representative will notify the City Clerk that the Contract has been completed in its entirety. The City's Representative shall request that the city accept the work and that the City Clerk be authorized to file on behalf of the City in the office of the Los Angeles County Recorder, a Notice of Completion of the work. The date of completion shall be the date the Contractor is relieved from responsibility to protect the work.

The Contractor hereby guarantees that the entire work constructed by him under the Contract will meet fully all requirements as to quality of workmanship and materials. The Contractor hereby agrees to make, at his own expense, any repairs or replacements made necessary by defects in materials or workmanship that became evident within one (1) year after the date of the completion, and to restore to full compliance with the requirements of these Contract Documents, including any test requirements set forth herein for any part of the work constructed hereunder, which during said one (1) year period is found to be deficient with respect to any provisions of the Contract Documents. The Contractor shall make all repairs and replacements promptly upon receipt of written orders for the same from the City's Representative. If the Contractor fails to make the repairs and replacements promptly, the City may do the work and the Contractor and his sureties shall be liable to the City for the cost thereof.

The guarantees and agreements set forth herein shall be secured by a surety bond which shall be delivered by the Contractor to the City before the Notice of Completion and acceptance of the work by the City. Said bond shall be in the form approved by the City Attorney and executed by a surety company or companies satisfactory to the City in the amount of one hundred percent (100%) of the Contract. Said bond shall remain in force for a period of one (1) year after the date of Notice of Completion and acceptance. Alternatively, the Contractor may provide for the Faithful Performance Bond furnished under the Contract to remain in force and effect for said amount until the expiration of said one (1) year period.

The parties agree that no certificate given, with the exception of the certificate of final payment, shall be conclusive evidence of the faithful performance of the Contract, either in whole or in part, and that no payment shall be construed to be in acceptance of any defective work or improper materials. Further, the certificate of final payment shall not terminate the Contractor's obligations under his warranty herein above. The Contractor agrees that payment of the amount due under the Contract and the adjustments and payments due for any work done in accordance with any alterations of the same, shall release the City, the City Council and its officials, officers and employees from any and all claims or liability on account of work performed under the Contract or any alteration thereof.

6-9 LIQUIDATED DAMAGES. Delete the entire subsection and substitute the following:

Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the Agency. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified for completion of the Work, as adjusted in accordance with 6-6, the Contractor shall pay to the Agency, or have withheld from moneys due it, the sum of **\$3,000**. Execution of the contract under these specifications shall constitute agreement by the Agency and Contractor that **\$3,000** per calendar day is the minimum value of the costs and actual damage caused by failure of the Contractor to complete the Work within the allotted time. Such sum is liquidated damages and shall not be construed as a penalty, and may be

deducted from payments due the Contractor if such delay occurs.

Liquidated damages shall apply also apply to the following work parts:

1. Potholing, \$500 per calendar day
2. Ordering/waiting for traffic signal equipment and other long lead items, \$1,300 per calendar day
3. Completion of an individual intersection as measured from the Contractor's scheduled starting date at each intersection, after the "ordering/waiting" period, \$1,800 per calendar day per intersection.

Cumulative liquidated damages for the entire project and the work parts shall not exceed \$3,000 per day except as noted below.

In addition to the liquidated damages specified, if the Contractor fails to complete the work within the time specified for completion, plus any authorized time extensions, the Agency shall have the right to charge to the Contract all or any part, as it may deem proper, of the actual costs of inspection, supervision and other overhead expenses that are directly chargeable to the project and that accrue after the expiration of such specified time for completion plus authorized extensions. This charge will be addition to the payment of liquidated damages.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3 LIABILITY INSURANCE. Delete the entire subsection and Refer to Public Works Contract Article 7.

7-4 WORKERS' COMPENSATION INSURANCE. Delete the entire subsection and Refer to Public Works Contract Article 7.

7-5 PERMITS. Delete and substitute:

The Contractor shall obtain, pay, and comply with all permits, including but not limited to the permits requirements as shown in the "Instruction to Bidders" part of this contract document, and give all notices necessary and incident to the due and lawful prosecution of the work and to the preservation of the public health and safety.

Excavation shall not be started on any trench, vertical or sloping, that is five feet (5') or more in depth until the Contractor has obtained a permit from the State Division of Industrial Safety and submitted a copy of said permit to the Engineer. Upon demand by the City or the State Division of Industrial Safety or representatives thereof, the Contractor shall produce the permit.

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

The Environmental Quality Act of 1970 (Chapter 1433, Stats. 1970), as amended by Chapter 1154, Stats. 1972 may be applicable to permits, license and other authorizations which the Contractor must obtain from local agencies in connection with performing the work of the contract. The Contractor shall

comply with the provisions of said statutes in obtaining such permits, licenses and other authorizations and they shall be obtained in sufficient time to prevent delays to the work.

In the event that the City has obtained permits, licenses or other authorizations, applicable to the work, in conformance with the requirements in said Environmental Quality Act of 1970, the Contractor shall comply with the provisions of said permits, licenses and other authorizations.

7-6 THE CONTRACTOR'S REPRESENTATIVE. Add the following:

When and as directed by the City Engineer, the Contractor shall attend all conferences and meetings which the City Engineer deems necessary for the proper progress of work under this contract.

7-8 WORK SITE MAINTENANCE.

7-8.1 General. Add the following:

When and as often as required by the Engineer, the Contractor shall furnish and operate self-loading motor sweepers with spray nozzles, to keep paved areas affected by the work acceptably clean and dust free.

The Contractor shall remove graffiti from all work, materials, equipment, and signs within the project. Equipment, materials, or signs containing graffiti shall not be brought to the project. Any graffiti found on work, materials, equipment, or signs shall be cleaned or removed from the project within 24 hours from its discovery. The cost of graffiti removal shall be borne by the Contractor, and shall be considered as being included in the various Contract items. Graffiti removal on paved surfaces shall be by sand-blasting with use of appropriate BMP's and clean-up included, and graffiti removal from other surfaces shall be by methods involving equivalent level of effort as approved by the Engineer.

7-8.3 Noise Control. Add the following:

The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract.

Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler. If the Contractor is forced or allowed by the Engineer to work outside the normal work hours, the noise level from the Contractor's operations, between the hours of 9:00 P.M. and 6:00 A.M. shall not exceed 86 dBA at a distance of fifty (50) feet. This requirement in no way relieves the Contractor from responsibility for complying with local ordinances regulating noise level. Said noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks, transmit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

7-8.4 Storage of Equipment and Materials.

7-8.4.1 General. Add the following:

It shall be the Contractor's responsibility to locate any storage sites for materials and equipment needed and such sites must be approved in advance by the City Engineer, and must be free of

objectionable material. The storage site shall be properly fenced, screened from neighboring properties and street view. The storage site has to comply with Sec 7-8.6, in compliance with California Storm Water Best Management Practice handbook for construction activities. The Contractor must submit to the City Engineer for approval any and all agreement(s) between the Contractor and the property owner(s) of said storage site(s) and/or construction site(s) for approval prior to the start of construction. Said agreement(s) must provide for the restoration of the site(s) by the Contractor prior to the filing of "Notice of Completion" by the City Engineer.

7-8.4.2 Storage in Public Streets. Add the following:

Stockpiling or storage of materials and equipments on any public right-of-way or parking areas will not be permitted without the approval of the City Engineer. Materials spilled along or on said right-of-way or parking areas shall be removed completely and promptly. All stockpile and storage areas shall be kept in a safe, neat, clean, and orderly fashion, and shall be restored to equal or better than original condition upon completion of the work.

Add the following subsection:

7-8.4.3 Temporary Light, Power, and Water Any water drawn from City fire hydrant shall be via City owned water meter. The meter requires posting a security deposit with the Utility Services Customer Service at City Hall. The deposit shall be retained until return of the meter in a condition like received, less normal wear and tear and set up charge. Deposit shall be forfeited for lost, stolen, or damaged meter. Cost of service charges and water consumption shall be paid to be paid to the Utility Services Department monthly. Current read of the meter to be provided or available for reading each month. All construction water meters require an approved "Reduced Pressure Backflow Preventer" (RPBP) to be installed immediately behind the meter on the service side. The Contractor shall operate the fire hydrant with a hydrant wrench only. Should damage occur to the hydrant, the Contractor shall make repairs at his expense.

The Contractor shall notify the Los Angeles County Fire Department and the City of Pomona, Public Works Department 24 hours in advance, stating the location of the hydrant and the hours when it will be used.

It is a misdemeanor to use water from any Public Fire Hydrant without obtaining the proper authorization.

7-8.6 Water Pollution Control. Add the following:

The Contractor shall comply with the requirements of Subsection 7-8.6 of the Standard Specifications and shall conduct his operations so as to prevent Portland cement, mud, silt or other materials from entering the surface drainage structures of the adjoining street and any underground storm drainage system. Contractor shall comply with the requirements of project specific **Storm Water Pollution Prevention Plan (SWPPP) in Appendix K.**

In addition to complying with all applicable federal, state and local laws and regulations, the contractor shall take note of the **NPDES (National Pollution Discharge Elimination System) Requirements**. The Contractor shall take all precautionary actions and implement all necessary BMPs to prevent discharges to any portion of the storm drain conveyance system including discharge of pollutants from activities such as paving operations, concrete waste washouts, cold-milling, vehicle and equipment fueling from entering storm drain systems. These precautionary actions are required as

dictated by the Stormwater Management program in accordance with Chapter 18 of the Pomona City Code. Such pollutants are listed per the California Stormwater Best Management Practices handbook for Construction activities.

The following shall be implemented:

1. Handle, store, and dispose of materials properly.
2. Avoid excavation and grading activities during wet weather.
3. Construct diversion dikes and drainage swales around working sites.
4. Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
5. Develop and implement erosion control plans (if applicable).
6. Check and repair leaking equipment away from construction sites.
7. Designate a location away from storm drains for refueling.
8. Cover and seal catch basins if work in their vicinity may allow debris or deleterious liquids to enter.
9. Use vacuum with all concrete sawing operations.
10. Never wash excess material from aggregate, concrete, or equipment onto a street.
11. Catch drips from paving equipment with drip pans or absorbent material.
12. Clean up all spills using dry methods.

7-10 PUBLIC CONVENIENCE AND SAFETY.

7-10.1 Traffic and Access. Add the following:

Traffic and access, including but not limited to vehicular and pedestrian traffic controls, maintenance of vehicular and pedestrian access, detours, and street closures, shall be in accordance with Subsection 7-10, of the latest edition of the Standard Specifications for Public Works Construction, including all its subsequent amendments; the latest edition of the **CAMUTCD (California Manual of Uniform Traffic Control Devices)** with State of California Modifications and the following Special Provisions. In the event of conflict, the Special Provisions shall take precedence over the CAMUTCD and the Standard Specifications, and the CAMUTCD shall take precedence over the Standard Specifications.

No lane closure will be allowed prior to 8:30 AM or after 3:30 PM within half-mile from any school or on major streets in the direction of peak traffic flow, unless otherwise provided in a City approved Traffic Control Plan.

No lane closure will be allowed prior to 8:00 AM on all other city streets.

The Contractor shall provide and maintain **four** ~~two~~ portable changeable/programmable message signboards (PCMS) for each street intersection under construction **(one on each leg)** ~~and on all major arterial streets~~. The signboards shall be installed one week prior to begin construction. The text shall be approved by the City. Portable changeable message signs shall be furnished, placed, operated, and maintained by the Contractor, at locations to be designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these special provisions.

Payment for the requirements of PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) shall be at the contract **lump sum (LS) price** ~~unit price bid per EACH (EA)~~ and shall include full compensation for furnishing all labor, tools, equipment, materials and incidentals required for doing all the work involved in furnishing, installing, maintaining, relocating, changing sign message (regardless of the

number of times directed by the Engineer), replacing, repairing, and when no longer required, removing of all PCMS as specified in the State Standard Specifications, the Standard Specifications, and these Special Provisions, and as directed by the Engineer. No additional compensation will be allowed therefore.

Convenient and safe pedestrian access to occupied residential and business property shall be maintained at all times. Access to mailboxes must be maintained at all times such that the postal delivery service is not- interrupted. Trash pick-up service shall not be interrupted. Access to vacant and unused property may be restricted when approved by the Engineer. Both vehicular and pedestrian access shall be maintained at all times to all other property except as otherwise specifically authorized in writing by the City's Engineer.

1) **NOTIFICATION:** The Contractor shall give written and reasonable notice (in English and in Spanish) to occupants or owners of property adjacent to the construction site at least (5) working days prior to the beginning of construction in their respective areas. The notification shall include the date and time of street closures, parking and traffic access information and requirements, and precautionary information regarding the work to be done. A copy of all notifications shall be submitted to the City Engineer for approval.

2) **ACCESS TO DRIVEWAYS:** The Contractor shall notify in writing residents of property adjoining the location of the work at least forty-eight (48) hours before the start of construction on that street. The Contractor is responsible for posting "temporary no-parking" signs at least forty-eight (48) hours before using the parking lane for construction purposes. The Contractor shall be responsible for furnishing, posting, and removing temporary "No Parking" and "No Driving" signs (as applicable) along project streets. Signs shall be posted on each side of the street with a maximum of 200 feet between signs. Signs may be attached to existing poles, street lights standards or whatever is existing in the public right-of-way. When necessary, the Contractor shall furnish posts.

Pursuant to City requirements, "Temporary No Parking" signs must be posted and verified by the Pomona Police Department 24 hours prior to beginning of construction.

In the case of work requiring excavation of the roadway which may interfere with the use by residents or businesses of their driveways, suitable provisions shall be made by the Contractor at such time as the exigencies of construction may demand a temporary blocking of said driveways. Efforts shall be made by the Contractor to minimize the duration of said blocking and to notify the residents of this need well in advance. Further, the Contractor shall provide access to each residential or commercial establishment each evening.

The contractor shall keep the access open to the LA County Fire Department and Pomona Police Department at all times and Coordinate his construction efforts with these departments and the City of Pomona.

3) **TRAFFIC CONTROL PLANS:** ~~If required, the~~ **The** Contractor shall submit a legible, detailed Traffic Control Plan (TCP) on one or more 24" x 36" reproducible plan sheets which shall clearly show and/or describe all proposed lights, warning signs, barricades, delineators, temporary lane markings, temporary traffic signals or signs, and any and all other facilities proposed to be installed. Said TCP shall be prepared and stamped/sealed, signed, and dated by a State of California Registered Civil or Traffic Engineer and shall show all lane closures, restrictions, tapers, and other disruptions of normal traffic flow, including pedestrian and vehicular detours. A schedule and/or

sequencing diagram shall be included. Said TCP may be drawn on a sepia or other transparent copy of the project's Plans. Said TCP shall be submitted to the Engineer for approval within **fifteen (15) calendar days** after issuance of **Conditional NTP**. It shall be the Contractor's responsibility to immediately revise said Plan at the direction of the Engineer, and the Contractor hereby agrees that such shall be strictly adhered to, and the Contractor hereby understands and agrees that its failure to provide any facility or device as shown on the TCP, or its deviation from said Plan, shall constitute a breach of contract.

7-10.3 Street Closures, Detours, Barricades. Add the following:

No closure of any street shall be allowed unless prior written permission is obtained from the City Engineer and approval of traffic control and detour plan. If permission to close a street is granted, then the Contractor is required to notify in writing at least **five (5) working days** in advance of street closures, all directly affected properties, all emergency services, and school bus services shall be notified by the contractor in writing of the locations, time, and date of the closures. In case of schedule changes, the emergency services, etc., shall be notified by telephone at least **two (2) working days** in advance of the street closure.

Add the following subsection:

7-15 RECORD DRAWINGS. At the beginning of the project, one blue-line print of each applicable drawing will be issued by the City to the Contractor for use in preparing record drawings.

Actual construction conditions shall be accurately and completely recorded on the blue-line prints by the Contractor as the project progresses. Upon completion of the work, the Contractor shall sign the record drawings and shall submit same to the City's Inspector for checking and approval prior to the Notice of Completion is filed.

Add the following subsection:

7-16 HAUL ROUTES. Haul routes shall be submitted to the Engineer within **fifteen (15) consecutive calendar days** following written notice of award of contract. Haul routes shall minimize impacts on heavily traveled arterials and areas with sensitive land used including schools, hospitals, and religious and residential communities.

Minimize **idling**: Contractor shall prohibit engine idling while waiting to load or unload, if the expected wait exceeds **ten (10) minutes**.

SECTION 8 – FACILITIES FOR AGENCY PERSONNEL

Facilities for Agency Personnel will not be required on this project unless specified otherwise in technical Provisions.

SECTION 9 – MEASUREMENT AND PAYMENT

9-3 PAYMENT.

9-3.1 General. Add the following:

Payment for cost of work to comply with the Standard Specification for Public Works Construction and these Special Provision and the Public Works Contract shall be included in the various bid items, and no additional payment will be made.

The City may keep any monies which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefore, to the payment of any expense, losses or damages, as determined by the Engineer, incurred by the City, for which the Contractor is liable under the contract.

Whenever in the opinion of the City Engineer the Contractor shall have completely performed the contract on his part, the City Engineer shall notify the City that the contract has been completed in its entirety. He shall request that the City accept the work and that the City Clerk be authorized to file, on behalf of the City, in the office of the Los Angeles County Recorder, a notice of completion of the work herein agreed to be done by the Contractor. The Contractor will then submit to the City Engineer for approval a written statement of the final quantities of contract items for inclusion in the final invoice. Upon receipt of such statement, the Engineer's Representative shall check the quantities included therein and shall authorize the Contractor to submit an invoice which in the City Engineer's opinion shall be just and fair, covering the amount and value of the total amount of work done by the Contractor, less **five percent (5%)** of the total work done.

On the expiration of **thirty-five (35) calendar days** after the filing of the **Notice of Completion** of the work, the City shall pay to the Contractor the amount remaining after deducting from the amount or value stated in the invoice all prior payments to the Contractor and all amounts to be kept and retained under the provisions of the contract.

9-3.2 Partial and Final Payment.

The Engineer will, after award of the Contract, establish a closure date for the purpose of making monthly progress payments. The Contractor may request in writing that such monthly closure date be changed. The Engineer may approve such request when it is compatible with the Agency's payment procedure.

- Prior to the first day of the month, during the progress of the work, commencing on the day and month specified in the **Contract**, Contractor shall submit to the Contract Officer a complete itemized payment request for all labor and materials incorporated into the work during the preceding month and the portion of the contract sum applicable thereto. Upon receipt of a properly presented payment request, the Contract Officer shall process the payment request in accordance with Public Contracts Code Section 20104.50. The Contract Officer shall review the payment request as soon as possible. If the Contract Officer rejects the payment request, it shall be returned to the Contractor within seven days of its receipt by the City with an explanation for the reasons of its rejection. If the payment request is approved, or partially approved in writing by the Contract Officer, payment shall be made for the approved portion of the work within thirty (30) days of receipt of an undisputed and properly presented payment request. Late payments shall bear interest at the legal rate of interest in accordance with Code of Civil Procedure 685.010. City shall pay Contractor a sum based upon **ninety-five percent (95%)** of the contract price apportionment of the labor and materials incorporated into the work under the contract during the month covered by said statement. The remaining **five percent (5%)** thereof shall be retained as performance security.

Add the following subsections

9-3.2.1 Retention of Funds. Progress payments shall be made in accordance with section 9-3.2 of the Special Provisions. In accordance with said section, City shall pay Contractor a sum based upon ninety-five percent (95%) of the contract price apportionment of the labor and materials incorporated into the work under the contract during the month covered by said statement. The remaining five percent (5%) thereof shall be retained as performance security to be paid to the Contractor, **thirty five (35) calendar days** after recordation of final Notice of Completion with County of Los Angeles, after Contractor shall have furnished City with a release of all undisputed contract amounts, if required by City. In the event there are any claims specifically excluded by Contractor from the operation of the release, the City may retain proceeds (per Public Contract Code 7107) of up to 150% of the amount in dispute. City's failure to deduct or withhold shall not affect Contractor's obligations hereunder.

The amount of any liquidated damages will be deducted from earned progress payments due the Contractor.

Add the following subsection:

9-3.2.2 Substitution of Securities. Pursuant to California Public Contract Code Section 22300, substitution of eligible equivalent securities for any moneys withheld to ensure performance under the contract for the work to be performed will be permitted at the request and expense of the successful bidder..

9-3.3 Delivered Materials. Add the following:

Unless included in the Bid Schedule, or unless otherwise called for in Technical Provisions, no payment will be made for materials or equipment delivered but not yet incorporated in the work.

PART 6

TECHNICAL PROVISIONS

(SUPPLEMENTS AND MODIFICATIONS TO
THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION)

City of Pomona
Major Street Rehabilitation - Citywide (FY 13/14)
PROJECT NO. 428-2590-xxxxx-68548
Technical Provisions

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BID ITEM #1: MOBILIZATION, INCLUDING QUALITY ASSURANCE PLAN COMPLIANCE (BID PRICE SHALL BE 2% OF THE TOTAL BASE BID)

A. GENERAL

Mobilization shall consist of all conditional notice to proceed work, securing all permits/approvals and licenses, paying all fees, preparatory work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for the work on this project; potholing; and for all other work and operations which must be performed or cost incurred without other pay items on the various contract items on the project site.

Re-mobilizations from street to street or intersection to intersection, and as needed in all other circumstances by the Contractor's operations, work sequencing, revised work sequencing, scheduling, revised schedules and for all work shall be included in unit price bid for the various items of work involved. No additional compensation will be allowed therefore.

Mobilization shall also include all costs required by the contract and not specifically included in a pay item.

B. PROJECT COORDINATION

The Contractor shall be required to initiate and maintain project coordination with affected stakeholders, residents, schools, police & fire departments, solid waste collection department, utility agencies, transportation agencies and businesses throughout the course of this project.

The Contractor shall coordinate with all transit agencies regarding affected transit routes a minimum of 4 weeks in advance of any impact to the route. Known transportation agencies within the project limits are:

- Foothill Transit,
- Metro,
- Omni Trans
- Pomona Transportation Authority

The contractor shall coordinate with each agency to determine necessary accommodations for the bus stops during the course of the project. Coordination may involve field meetings to discuss the safe passage of pedestrians, the limits where work zone will be, recommend phasing of work in a sequence to cause as little impact and/or the closure of the bus stops.

Attention to business coordination shall also be included under the contractor's responsibilities.

As part of the contractor's project coordination efforts, a minimum of two project specific notices shall be prepared and distributed to all residences and businesses within the project limits, or whose properties lie on dead end/cul-de-sac streets that intersect with one of the project segments. Separate notices shall be prepared for each roadway segment. The minimum required notices are:

- **Project Information Notice (to be distributed one week (7 calendar days) prior to the start of construction** ~~to be distributed at start of project~~ which includes:

- General project limits (street specific) & scope of work
 - Construction timeframe & duration
 - Contractor contact name and number for access needs and project questions
 - **All notices shall be in English and Spanish**
- **Slurry/Fog Seal or Grinding and Paving Notice (to be distributed one week (7 calendar days) to be distributed 5 working days prior to start of grinding/paving operations) which includes:**
 - Description of type of work
 - Specific Dates of grinding & paving impacts
 - Parking limitations
 - Special Instructions (Trash, Access, Etc.)
 - Contractor contact name and number for access needs and questions.
 - **All notices shall be in English and Spanish**

Contractor shall coordinate, organize, set up, participate at, and address issues with all utilities at a weekly utility coordination meeting held at the project intersection sites and shall send out and follow-up on all communications needed weekly and daily with utilities to affect the completion of the intended work.

Contractor shall attend weekly progress meetings at Pomona City Hall, 505 S. Garey Avenue, Pomona, CA 91724, from the week of the conditional notice to proceed through the week of the notice of completion. At the weekly progress meetings, Contractor shall provide in a format acceptable to City Engineer: updated schedules, work locations map for current and next 2 weeks. Contractor shall participate in the planning and forecasting of work to avoid delays and disruptions, and shall communicate with the City to anticipate resolution of foreseeable issues before they happen and to expedite resolution (time is of the essence) of issues that have already occurred. The Contractor shall attend the weekly progress meetings and shall:

- **shall coordinate to have Foreman in attendance at all weekly progress meetings,**
- **be prepared to discuss all aspects of the project,**
- **require necessary subcontractors to also attend and perform,**
- **provide updated complete project CMP schedule,**
- **provide updated detailed 2-week look-ahead schedule, and updated overall project schedule**

The cost for project coordination and notification shall be included in various work items and no additional compensation will be allowed therefore.

C. POTHOLING

The Contractor shall pothole the proposed locations of all proposed traffic signal foundations and other underground improvements. The Contractor shall complete potholing, confirm there are no conflicts with the proposed traffic signal improvements, and obtain the City's approval of shop drawings prior to the ordering of traffic signal equipment.

The Contractor shall provide temporary Full-Depth hot-mix asphalt or concrete pavement patching acceptable to the City Engineer to allow these areas to be re-opened to ALL modes (bicycle, pedestrian, vehicular, etc) of traffic through the intervening “ordering/waiting” period.

The Contractor shall Not commence other unnecessary disruptions in the intersection areas (project work areas), beyond the above noted potholing, until the time needed for the completion of this other work coincides with the CPM (Critical Path Method) schedule for the poles, cabinets, controllers, etc. for the complete work. Contactor shall continue utility coordination and shall resolve utility conflicts and service needed during the intervening ‘ordering/waiting’ period.

D. QUALITY ASSURANCE PLAN COMPLIANCE

The Contractor comply with the requirements of the Quality Assurance Plan in Appendix I.

E. MEASUREMENT & PAYMENT

Measurement & Payment for Mobilization, including Quality Assurance Plan compliance (~~Bid Price Shall be 2% of the Total Base Bid~~) shall be at the contract lump sum (LS) price bid as defined in Section 9-3.4 of the standard specifications, including but not limited to all activities, equipment, supplies, materials, transportation, facilities, and cleanup, and the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for the work on this project; and for all other work and operations of the Contractor's forces which must be performed or cost incurred, without other pay items on the various contract items on the project site under the Contract. 50% of the Payment shall be made upon Award of Contract, 25% of the Payment shall be made upon 50% of the completion of work, and 25% of the Payment shall be made upon 100% completion of work and shall constitute full compensation for the completion of the work. ~~Payment shall be made as the work proceeds and shall constitute full compensation for the completion of the work. The total price for Mobilization shall be 2% of the total contract amount. No further compensation will be allowed separately from bid items.~~

BID ITEM #2: CONSTRUCTION SURVEY & MONUMENT PRESERVATION

Prior to any construction activities, all monuments, centerline ties, and any other survey markers within the project limits shall be located and recorded by a State of California Licensed Land Surveyor. No work will be authorized until the Contractor submits the required documentation to the City. Upon completion of construction, conflicting monuments, centerline ties, and other survey markers obliterated during construction shall be replaced in-kind per section 309 of the SSPWC and per the California Professional Land Surveyor's Act, latest edition. Corner records for all applicable intersections shall be filed with the County of Los Angeles prior to and after construction activities with copies of recordings provided to the City. All work involved shall conform to the California Professional Land Surveyor's Act, latest edition.

Measurement & Payment for Construction Survey & Monument Preservation shall be at the contract **lump sum (LS)** price bid for all work involved with impacted monuments, centerline ties and survey markers due to all construction activity and shall include furnishing all materials, tools, labor, equipment and incidentals necessary to perform all operations involved with resetting obliterated monuments, centerline ties, and other survey markers. Work shall also include all work involved with filing corner records, including payment of any required fees, prior to and after construction in conformance with the California Professional Land Surveyor's Act, latest edition and County of Los Angeles Surveyor's Office requirements, and providing documentation of same to the City of Pomona.

BID ITEM #3: SWPPP/NPDES/WATER POLLUTION CONTROL

A. GENERAL

The Contractor shall conform to the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities, NPDES General Permit No.CAS000002 (Order No. 2009-0009-DWQ), the Waste Discharge Requirements for the County of Los Angeles and the Regional Water Quality Control Board for the Los Angeles Region. The Contractor shall confirm that all of the Best Management Practices (BMP's) have been adequately detailed and addresses his or her anticipated construction operations and meets the intent of the NPDES requirements.

The Contractor shall utilize Best Management Practices (BMP's) during construction to ensure that sediment from storm runoff and construction activities does not enter storm drains. Some of the primary Water Pollution Control measures anticipated for this project include, but are not limited to, covering all storm drains inlets in the project vicinity with water permeable fabric and gravel bags prior to performing any AC grinding, removal or paving operations; properly fueling and cleaning all equipment/vehicles; maintaining an ample supply of gravel/sand bags on-hand when excavating new PCC sidewalk/ramp/curb/gutter improvements in the event of rain; properly containing all PCC treatment materials such as the coloring agents, exposed aggregate etching chemicals and surface treatment chemicals required to install the detectable warning mats; properly covering all incoming material trucks and all out going debris hauling vehicles; providing restroom facilities for workers; and regular street sweeping of the work area and haul routes to the satisfaction of the City of Pomona. The requirements of all of the following agencies shall be met and maintained and where there is a conflict between requirements, the most stringent requirement shall govern.

1. Regional Water Quality Control Board Los Angeles Region
2. County of Los Angeles
3. City of Pomona & NPDES General Permit Requirements (No. CAS000002 and Order No. 2009-0009-DWQ) including BMP's

B. BEST MANAGEMENT PRACTICES

The Contractor shall submit a Best Management Practice (BMP) plan for containing any wastewater or storm water runoff from the project site including, but not limited to the following:

1. No placement of construction materials where they could enter storm drain system, which includes gutters that lead to catch basins.
2. Checking construction vehicles for leaking fluids.
3. Providing a controlled area for cleaning or rinse-down activities.
4. Monitoring construction activities.
5. Minimizing usage of water when saw-cutting and vacuum the residue.
6. Providing measures to capture or vacuum-up water contaminated with construction debris.
7. Removing any construction related debris on a daily basis.
8. Protecting work areas from erosion.

The BMP will be approved by the Engineer prior to any work. The City of Pomona will monitor the adjacent storm drains and streets for compliance. Failure of the Contractor to follow BMP plan will

result in immediate cleanup by City and back-charging the Contractor for all costs plus 15 percent.

It is assumed that the Contractor will apply for the “Small Construction Rainfall Erosivity Waiver” as defined in the General Permit. Filing of the waiver does not relieve the Contractor of submitting BMP’s to be used on site during construction, nor does it relieve the Contractor from conforming to the storm water requirements of the State Water Resources Control Board. The Contractor shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board’s SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. In the event that a the Rainfall Erosivity Waiver is not granted by the State Water Resource Control Board, the Engineer shall be notified immediately.

C. MEASUREMENT & PAYMENT

Measurement & Payment for SWPPP/NPDES/Water Pollution Control shall be at the contract **lump sum (LS)** price bid, including but not limited to all activities, equipment, supplies, materials, cleanup, and incidentals for doing all the work including BMP Plan preparation, implementation and maintenance of BMP’s on the construction site, preparation and filing for the NOI, all SWPPP documentations, updates to SMARTS and “Small Construction Rainfall Erosivity Waiver” as specified herein and as described in the SSPWC, all NPDES related work and activities, and no further compensation will be allowed therefore.

BID ITEM #4: PROJECT SIGNS

The Contractor shall provide and install a total of ~~eight~~ **sixteen** (16) project signs, two (2) at each project intersection **using Appendix J – Project Information Sign as a template**. The sign shall be mounted onto a 4’X8’ plywood board, and supported by wood posts with bracing and skids as directed. The finish and lettering of the sign shall be as directed by the City.

The Contractor shall erect the sign using the attached City specifications install at locations designated by the Engineer. The erection of the signs shall be designed to be stable when subjected to high wind gusts. The Contractor shall maintain the sign for graffiti and shall provide a new sign if the graffiti or other event which damages the sign cannot be repaired. The Contractor may apply an anti-graffiti coating or cover the sign with clear Plexiglas as an alternative. The conditions for sign maintenance would remain the same; resulting in sign-replacement or Plexiglas replacement. At the end of construction, the Contractor shall be responsible for removal and return to the City.

The information and format required for the sign will be discussed at the pre-construction meeting. The Contractor shall submit a draft copy of the Project Sign to the Engineer for approval before fabrication.

Measurement & Payment for Project Signs shall be at the contract unit price bid **per each (EA)** for the approval, production, fabrication, installation, maintenance, and, upon completion of the project, the removal of project signs, restoration of impacts, and shall include all materials, labor, tools, equipment, and performing all operations necessary for project signage, as directed by the Engineer. No additional payment will be made therefore.

BID ITEM #5: CALTRANS ENCROACHMENT PERMITTING – Foothill Boulevard SR-66

The Contractor shall be responsible for preparing, submitting, processing and obtaining an encroachment permit/double permit from Caltrans District 7, including payment of all required fees and insurance provisions, for all work within Caltrans Right-of-way at Foothill Boulevard (SR-66). All permitting, coordination, equipment, time, materials and incidentals required to obtain approval and maintain correspondence with Caltrans District 7, shall be included in this bid item.

The Contractor shall be responsible for obtaining an encroachment permit through Caltrans for all work within State Right-of-way and sphere of influence, including the intersection of Foothill Boulevard (SR66) and Garey Avenue. No work on Garey Avenue within Caltrans Right-of-Way at Foothill Boulevard will be allowed until the Contractor obtains the required encroachment permit/double permit, and complies with all of the conditions listed in the approved permit. The City’s approved permit application, instructions, permit requirements and forms have been included in Appendix C. The Contractor shall review and submit all required information to Caltrans District 7, including any required permit fees, inspection fees, and insurance, with a carbon copy being sent to the City Project Manager.

The Contractor shall review and understand the permitting and scheduling requirements for the Caltrans permit. The contractor’s schedule shall include scheduling items for submitting and obtaining approval for the construction permit, traffic control and site specific plans. Paving operations on Garey Avenue shall be planned in order to best coincide with Caltrans’s approval of the final permit package.

It shall be the contractor’s responsibility to verify the full extent of the submittal and scheduling requirements in order to fully comply with the Caltrans permit and to complete the scope of work within the allotted timeframe.

Measurement & Payment for Caltrans Encroachment Permitting-Foothill Boulevard SR-66 shall be at the contract **lump sum (LS)** price bid and shall include all labor, tools, materials, equipment, fees, incidentals, and hours necessary to coordinate and obtain the Caltrans encroachment permit and/or Caltrans double permit, prepare traffic control and phasing plans, and comply with all conditions of the encroachment permit. The work item also includes all costs associated with Caltrans permit and inspection fees, insurance, and all other associated costs. No additional payment will be made therefore.

BID ITEM #6: TRAFFIC CONTROL & ELECTRONIC MESSAGE SIGNS (EMS)

A. GENERAL REQUIREMENTS:

It shall be the Contractor's responsibility to furnish detailed Traffic Detour and Control Plans for CITY approval, for all work within the project limits, including any proposed modifications to the approved Traffic Detour and Control Plan for the intersection of Garey Avenue and Foothill Boulevard (SR-66), which is included in the project plans and Caltrans Encroachment Permit. The Contractor shall comply with all requirements of the Caltrans Encroachment Permit required for the work at the intersection of Foothill Boulevard (SR-66) and Garey Avenue. All Traffic Detour and Control Plans shall be prepared by a California registered Civil or Traffic Engineer and submitted for plan checking and City approval, prior to the start of construction.

Said plan shall identify construction phasing, which shall not disrupt existing traffic circulation patterns. Delineation shall be in accordance with the latest version of the California Manual on Uniform Traffic Control Devices as approved by the City Traffic Engineer. No street closures shall be proposed or made without the prior **written** approval of the ENGINEER and other agencies involved.

All work shall conform to the SSPWC and the "California Manual on Uniform Traffic Control Devices" (CA-MUTCD). Unless otherwise specified, this item shall include full compensation for street closures, detours, grading, restoration, signs, flagmen, barricades, flashers, temporary striping, removal and replacement of miscellaneous signs, **temporary signal modifications/operations**, fences and all appurtenances related to providing traffic control for the project.

No street or access closure to through traffic will be allowed to be proposed or implemented without the **written** approval of the ENGINEER.

Electronic message signs (EMS) shall be provided on each roadway segment per section 7-10.1. A minimum of four EMS at each intersection shall be in place one week prior to any roadway operation that will have impact on the streets and/or intersections. EMS shall remain in place until the work is completed on the project intersections. It shall be the contractor's responsibility to maintain, update and move the EMS as required and directed by the City.

The Contractor shall provide **additional** advance electronic message signs (EMS) for road closures requiring detours and for lane closures at appropriate locations prior to entering the detour or lane closure area in each affected direction. These signs are in addition to the advance notification EMSs discussed in the supplemental provision (Section 7-10.1).

Traffic control also includes all additional materials, equipment and labor to construct driveways one-half (1/2) at a time.

Steel plate covers shall be installed over all open trenches at the close of construction each day so that a minimum of one (1) travel lane in each direction can be maintained during non-construction hours. Recess (flush) installation of steel plates is required on all asphalt streets and ramping (1v:24h) with asphalt is required on all concrete streets.

Specialized traffic control will be required for this project, requirements are described in Section 7-10.

“No Parking” signs must be posted a minimum of 48 hours in advance, but not more than 72 hours prior to the period needing enforcement. Tow-away, No Parking signs must include:

BY ORDER OF THE POLICE DEPT, C.V.C. 22651 (L) / 22658 (A)

All necessary temporary striping is included as part of the traffic control bid item.

B. PHASING REQUIREMENTS:

General Traffic Control/Phasing Requirements:

A minimum of one (1) travel lane of twelve (12) feet (minimum) in each direction shall be maintained on all paved streets within the construction zone at all times wherever possible. If one travel lane in each direction is not possible during construction, the Contractor shall follow the requirements stated in Section 7-10.1 which require flaggers and pilot cars for lane closures. Clearances from traffic lanes shall be five feet to the edge of any excavation and two feet to the face of any curb, pole, barricade, delineator, or other vertical obstruction. Access shall be provided to all intersecting local streets and driveways at all times. Utility adjustment and striping will be permitted during daylight hours. The Contractor shall submit a plan detailing the delineation and protective measures to be undertaken for CITY and other agencies' approval.

Holiday Phasing Requirements:

The Contractor will not be allowed to excavate and leave open any parkway or roadway improvements over any weekend or holiday. The Contractor shall schedule and phase the work accordingly to ensure that all initiated work is completed before the start of any weekend or holiday.

Street Specific Traffic Control/Phasing Requirements:

Garey Avenue & Foothill Boulevard (SR-66):

- See Appendix C for Caltrans Encroachment Permit requirements for work within Foothill Boulevard (SR-66), State right-of-way and sphere of influence.

Garey Avenue & Bonita Avenue:

- Garey Avenue:
 - Road closures will not be allowed on Garey Avenue.
 - Detailed traffic control and phasing plans shall be required for the entire project limits.
 - The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
 - Weekend work will be required for all pavement grinding, patching and paving operations.
- Bonita Avenue:
 - Limited road closures will be allowed on Bonita Avenue for the roadway paving operations due to the limited street widths. **Local and emergency access shall be maintained.**

- Road closures shall be phased and implemented in logical segments, and shall require the preparation and implementation of a roadway detour plan. Final segments and detour routes shall be approved by the City prior to implementation.

Garey Avenue & Arrow Highway:

- Road closures will not be allowed on Garey Avenue or Arrow Highway within the project limits.
- Detailed traffic control and phasing plans shall be required for the entire project limits.
- The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
- Weekend work will be required for all pavement grinding, patching and paving operations.

Garey Avenue & Alvarado Street:

- Garey Avenue:
 - Road closures will not be allowed on Garey Avenue.
 - Detailed traffic control and phasing plans shall be required for the entire project limits.
 - The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
 - Weekend work will be required for all pavement grinding, patching and paving operations.
- Alvarado Street:
 - Limited road closures will be allowed on Alvarado Street for the roadway paving/sealing operations due to the limited street widths. **Local and emergency access shall be maintained.**
 - Road closures shall be phased and implemented in logical segments, and shall require the preparation and implementation of a roadway detour plan. Final segments and detour routes shall be approved by the City prior to implementation.

Holt Avenue & Hamilton Boulevard:

- Road closures will not be allowed on Holt Avenue or Hamilton Boulevard within the project limits.
- Detailed traffic control and phasing plans shall be required for the entire project limits.
- The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
- Weekend work will be required for all pavement grinding, patching and paving operations.

Holt Avenue & Towne Avenue:

- Road closures will not be allowed on Holt Avenue or Towne Avenue within the project limits.
- Detailed traffic control and phasing plans shall be required for the entire project limits.

- The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
- Weekend work will be required for all pavement grinding, patching and paving operations.

Holt Avenue & San Antonio Avenue:

- Road closures will not be allowed on Holt Avenue or San Antonio Avenue within the project limits.
- Detailed traffic control and phasing plans shall be required for the entire project limits.
- The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
- Weekend work will be required for all pavement grinding, patching and paving operations.

San Bernardino Avenue & Indian Hill Boulevard:

- Road closures will not be allowed on San Bernardino Avenue or Indian Hill Boulevard within the project limits.
- Detailed traffic control and phasing plans shall be required for the entire project limits.
- The contractor's operations shall be phased and scheduled in such a way that the paving and sealing operations can be completed in a single day's work so that all lanes are open to traffic at the end of each work day.
- Weekend work will be required for all pavement grinding, patching and paving operations.

C. Measurement & Payment:

Measurement & Payment for Traffic Control & Electronic Signs shall be on a **lump sum (LS)** basis and shall include compensation for all traffic control activities including but not limited to labor, materials, tools, equipment for temporary Asphalt Concrete, Cold and Hot Mix installation as well as the removal for all work involved in Traffic Control as specified, including preparation of Traffic Control Plans and obtaining CITY and other agencies plan review, approval and permits, install and maintain project signs, temporary construction signs, delineators, cones, flashing arrow signs, portable changeable message signs, street closures, detours, temporary striping, barricades, steel plates, one-half width at a time driveway construction, and other safety devices, as required for public safety in Section 7-10 "Public Convenience and Safety" of the Standard Specifications for Public Works Construction (SSPWC) and the Special Provisions or as directed by the Engineer. No separate payment will be made for traffic control, and no further compensation will be allowed therefore.

BID ITEM 7: PUNCH LIST (BID PRICE SHALL BE 2% OF THE TOTAL BASE BID)

This item includes all labor, equipment and materials required to prepare, complete and restore all punch list items to the City's satisfaction. No partial payment will be allowed until all punch list items, restoration, clean up, demobilization, as-builts, operation and maintenance manuals/documents, and prevailing wage submittals are completed and provided to the City and accepted by the City Engineer. Costs not included in this bid item shall be included in various bid items of work.

Measurement & Payment for Punch List (~~Bid Price Shall be 2% of the Total Base Bid~~) shall be on a **lump sum (LS)** basis as defined in Section 9-3.4, including but not limited to all activities, equipment, supplies, materials, transportation, facilities, and cleanup, associated with the completion of all punch list items, as-builts, O&M Manuals, submittal of all required prevailing wage forms and all other required items. ~~The total price for Mobilization shall be 2% of the total contract amount.~~ No further compensation will be allowed separately from bid items.

CLEARING AND GRUBBING:

Section 300-1, "Clearing and Grubbing," of the Standard Specifications is supplemented by the following:

Contractor shall field verify existing grades and shall accept site as is, for no other grading shall be performed by the CITY.

- 300-1.3 Removal and Disposal of Materials
- 300-1.3.1 General

All materials removed shall be disposed of in a legal manner at an appropriate Disposal Site.

- 300-1.3.2 Requirements

Prepare and follow an organized plan for demolition and removal of items.

4. Shut off, cap, and otherwise protect existing public utility lines in accordance with the requirements of the public agency or utility having jurisdiction.
5. Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid, and ready to receive new materials specified elsewhere.
6. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.

Demolished materials shall be considered to be property of the Contractor and shall be completely removed from the job site.

Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

A. Bituminous Pavement

Saw cutting of edges to be joined is required.

Contractor shall be familiar with all sections and plans of the Contract Documents to determine the location and extent of selective demolition to be performed.

In the company of the City Representative, visit the site and verify the extent and location of selective demolition required.

1. Carefully identify limits of selective demolition.
2. Mark interface surfaces as required to enable workmen to identify items to be removed and items to be left in place intact.

B. Vegetation

Clearing and grubbing shall consist of the removal of all natural and artificial objectionable materials from construction areas.

Clear ground surface of all vegetable growth, such as trees, logs, upturned stumps, roots, brush, grass, plantings, weeds, and all objectionable material within limits of construction and/or grading operations. Areas of existing lawn not disturbed by construction or grading shall be protected.

All roots 1" and larger, rocks and/or debris 3" and larger, and all other objectionable materials shall be removed 3 feet below existing ground surface or subgrade whichever is deeper where encountered during demolition or construction operations.

C. Miscellaneous

In addition to the work outlined in Section 300-1.1 of the Standard Specifications, the following items of work are included under Clearing & Grubbing unless otherwise covered by specific bid item.

1. Maintaining dust control at all times by watering during the entire time of the project, whether extended or not, including developing a water supply and furnishing and placing all water for all work done in the contract, including water used for extra work.
2. Application of soil sterilant.
3. Protection of utilities, structures, improvements and other facilities within the construction zone, except those specifically shown on the plans to be removed or relocated.
4. Verification of existing locations and elevations as shown on the plans or directed by the ENGINEER.
5. Replacement of disturbed traffic signs, street names, mailboxes, property owner signs, fences, landscaping, protection of temporary construction fences and all appurtenances, striping and markings as required to the satisfaction of the ENGINEER. Also, includes the installation of safe pedestrian pathway by installing orange netting or other approved method of safely directing pedestrians through a protected path.
6. Provide for the replacement of trees and plants, of the same kind, to the satisfaction of the property owners whether indicated on the plans or not.
7. This item shall also be interpreted to include the removal or relocation of any additional items in conflict with the proposed work not specifically mentioned herein or covered by specific bid item as directed in the field by the Engineer, which maybe found within the work limits whether shown or not shown on the plans to be removed or relocated.
8. All surplus material three (3) inches or smaller shall be uniformly spread and compacted in the street sub grade. No material greater than three (3) inches in any dimension shall be used in the top twelve (12) inches of the sub grade. No nesting of rocks shall be allowed.

9. Unclassified fill shall consist of all fill unless separately designated. Construction of unclassified fill included preparing the area on which fill is to be placed, and the depositing, conditioning, and compaction of fill material.
10. Complete all demolition and removal work associated with the removal of AC, underlying PCC, PCC curb/gutter, as designated on the drawings for removal, unless otherwise defined.
11. Any structural or non-structural demolition work involved for the construction of the project and Contractor shall be responsible for disposing in a legal manner.
12. Determining and maintaining a straight edge in areas where AC joins existing edge of pavement.
13. Root pruning may be needed following concrete removals. Contractor shall give three (3) working days' notification, and coordinate with the Public Works Department, to accomplish the pruning. Contractor shall be responsible for removing and disposing of tree roots. Lifting of tree roots without cutting them in small pieces shall be avoided to prevent damage to trees and/or service lines. Pruning of roots encircling or adjacent to utility (i.e., water) service lines shall be performed by Contractor

Payment for clearing and grubbing as described above shall include full compensation in furnishing all labor, materials, tools and equipment as specified, including saw-cutting, loading, hauling, stockpiling and disposal, shall be included in the various items of work for which Clearing and Grubbing is required, as directed by the Engineer, and no additional payment will be allowed therefore.

UNCLASSIFIED EXCAVATION:

Section 300-2, "Unclassified Excavation," of the Standard Specifications is supplemented by the following:

Unclassified excavation shall also include salvaging clean excavated material, filling areas to the required grade and cross-section, compacting fill material, and subgrade preparation, as directed by the Engineer.

300-2.2 Unsuitable Material

Bituminous Pavement and Concrete removals shall be saw-cut at the designated lines of removal shown on the Plans or as designated by the Engineer.

300-2.6 Surplus Material

All surplus materials shall be disposed of in a legal manner at the Contractor's expense.

This item shall be included in the various items of work, for which unclassified excavation is required, as directed by the Engineer. No further compensation will be allowed therefore.

BID ITEM 8: COLD PLANE EXISTING AC PAVEMENT 1.5”-3” PER TYPICAL SECTION SHEET 2 & 3 OF PLANS

Subsection 302-1.1, "Cold Milling Asphalt Concrete Pavement," of the Standard Specifications is supplemented by the following:

302-1.1 General

Cold milling (planing) shall be performed as required per Typical Sections and details shown on Sheets 2 of plans, or as directed by the Engineer.

All temporary striping required after cold milling operations shall be installed per City Standards. All required temporary striping shall be considered paid for under the bid item for Traffic Control. No additional compensation will be allowed.

The Contractor shall be responsible for furnishing, placing and maintaining barricades and lights as necessary to protect the public from danger due to the work being done. The machine used for cold planing shall have performed satisfactorily on similar work and meet the following requirements:

The Planing Machine shall be specially designed and built to perform cold planing of bituminous pavement with the ability to plane concrete patches. The cutting drum shall be a minimum of sixty (60”) inches wide with carbide tip cutting placed in variable lacing patterns to provide various finishes. The machine shall be capable of operation at speeds ranging from 0 to 40 FPM. It shall be self-propelled and have a water spray at the cutting drum to minimize dust. The machine shall be capable of removing the material next to the gutter of the pavement being reconditioned and so designed and the operator thereof can at all times observe the planing operation without leaving the controls. The cutting drum shall be adjustable as to slope and shall deep cut in one pass a maximum of three (3”) inches without producing fumes or smoke.

Ski arms to improve smoothness of grinding operations are required with a minimum 15 foot long arm.

The Contractor shall provide a smaller machine to trim areas inaccessible to the larger machine at manholes, curb returns and intersections. The smaller machine shall be equipped with a twelve (12”) inch wide cutting drum mounted upon a three (3) wheel chassis allowing it to be positioned without interrupting traffic and pedestrian flow.

During the operation the Contractor shall sweep the street with mechanical equipment and remove all loose material from planed areas. In addition, all existing asphalt/slurry buildup on the concrete gutter shall be removed and the cost thereof shall be included in the unit price of cold planing cost, no additional compensations shall be paid. The Contractor shall abate dust nuisance by cleaning, sweeping and sprinkling with water or other means as necessary.

Residue from grinding shall not be permitted to flow or travel into gutters, onto adjacent street surfaces or parkways. All residues shall be completely removed by a vacuum sweeper and properly disposed. Sweeping is to take place immediately after the grinding has been completed and as directed by the Engineer. No washing of any residue into gutters and/or drainage structures shall be allowed. The Contractor shall cover and protect all storm drain inlets prior to the start of cold milling operations.

All pavement transitions and temporary striping/markings shall be in place prior to the opening of a lane for traffic. Any pavement grade differential between adjacent lanes that will, with the permission of the Engineer, remain during non-working hours shall be indicated with the appropriate warning signage.

Cold mix A.C. shall be placed and maintained at the interface between milled and non-milled areas to eliminate the hazard caused by sudden elevation differences, especially in pedestrian path of travel areas adjacent to wheelchair ramps, and shall be removed prior to placement of surface course pavement.

The Contractor shall provide access and detours at all times for pedestrian facilities when cold milling.

The Contractor is to notify the Engineer at least two (2) working days prior to and immediately after the cold mill operations so that observations and measurements may be made of areas before the placement of permanent asphalt.

Existing pavement thicknesses, as measured by the City's geotechnical investigation, have been provided on the plans and in these specifications for reference purposes only. It shall be the contractor's responsibility to verify the existing pavement thickness and to adjust field operations accordingly in order to properly construct the proposed improvements.

A. PHASING REQUIREMENTS

Cold milling shall not be performed more than the allowed days ahead of surface course paving, as outlined below:

All Project Streets and Intersections --

- Base paving shall occur within 1 working day of the cold milling operations
- Final paving shall occur within 3 working days of the cold milling operations

B. CRACK SEAL & WEED ABATE

Weed abatement shall be applied 10 days prior to work.

Prior to placing the ARHM overlay all cracks, areas identified greater than or equal to ¼ inch in width shall be cleaned and filled with crack filler. The pavement surface should be warm, dry and free of any dust, dirt and deleterious material before applying the crack sealant. The crack sealant shall be a Type "D" Joint Sealant per section 201-3.7 of the Standard Specifications and shall be DEERY 200 or Crafcro Polyflex Type 3 hot applied sealant, or approved equal. The Contractor shall submit for approval the material he intends to use for crack sealant two (2) weeks prior to its incorporation into the work.

Cleaning of cracks or holes shall be by power brooming, compressed air or other approved methods.

302-1.11 Payment

Measurement and Payment for COLD PLANE EXISTING AC PAVEMENT 1.5”-3” PER TYPICAL SECTION SHEET 2 & 3 OF PLANS, including removal and disposal of petromat/pavement reinforcing fabric, and disposal of residue, shall be made at the unit price bid per **square yard (SY)**, and shall include all labor, tools, equipment and materials required to complete the work per the details and thicknesses shown on the plans. The price of this item shall include milling the pavement to be removed, the disposal and hauling of material removed, including pavement fabric (as applies), crack cleaning, crack filling and preparing cracks for overlay as described herein, all debris, traffic control as described herein, and all incidentals required for doing the work involved in cold milling asphalt concrete surfaces as defined in Section 302-1, and no further compensation will be allowed therefore.

BID ITEM 9: ASPHALT RUBBER HOT MIX (ARHM-GG-C PG 64-16)

Asphalt concrete surface course shall be Asphalt Rubber Hot Mix, Type ARHM-GG-C, wet process, as specified in Section 203-11 and 302-9 of the Standard Specifications (2012 edition), per Typical Sections as shown on the plans, and shall conform to the following:

Paving asphalt used for asphalt-rubber shall be performance grade PG 64-16. Composition and Grading shall be per Section 203-11.3 of the Standard Specifications (2012 edition). The Contractor shall submit a copy of the asphalt concrete mix design to the City or its designated laboratory a minimum of two weeks prior to the start of the construction.

The Contractor shall place the ARHM a maximum of 48 hours after the commencement of all edge grinding operations during any stage of the work for this project.

Apply SS-1H tack coat at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints of AC patching and P.C.C. surfaces, edges, and cold surface joints (i.e. between layers of HMA & ARHM) against which ARHM is to be placed. Diesel fuel shall not be used for cleaning purposes within the limits of this project.

All surfaces to be overlaid shall be cleaned by the use of a broom and a vacuum sweeper. The overlaid surface shall be free of water, dust, or foreign material before tack is applied. All raised pavement markers shall be removed prior to the placement of any AHRM concrete overlay. Removal of all AC slurry seal residue from gutter lip should be completed prior to paving.

The Contractor shall utilize a paving machine equipped with an automatic adjusting screed, which is actuated by a 30-foot "ski", for the entire ARHM-GG overlay.

ARHM-GG shall be thoroughly compacted by rolling. The number of rollers necessary will be established in accordance with Section 302-5.6.1 of the Greenbook Specifications. All compacted ARHM-GG shall have a relative compaction of not less than 95 percent in accordance with Section 302-5.6.2 of the Greenbook Specifications.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint. Joint lines between successive runs shall be within 5 inches of lane lines or a minimum of 12 feet outside of the outer most lane line.

The Contractor shall provide for adequate quality control measures to insure that delivery of asphalt rubber shall be neither too slow nor too fast to prevent stopping of the paving operation and/or cooling of the asphalt rubber material. Material delivery scheduling and handling is critical to provide for optimum compaction opportunity and maximize ride quality performance.

Rock dust blotter material shall be required immediately after the completions of the "finish rolling" and prior to opening to traffic to prevent bleeding and tracking of the asphalt rubber material.

Rock dust blotter shall be per Section 200-1.2 of the Standard Specifications and shall be uniformly applied using a mechanical spreader, which distributes uniformly at a rate of approximately three pounds per square yard. Compaction rollers shall not be allowed on the rock dust covered

pavement surfaces. All excess rock dust blotter shall be removed from the street at the end of each workday.

Measurement and Payment for **ASPHALT RUBBER HOT MIX (ARHM-GG-C PG 64-16)** shall be included in the contract unit price bid per **ton (TON)**, based upon certified weigh master tickets. The unit price shall include all surface preparation, tack coat, rock dust blotter, labor, tools, equipment materials, and incidentals required to complete the work. No additional compensation will be allowed.

BID ITEM 10: DENSE GRADED ASPHALT CONCRETE (DGAC) PAVEMENT (TYPE B PG 70-10 (10% MAX. RAP) &

Paving Asphalt shall be PG 70-10 conforming to Section 203-1 of the Standard Specifications (2012 edition).

Tack coat material shall be Grade SS-1h. A tack coat **shall** be applied on all vertical joints and between each course of paving regardless of when the previous course of asphalt was laid. The contractor shall not be allowed to omit the tack coat for any circumstance unless approved by the Engineer.

Asphalt concrete shall conform to Section 203-6 of the Standard Specifications (2012 edition).

Dense Graded Asphalt Concrete (DGAC) base course for full depth A.C. slot paving shall be an asphalt concrete mix of Type B PG 70-10. **A maximum of 10% reclaimed asphalt pavement (RAP)** with paving asphalt conforming to Section 203-1 at the central mixing plant, is allowed for the DGAC base course mix and for the AC mix for slot paving.

Where asphalt concrete pavement is designated to be constructed on existing aggregate base, the existing base shall be compacted and graded in accordance with Subsection 301-2.3, "Compacting," of the Standard Specifications.

Construction of Asphalt Base Course, as shown on the Plan, shall be in accordance with section 302-5 of the Standard Specifications (2012 edition) or as modified or supplemented herein.

- A. Asphalt concrete slot paving areas and thicknesses shall be as shown on the plan.
- B. The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining A.C. pavement is placed.
- C. Finished surface of the new pavement at the edge of gutter shall be flush with the edge of the gutter in all crosswalk areas and curb ramp areas, and shall be 3/8" higher than the lip of gutter in all other areas.

The last sentence of Subsection 302-5.1 of the Standard Specifications is hereby deleted and replaced with the following:

AC pavement repairs and PCC pavement repairs shall be placed the same day as removals are performed.

The Contractor shall remove all raised pavement markers prior to any paving.

Tack Coat materials shall be Grade SS-1h emulsified asphalt, and shall be applied to the perimeter of all A.C. removal and replacement locations and cold milling locations. All tack coat over spray on gutter lips shall be removed.

At all locations where new asphalt concrete pavement is joining or overlaying existing asphalt pavement, the Contractor shall feather or perform pavement cold planing/milling to form a smooth

transition with the existing pavement. The final or surface layer of asphalt concrete shall not be placed until all on-site improvements have been completed, including all grading. Cold planing across side street shall be per plan dimension as adjusted in the field by the Engineer.

The Contractor shall be responsible for maintaining locations of all gate valves during construction operations. The self-propelled, mechanical spreading and finishing machine, when placing the surface course, shall be equipped with an electronically-actuated screed adjusting mechanism which will automatically maintain the required elevations; a side-mounted extension arm shall be used to minimize surface undulations longitudinal to the machines travel.

Asphalt concrete base shall be spread and compacted in layers not to exceed 3-inches in compacted thickness. When more than one layer of base course is required, the layers shall be of equal thickness. The following shall apply to spreading:

1. Each layer shall be spread with an approved spreading device which will deposit a uniform layer for a minimum of one traffic lane width. A motor grader shall not be used as the spreading device.
2. Initial or breakdown compaction shall consist of a minimum of three complete coverages of the asphalt concrete and shall be performed with a two-or-three axle tandem roller weighing not less than 12 tons.
3. The initial or breakdown rolling shall be immediately followed by a motor grader with additional material to level irregularities and provide a uniform surface for subsequent layers. Additional rolling shall proceed directly behind the motor graders and shall consist of a minimum of three complete coverages with a pneumatic-tired roller.

Initial or breakdown compaction shall consist of a minimum of three coverages of a layer of asphalt mixture. A pass shall be the movement of a roller in both directions over the same path. A coverage shall be as many passes as are necessary to cover the entire width being paved. Overlap between passes, during any coverage made to insure compaction without displacement of material in accordance with good rolling practice, shall be considered to be part of the coverage being made and not part of a subsequent coverage. Each coverage shall be completed before subsequent coverages are started. Three-wheel rollers shall not be permitted and pneumatic rollers shall be used on lower layers only. Each lane of the top layer, once commenced, shall be placed without interruption.

The asphalt concrete pavement shall be spread with a self-propelled mechanical spreading and finishing machine.

The Contractor shall have sufficient workers and equipment necessary to accomplish proper placement and compaction of the asphalt concrete pavement to the satisfaction of the Engineer.

Ski arms to improve smoothness of paving operations are required on all paved streets with a 30-foot minimum length arm for paving.

The final or surface layer of asphalt concrete shall not be placed until all on-site improvements have been completed, including all grading and until all unacceptable concrete is removed and replaced at the direction of the Engineer.

Any sewer manholes, storm drain manholes, survey monuments, water meter box and cover, and water valves, frames, and covers, to be adjusted to grade by the Contractor, as indicated on the plans, shall be done in a workmanlike manner and all such work shall be done in cooperation with the utility owner. The Contractor shall be responsible for any costs resulting from the Contractor's failure to do the work at such times as are acceptable to the owner. The Contractor shall notify owner at least forty-eight (48) hours in advance of any work on any of their facilities and shall pay all inspection fees required by the owner for any work on their facilities.

The Contractor shall be responsible for maintaining locations of all gate valves during construction operations. Prior to performing any construction work on the street, the Contractor shall measure and tie out all at grade utility structures to be adjusted prior to completion of the project. Copies of all measurements shall be given to the Engineer upon completion of field measurements.

The Contractor shall exercise care so that surface materials such as rocks, dirt and debris do not enter sewer or storm drain lines.

Measurement and Payment for DENSE GRADED ASPHALT CONCRETE (DGAC) (TYPE B PG 70-10) (10% MAX. RAP) shall be included in the contract unit price bid per **ton (TON)**, based upon certified weigh master tickets. The unit price shall include subgrade and surface preparation, tack coat, and all labor, material, equipment and incidentals required to complete the work. No additional compensation will be allowed.

Temporary asphalt concrete, if required to maintain any requirements specified within these Specifications, shall be included in each respective bid item and no additional compensation shall be allowed. Payment for the requirements of slot paving adjacent to traffic loop detectors and temporary ramping shall be included in the contract unit prices bid for the various items of work involved and no additional compensation shall be allowed.

BID ITEM 11: SLURRY SEAL – TYPE I (CQS-1h)

All street to street remobilizations and demobilization work for slurry sealing activities shall be included in this bid item and no additional payment will be allowed.

At least ten (10) calendar days prior to commencing work, the Contractor shall submit a detailed slurry seal phasing schedule to the City for approval. This schedule shall allow residents on the streets to be sealed or paved, ample “on street” parking within a reasonable distance from their homes.

Based on the spreading schedule, the Contractor will notify residents, businesses, school districts, bus companies, trash and street sweeping companies, and emergency services of the proposed work and post temporary “NO PARKING” signs at no cost to the City. Signs shall be posted at all intersections, at the end of cul-de-sac streets, and on each side of the street a maximum of two hundred (200) feet between signs. Signs may be attached to existing poles, street light standards or parkway trees. When necessary the Contractor shall furnish posts.

The Contractor shall furnish and provide a ten (10) day and forty-eight (48) hour signs notice. The “NO PARKING” signs shall be in place not less than ten (10) days prior to performing the work; therefore a request for changes in the schedule requiring additional posting shall be submitted by the Contractor for approval by the City Engineer at least forty-eight (48) hours prior to posting of any said signs.

Upon forty-eight (48) hours of work to be performed on the street, the ten (10) day sign shall be removed and replaced with a forty-eight (48) hour notice and implemented for chip seal and slurry seal operations. The Contractor shall also create Notifications for manhole adjustments forty-eight (48) hours prior to the work to be performed. Upon start of pavement construction, the Contractor shall notify the residents in person for closure and obstruction of their street.

Crack cleaning, sealing and filling of the pavement surface shall be included in the unit price for slurry sealing.

Cracks shall be cleaned of all dirt, sand, and debris using no less than a 175 cfm compressor at 100 psi to insure cleanliness of asphalt walls to a proper depth (1:1 ratio).

Crack sealing shall comply with 303-1.8.7 of Standard specifications. Cracks larger than 1/4-inch and up to and including 3/8” shall be routed to a width of 1/2” and a depth of 3/4” and shall be filled. Cracks greater than 3/8” shall be filled but need not be routed. **Cracks in excess of 1-inch in width shall be filled with asphalt.** The Contractor is cautioned to make his/her own estimate of the linear footage of cracks to be filled. All filled cracks shall be made flush with surround pavement surface. All freshly applied sealant shall be immediately be covered with sand or rock dust to prevent tracking by vehicle tires when opened to traffic. All debris generated by the pavement crack cleaning shall be removed from the area before the end of the day on which the cleaning occurs.

All vegetation shall be removed by mechanical means using a 1/4” wide rotating blade to insure proper vegetation removal in narrow cracks.

Moisture shall be removed using a hot air lance accompanied by no less than a 175 cfm compressor producing an air stream velocity of 3,000 ft/sec and heated air temperature of 295°F with no

direct flame.

Sealant shall be applied in prepared cracks by inserting a nozzle into the crack and filling it from the bottom up with the approved sealant material.

Sealant shall be applied according to manufacturer's specifications, using manufacturer's recommended equipment. Manufacturer's specifications and equipment recommendations shall be furnished to the Engineer prior to construction.

After filling the cracks with sealant, a "U" shaped squeegee shall be used to strike off excess material and to provide a band-aid effect with the sealant. Any excess sealant material shall be removed from asphalt surfaces. After the sealant has cooled, there should be a depression between 1/8 and 1/4" in depth.

Slurry seal shall be quick set Type I Slurry Seal (CQS-1h).

Prior to application of slurry seal, the existing pavement surface shall be cleaned, accumulation of water removed, and unsatisfactory areas repaired. Failed pavement, base, or subgrade material shall be removed and replaced with new materials. Cracks in the surface not due to structural deficiencies shall be cleaned and sealed as described herein.

Removal of contamination, traffic paint, thermoplastic and vegetation: All dust, dirt, oil, grease, fuel, loose or flaky paint, thermoplastic, raised pavement markers, vegetation, and other objectionable material shall be removed. Grease and oil contaminated areas which cannot be cleaned shall be removed and replaced with new bituminous pavement. All vegetation shall be removed completely, and those areas treated with herbicide.

Any vegetation in the area of the slurry seal shall be removed with an approved herbicide applied at least ten (10) days prior to the placing of the slurry.

All utility covers/appurtenances shall be covered and protected during the slurry sealing operation. Upon completion and curing of the slurry seal, all covers placed on the utility appurtenances shall be removed and disposed of by the contractor.

Conforming to Standard Specifications, Section 302-4.2, mixing shall be performed by continuous-flow mixer. All aggregate particles shall be uniformly saturated and coated with asphalt.

The slurry mixer shall be a multi-blade or spiral continuous-flow unit in good working condition capable of accurately delivering a pre-determined proportion of aggregate, water, emulsion, and accelerator or retardant to the mixer and of discharging the thoroughly mixed slurry on a continuous basis. Each mixer shall have a metering device to measure the quantity of water in gallons used in each load of slurry and a separate metering device or equivalent which meets the approval of the City Engineer to measure the quantity of emulsified asphalt used in each load of slurry.

Transit mix trucks shall not be used.

The Contractor shall have two (2) fully operational mixers for use at the project site at all times. These mixers shall be available for inspection by the Agency at least forty-eight (48) hours prior to commencing work.

Application shall Conform to Standard Specifications, Section 302-4.3.1, the work shall consist of mixing asphalt emulsion, aggregate, additive and water, and spreading the mixture on the pavement where shown on the drawings. The Contractor shall apply Slurry seal two (2) weeks after crack sealant application. Contractor shall schedule his work to allow enough time between crack sealing and slurry seal application.

The Contractor shall inform himself of the city trash pick up days schedule for the project area. There shall be at least four (4) calendar day period prior to trash pick-up day for each street receiving slurry.

All concrete surfaces to be joined by the slurry seal, with the exception of parallel curb and gutter, shall be covered with tar paper or any approved material.

The sites for stockpiling and batching materials shall be clean and free from objectionable material. Arrangement for these sites shall be the responsibility of the Contractor.

Hand squeegees and other hand equipment shall be provided to remove spillage and spread slurry in areas inaccessible to the spread box.

The spreader box shall be equipped with flexible material in contact with the pavement and shall be maintained so as to prevent loss of slurry. It shall be adjustable to ensure a uniform controlled spread and be equipped with a mechanical or hydraulic type of horizontal shifting device. The spreader box shall be equipped with a burlap drag or approved equivalent.

The slurry mixture shall be fed into the spreader box such that a uniform and complete coverage of the pavement is obtained. The slurry seal machine shall be operated at such a speed that the amount of slurry in the spreader box shall remain essentially constant. Thickness of the slurry when measured over the average pavement surface shall be approximately the maximum size of the aggregate being used. Where multiple applications are required, each application shall be thoroughly cured before another application is placed.

Spreading shall Conform to Standard Specifications, Section 302-4.3.2.

Slurry should be placed only when the temperature is at least 10° C (50° F) and rising, and when no rain is expected.

The application of slurry shall not commence until after 8:30 a.m. and the slurry shall be sufficiently cured to be opened to traffic by 4:30 p.m. The streets to be sealed shall be closed from the time the application begins until the City Engineer determines the mixture has achieved sufficient set to be opened to traffic.

The Contractor shall thoroughly sweep or clean the surface, to the satisfaction of the City Engineer. The streets shall be swept of all loose aggregates for period of two (2) weeks after the application of slurry seal. Additional sweeping may be needed on streets that exhibit raveling of

aggregate. The frequency and location of additional sweeping will be on an as needed basis as determined by the Engineer at no additional cost to the City.

Prior to applying slurry, the surface to be sealed shall be cleaned by the Contractor unless otherwise specified. Immediately ahead of the mixer the pavement shall be pre-wetted by a pressure water distributed system equipped with a fog type spray bar which will completely fog the surface of the pavement. The need for application and the rate of application shall be determined by the City Engineer.

Evidence of solidification of the slurry, balling or lumping of the aggregates or the presence of uncoated aggregates shall be cause for rejection of the slurry.

Slurry shall be applied in such a manner that no ridges shall remain.

Slurry shall be applied with a maximum overlap of the concrete gutter of two (2) inches. Any slurry material exceeding two (2) inches shall be removed by the Contractor prior to the completion of the project.

The Contractor will be required to work around all existing utility facilities and seal up to said facilities. During sealing operations, the Contractor shall cooperate with the owners of any utility covers and shall cover and completely protect said covers with heavy plastic or other suitable material.

At the direction of the City Engineer, the Contractor shall repair and reseal all areas of the streets which have not been sealed properly or completely at no cost to the Agency.

Where the completed slurry is not uniform in color, the street shall be treated to eliminate the color variation at the Contractor's expense. The method of treatment shall be approved by the City Engineer.

Each slurry crew shall be composed of a coordinator at the project site at all times, a competent quick set mixing operator, a competent driver and sufficient laborers for any handwork, cleanup and barricading.

Curing:

Completed slurry seal shall be protected from traffic per Standard Specifications Section 302-4.4.

The Contractor shall be responsible for adequate barricading of the work area and controlling of traffic in the vicinity of the project as specified in Subsection 7-10 of the General Provisions.

When it is necessary to provide vehicular or pedestrian crossings over the fresh slurry, the City Engineer may direct the Contractor to spread sufficient sand or rock dust, or request that access be provided to the affected area to eliminate tracking or damage to the slurry. Sand, rock dust, or other measures used for this purpose shall be at the Contractor's expense.

Measurement & Payment for SLURRY SEAL – TYPE I (CQS-1h) shall be at the contract unit price bid per **Square Yard (SY)**, and shall include full compensation for all labor, materials, tools,

equipment, and incidentals; for doing all the work involved in scheduling, obtaining approvals, providing notifications, no parking signs, site preparation, crack cleaning, sealing, crack filling, surface preparations, covering and protecting all utility appurtenances, application of slurry seal, protection and barricading of the work, and for completing the work in place, as noted on the plans and approved by the Engineer, and no additional compensation will be allowed therefore.

BID ITEM 12: SAWCUT & REMOVE EX. AND CONSTRUCT PCC DRIVEWAY PER SPPWC STD. PLAN NO. 110-2 (TYPE AND THICKNESS PER PLAN) OVER 6" CMB

The Contractor shall sawcut, remove, and dispose of existing improvements, and construct new driveway approach, including integral curb, conforming to the SPPWC Standard Plan No. 110-2, as shown on the plans. Six (6") inches of crushed miscellaneous base shall be constructed under new driveways.

All related work shall conform to the provisions of Section 303-5 of the Standard Specifications, the Plans and these Specifications.

Concrete for driveways shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 PSI within 48 hours of pouring and at least 2,500 PSI after 28 days.

Crushed Miscellaneous Base material and construction shall conform to Subsections 200-2.4 and 301-2 of the Standard Specifications, and as directed by the Engineer. The sieve size shall be $\frac{3}{4}$ " (fine). Contractor shall install Crushed Miscellaneous Base (CMB) with line and grades to match final subgrade elevations as shown on the plans.

New improvements shall be constructed to grades indicated on the plans and in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

The Contractor shall be responsible to protect and oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be removed and replaced by the Contractor at no additional cost to the City.

All concrete removal and replacement work items shall be completed prior to grinding and paving any of the adjacent roadways.

For all concrete removals and replacements, the Contractor will not be allowed to excavate more locations than can be poured and completed by the end of the work week. All concrete removals shall be replaced by end the of the work week and completed in place unless authorized by the Engineer.

Damage to any existing improvements shall be remedied by sawcutting, removal and reconstruction at the Contractor's expense and to the satisfaction of the Engineer. Removals, relocations, and/or adjustments not covered by a separate bid item but necessary for the proposed concrete construction shall be included in the unit price bid for the various items of work involved.

The Contractor shall maintain safe access to all residents/ business establishment at all times throughout the duration of the contract. The only permitted interruption to access will be during placement of concrete. No establishment shall be denied access more than one day at a time. Contractor shall install steel plates after finishing the concrete, to provide access during the cure period. The

Contractor shall pour new P.C.C. improvements in such a fashion as not to interrupt the access to residences near the job site.

Should a driveway be excavated at the end of a workday, the Contractor shall provide a temporary access ramp to residences/businesses. The temporary access ramp shall be removed by the Contractor on the following day so that driveway construction can be completed. Access to building over newly placed ramp shall be provided the day following the placement of ramp. New ramp shall be protected by the Contractor with the use of materials such as roofing paper, plywood, or other means approved by the Engineer. The cost for the placement of the temporary ramp/plate, and its removal shall be included in the unit cost bid for the various items of work involved, and no additional compensation will be allowed therefore.

Any existing improvements damaged by the Contractor's operations shall be replaced in kind at the Contractor's expense and no additional compensation will be allowed therefore.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

All limits of remove and replace shall be determined by the Engineer.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC DRIVEWAY PER SPPWC STD. PLAN NO. 110-2 (TYPE AND THICKNESS PER PLAN) OVER 6" CMB shall be at the contract unit price bid per **square foot (SF)** and shall include, sawcutting, removal and disposal of existing concrete improvements, unclassified excavation, root pruning as directed by the City Arborist, subgrade preparation, 6" CMB, compaction, forms, steel reinforcement, expansion joints, sawcut for control joints, new PCC concrete driveway approach and integral curb, finishing, curing, and all other work as required to complete the work. The bid price for this item shall include excavation, placement and compaction of six inches (6") of crushed miscellaneous base (CMB) as a subbase for new driveway. No additional compensation will be allowed.

Payment for any driveway transitions onto private property shall be paid for under the various items of work.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 13: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER TYPE "D" (24") PER CITY OF POMONA STD. PLAN NO. A-3-64 (MODIFIED TO VARIABLE CURB FACE) &

BID ITEM 14: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER TYPE "D" (18") PER CITY OF POMONA STD. PLAN NO. A-3-64 (MODIFIED TO VARIABLE CURB FACE)

The Contractor shall sawcut, remove, and dispose of existing improvements and construct new curb and gutter conforming to the City of Pomona Standard Plan No. A-3-64, Type "D", with gutter width per plan (18" or 24"), modified to variable curb face, and conforming to all applicable sections of the Greenbook. Subgrade under all new curb and gutter shall be compacted to 95 percent relative density. Also, all roots and stumps shall be removed and/or ground to six (6) inches below sub-grade.

All related work shall conform to the provisions of Section 303-5 of the Standard Specifications, and the Plans and these Specifications.

The concrete class shall be 520-C-2500.

Concrete for curb and gutter shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

The work shall include replacement or relocation of any damaged irrigation lines and sprinkler heads to a condition equal to existing; and replacement of any grass damaged as a result of the construction operations with sod.

Weakened plane joints are required every ten (10) feet. Transitional curb and gutter shall be five (5) feet from one type to the other. No construction joints will be permitted.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Expansion joints in curb and gutter shall be constructed per City of Pomona Std. Plan No. A-3-64, and at locations specifically designated by the Engineer.

The removal of the curb and gutter shall not result in any damage to adjacent sidewalk, driveway approach or other improvements unless indicated on the plans. The top of curb elevations for the proposed curb and gutter shall match the existing top of curb elevations unless otherwise indicated on the plans. Any damage to adjacent improvements will be repaired at the Contractor's expense.

Prior to the removal of curb and gutter and sawcutting operation the Contractor is required to stake sawcut lines at a four (4) foot minimum offset from proposed gutter lip and gain acceptance from the Engineer.

Where existing red curb is removed and reconstructed, the Contractor shall paint the newly constructed curb (the curb face and top of curb) red. The paint material shall be water-base and shall be

Pervo Paint, Red Curb Paint #3123 or approved equal. **Locations and lengths of red curb shall match existing locations and lengths as shown on the plans.**

Prior to acceptance of any curb and gutter, the Contractor shall water flow test each segment of curb and gutter to ensure that ponding of water does not occur within the limits of new construction.

A sidewalk ½-inch radius edging tool is to be used to finish the edges of all curbs.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER TYPE “D” (24”) PER CITY OF POMONA STD. PLAN NO. A-3-64 (MODIFIED TO VARIABLE CURB FACE), shall be per the contract unit price bid per **lineal foot (LF)** and shall include all labor, materials and equipment necessary for sawcut, removal & disposal of existing improvements, subgrade preparation, forms, P.C.C. improvements, backfilling behind curb and gutter, restoring form areas, replacement of all existing landscape planting damaged by construction with plants and/or sod, as directed by the Engineer, restoring irrigation improvements damaged by construction and all other work required to complete the work. New curb and gutter shall be constructed to provide proper flow line with existing improvements. Curb height shall vary as necessary to join existing improvements. Transitional curb and gutter shall be five (5') feet from one type to the other. Weakened plane joints are required every ten (10) feet. The bid price for this item shall include excavation. No additional compensation will be allowed.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER TYPE “D” (18”) PER CITY OF POMONA STD. PLAN NO. A-3-64 (MODIFIED TO VARIABLE CURB FACE), shall be per the contract unit price bid per **lineal foot (LF)** and shall include all labor, materials and equipment necessary for sawcut, removal & disposal of existing improvements, subgrade preparation, forms, P.C.C. improvements, backfilling behind curb and gutter, restoring form areas, replacement of all existing landscape planting damaged by construction with plants and/or sod, as directed by the Engineer, restoring irrigation improvements damaged by construction and all other work required to complete the work. New curb and gutter shall be constructed to provide proper flow line with existing improvements. Curb height shall vary as necessary to join existing improvements. Transitional curb and gutter shall be five (5') feet from one type to the other. Weakened plane joints are required every ten (10) feet. The bid price for this item shall include excavation. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 15: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER PER CALTRANS STD. PLAN NO. A87A TYPE "A2-8" (MODIFIED TO VARIABLE CURB FACE)

The Contractor shall sawcut, remove, and dispose of existing improvements and construct new curb and gutter conforming to the Caltrans Standard Plan No. A87A, Type "A2-8", modified to variable curb face, and conforming to all applicable sections of the Greenbook and Caltrans Specifications. Subgrade under all new curb and gutter shall be compacted to 95 percent relative density. Also, all roots and stumps shall be removed and/or ground to six (6) inches below sub-grade.

All related work shall conform to the provisions of Section 303-5 of the Standard Specifications, Caltrans Specifications, and the Plans and these Specifications.

The concrete class shall be 520-C-2500.

Concrete for curb and gutter shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

The work shall include replacement or relocation of any damaged irrigation lines and sprinkler heads to a condition equal to existing; and replacement of any grass damaged as a result of the construction operations with sod.

Weakened plane joints are required every ten (10) feet. Transitional curb and gutter shall be five (5) feet from one type to the other. No construction joints will be permitted.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Expansion joints in curb and gutter shall be constructed per Caltrans Std. Plan No. A87A, and at locations specifically designated by the Engineer.

The removal of the curb and gutter shall not result in any damage to adjacent sidewalk, driveway approach or other improvements unless indicated on the plans. The top of curb elevations for the proposed curb and gutter shall match the existing top of curb elevations unless otherwise indicated on the plans. Any damage to adjacent improvements will be repaired at the Contractor's expense.

Where existing red curb is removed and reconstructed, the Contractor shall paint the newly constructed curb (the curb face and top of curb) red. The paint material shall be water-base and shall be Pervo Paint, Red Curb Paint #3123 or approved equal. **Locations and lengths of red curb shall match existing locations and lengths as shown on the plans.**

Prior to acceptance of any curb and gutter, the Contractor shall water flow test each segment of curb and gutter to ensure that ponding of water does not occur within the limits of new construction.

A sidewalk ½-inch radius edging tool is to be used to finish the edges of all curbs.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB & GUTTER PER CALTRANS STD. PLAN NO. A87A TYPE "A2-8" (MODIFIED TO VARIABLE CURB FACE), shall be per the contract unit price bid per **lineal foot (LF)** and shall include all labor, materials and equipment necessary for sawcut, removal & disposal of existing improvements, subgrade preparation, forms, P.C.C. improvements, backfilling behind curb and gutter, restoring form areas, replacement of all existing landscape planting damaged by construction with plants and/or sod, as directed by the Engineer, restoring irrigation improvements damaged by construction and all other work required to complete the work. New curb and gutter shall be constructed to provide proper flow line with existing improvements. Curb height shall vary as necessary to join existing improvements. Transitional curb and gutter shall be five (5') feet from one type to the other. Weakened plane joints are required every ten (10) feet. The bid price for this item shall include excavation. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 16: SAWCUT AND REMOVE EX. MEDIAN CURB AND CONSTRUCT CONC. MEDIAN CURB (TYPE AND THICKNESS PER PLAN)

The Contractor shall sawcut, remove, and dispose of existing improvements and construct new median curb conforming to the detail as indicated on the plans under the same bid item name, and conforming to all applicable sections of the Greenbook. Subgrade under all new median curb shall be compacted to 95 percent relative density. Also, all roots and stumps shall be removed and/or ground to six (6) inches below sub-grade.

All related work shall conform to the provisions of Section 303-5 of the Standard Specifications, and the Plans and these Specifications.

The concrete class shall be 520-C-2500 and the concrete shall be poured monolithically.

Concrete for median curb shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

The work shall include replacement or relocation of any damaged irrigation lines and sprinkler heads to a condition equal to existing; and replacement of any grass damaged as a result of the construction operations with sod.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

The removal of the existing median curb shall not result in any damage to adjacent median, roadway or other improvements unless indicated on the plans. The top of curb elevations for the proposed median curb shall match the existing top of median curb elevations unless otherwise indicated on the plans. Any damage to adjacent improvements will be repaired at the Contractor's expense.

Prior to acceptance of any median curb, the Contractor shall water flow test each segment of median curb to ensure that ponding of water does not occur within the limits of new construction.

A sidewalk ½-inch radius edging tool is to be used to finish the edges of the median curb.

Measurement and Payment for SAWCUT AND REMOVE EX. MEDIAN CURB AND CONSTRUCT CONC. MEDIAN CURB (TYPE AND THICKNESS PER PLAN), shall be per the contract unit price bid per **square foot (SF)** and shall include all labor, materials and equipment necessary for sawcut, removal & disposal of existing improvements, subgrade preparation, forms, P.C.C. improvements, backfilling median curb, restoring form areas, replacement of all existing landscape planting damaged by construction with plants and/or sod, as directed by the Engineer, restoring irrigation improvements damaged by construction and all other work required to complete the work. New median curb shall be constructed to provide proper flow line with existing improvements. Curb height shall vary as necessary to join existing improvements. The bid price for this item shall include excavation, placement and compaction of subbase for new median curb. The placement of flexible pavement at flowline shall be paid under respective bid item DENSE GRADED ASPHALT CONCRETE (DGAC) PAVEMENT (TYPE B PG 70-10 (10% MAX. RAP). Also, the bid price shall

include all work and materials necessary to tie in all existing curb drains using schedule 40 PVC pipe materials. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 17: SAWCUT & REMOVE EX. AND CONSTRUCT NEW PCC SIDEWALK PER CITY OF POMONA STD. PLAN NOS. A-7-02, A-7-61 AND A-7-66

The work under this Bid Item shall include the following tasks.

1. ***Construction of 4" Concrete Sidewalk:***

The Contractor shall construct new Portland cement concrete sidewalk conforming to Section 303-5 of the Standard Specifications and City of Pomona Standard Plan Nos. A-7-02, A-7-61 and A-7-66, with lines and grades to meet existing and as indicated on detail TYPICAL CURB RETURN TREATMENTS AND STANDARDS on the plans.

Prior to installation of sidewalk, the Contractor shall gain acceptance on all sidewalk layouts from the Engineer.

Concrete shall be Class 520-C-2500.

Concrete for sidewalk shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private properties, where required.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new sidewalk. The remaining asphalt or concrete pavement adjacent to new sidewalk shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

All removals shall be to the nearest existing score lines. Contractor shall walk the job with the City Inspector to mark removal limits prior to commencing work.

All new score lines shall be tooled and spacing should match existing. Sidewalk score lines shall have a minimum finished depth of ½-inch. Walkway replacement needed to join new sidewalk shall be in-kind (surface texture, aggregate, finish, etc.) to the walkway removed or as directed by the Engineer's representative.

The Contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

For all concrete removals and replacements, the Contractor will not be allowed to excavate more locations than can be poured and completed by the end of the work week. All concrete removals shall be replaced by end the of the work week and completed in place unless authorized by the Engineer.

One foot (1') slot patch at the back of the sidewalk adjacent to existing asphalt concrete driveway shall be replaced as required with a structural section of 6" AC over 6" CMB.

The Contractor may also be directed by the Engineer to sawcut and remove existing improvements and construct four inch (4") concrete over four inch (4") CMB in parkway areas (adjoining to sidewalk areas) or beyond public right-of-way to match existing improvements.

The Contractor shall protect all existing drainage pipes and structures, and other existing improvements not designated to be removed, in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of forty-eight-inch (48") clearance adjoining excavated areas within parkway limits for persons in wheelchairs and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Prior to acceptance of any sidewalk, the Contractor shall water flow test each segment of sidewalk to ensure that ponding of water does not occur within the limits of new construction.

2. *Unclassified Excavation:*

The unclassified excavation shall consist of all excavation for the construction of sidewalk. The Contractor shall also cut and remove any tree roots encountered within construction limit to at least six (6) inches below the subgrade.

3. *Irrigation Lines and Sprinkler Heads:*

The Contractor shall furnish and install all new pipe size to match existing but no less than ½" schedule 40, PVC pipe to tie into existing pipes, new sprinkler heads equal to or better than existing, and all appurtenances. All work shall conform to Sections 212-2 and 308-5 of the Standard Specifications and as directed by the Engineer.

The Contractor may salvage and reuse sprinkler heads that are still in reusable and functional condition for use at locations from which they were removed.

Any damage beyond the construction limit shall be repaired at the Contractor's expense per Section 7-9 of the Standard Specifications.

The Contractor shall cut interfering portions of existing irrigation lines and cap all ends for future reconnection.

The Contractor shall modify, relocate or replace and/or extend all encountered irrigation lines or sprinkler heads so as to give full coverage to landscape area.

All repair and replacement of the irrigation system shall be done within five (5) days or sooner after disconnection. During disconnection period of existing irrigation systems, the Contractor shall maintain the existing grass, trees, shrubs, and other existing landscape in a live condition with temporary irrigation system and/or shall water the landscaped areas by hand. Homeowner's water supply shall not be used without written consent from each homeowner.

As determined in the field by the Engineer, the Contractor may be directed to extend the existing

sprinkler system or place a P.V.C. sleeve into the landscaped area between the curb and sidewalk and other locations as necessary.

Prior to accepting work, the Contractor must turn the system on, and it must work properly in the presence of and to the satisfaction of the Engineer and property owner. The Contractor, at no cost to the City, shall replace any damaged and dead grass or landscaping beyond construction limits resulting from Contractor's operation or insufficient water supplies.

4. Sod and Modified Class "A" Topsoil:

The Contractor shall furnish and place Modified Class "A" Topsoil and new sod in accordance with Section 212-1 and Section 308 of the Standard Specifications for parkways and behind the right-of-way areas. The limits of sodding shall be as indicated in this specification.

During construction, the Contractor shall protect and support existing irrigation lines and sprinkler heads in place and intact. The Contractor shall adjust them to the proper level if necessary.

Prior to performing any landscaping work, Contractor shall place a 4-inch (4") thick imported Modified Class "A" Topsoil for the top layer of landscaping area.

The Modified Class "A" Topsoil shall consist of 80% content of Class "A" Topsoil per the Standard Specifications and 20% content of processed wood product of type "I" organic soil amendment per the Standard Specifications.

The Contractor shall place new sod in the areas adjoining the newly constructed concrete improvements that were disturbed by his/her operations.

The Contractor shall also place new sod for filled and regraded areas. The Contractor may be directed by the Engineer to sod other areas as necessary in conformance with these Specifications.

The Contractor shall select the type of new sod that matches or most matches the existing sod, or as directed by the Engineer.

Upon the completion of the removal of existing concrete improvements for which no replacement is required, the Contractor shall backfill the void with Modified Class "A" Topsoil for placing new sod as directed in those respective bid items.

4. Miscellaneous Clearing and Grubbing:

The Contractor shall trim all encountered bushes, hedges, plants, and vegetation having diameters equal to or less than six inches (6") measured at eighteen inches (18") above adjacent top of curb within construction limits, as directed by the Engineer. All roots and stumps shall be removed and/or ground to six inches (6") below subgrade. Upon completion of trimming, all debris shall be cleared from the site.

5. Regrading:

Some areas adjoining to new sidewalk will be lower or higher than new sidewalk grade. At these

locations the Contractor shall be required to re-grade the area to a slope of 3:1 from the edge of the new sidewalk to meet existing ground.

The Contractor may be directed to re-grade beyond the above ratio where necessary. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

All re-graded or filled areas shall receive four inch (4") thick Modified Class "A" Topsoil for placing new sod to match existing; therefore, the Contractor shall fill or excavate those areas accordingly. Sod shall be placed only where sod exists prior to cut and fill.

6. *Root Pruning:*

All root pruning to be performed must be coordinated with the City Arborist a minimum of 2 working days in advance of scheduled work. **The Contractor shall not cut any roots without the prior consent of the City Arborist.**

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT NEW 4" PCC SIDEWALK PER CITY OF POMONA STD. PLAN NOS. A-7-02, A-7-61 AND A-7-66 shall be at the contract unit price bid per **square foot (SF)** and shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary to do all the work involved thereof, complete, in place, and accepted. Payment for the preceding requirements shall include:

1. Removing existing concrete sidewalk and other conflicting improvements at parkway repair locations, sawcutting, clearing and grubbing, unclassified excavation, and 4" Portland cement concrete construction.
2. Restoring sprinkler systems including all reducers for different pipe sizes, and from existing or new pipes to the sprinkler heads, connection points, all fittings, all tees and ells, backfill material for pipe trench, and all miscellaneous materials for proper installation and for construction of complete sprinkler systems.
3. Furnishing and placing Modified Class "A" Topsoil and new sod.
4. Performing Miscellaneous clearing and grubbing.
5. Re-grading the areas behind the new sidewalk as stated herein.
6. Removing and replacing existing PCC improvements in the parkway or behind R.O.W. at the marked limits or as directed by the Engineer in the field.
7. Adjusting utility and water meter boxes to finished grade.
8. Protecting in-place the existing mail boxes or installing new posts and reattach.
9. Grinding existing stumps only (if trees were previously removed by others).
10. Removing miscellaneous parkway concrete, and replacing with modified class "A" topsoil.
11. Providing one foot (1') wide AC slot patch (4"AC/4"CMB) paving behind sidewalk adjacent to asphalt concrete driveways at required locations.
12. Tree root pruning as directed and approved by the City Arborist.

No additional compensation will be allowed.

BID ITEM 18: SAWCUT & REMOVE EX. AND CONSTRUCT NEW PCC SIDEWALK PER CALTRANS STD. PLAN NO. A88A

The work under this Bid Item shall include the following tasks.

1. ***Construction of 4" Concrete Sidewalk:***

The Contractor shall construct new Portland cement concrete sidewalk conforming to Section 303-5 of the Standard Specifications and Caltrans Standard Plan No. A88A, with lines and grades to meet existing.

Concrete shall be Class 520-C-2500.

Concrete for sidewalk shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private properties, where required.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new sidewalk. The remaining asphalt or concrete pavement adjacent to new sidewalk shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

All removals shall be to the nearest existing score lines. Contractor shall walk the job with the City Inspector to mark removal limits prior to commencing work.

All new score lines shall be tooled and spacing should match existing. Sidewalk score lines shall have a minimum finished depth of ½-inch. Walkway replacement needed to join new sidewalk shall be in-kind (surface texture, aggregate, finish, etc.) to the walkway removed or as directed by the Engineer's representative.

The Contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

For all concrete removals and replacements, the Contractor will not be allowed to excavate more locations than can be poured and completed by the end of the work week. All concrete removals shall be replaced by end the of the work week and completed in place unless authorized by the Engineer.

One foot (1') slot patch at the back of the sidewalk adjacent to existing asphalt concrete driveway shall be replaced as required with a structural section of 6" AC over 6" CMB.

The Contractor may also be directed by the Engineer to sawcut and remove existing improvements and construct four inch (4") concrete over four inch (4") CMB in parkway areas (adjoining to sidewalk areas) or beyond public right-of-way to match existing improvements.

The Contractor shall protect all existing drainage pipes and structures, and other existing improvements not designated to be removed, in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of forty-eight inch (48") clearance adjoining excavated areas within parkway limits for persons using wheelchairs and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

2. *Unclassified Excavation:*

The unclassified excavation shall consist of all excavation for the construction of sidewalk. The Contractor shall also cut and remove any tree roots encountered within construction limit to at least six (6) inches below the subgrade.

Contractor shall protect and support in-place and intact all existing curb drain lines during excavation and construction.

3. *Irrigation Lines and Sprinkler Heads:*

The Contractor shall furnish and install all new pipe size to match existing but no less than ½" schedule 40, PVC pipe to tie into existing pipes, new sprinkler heads equal to or better than existing, and all appurtenances. All work shall conform to Sections 212-2 and 308-5 of the Standard Specifications and as directed by the Engineer.

The Contractor may salvage and reuse sprinkler heads that are still in reusable and functional condition for use at locations from which they were removed.

Any damage beyond the construction limit shall be repaired at the Contractor's expense per Section 7-9 of the Standard Specifications.

The Contractor shall cut interfering portions of existing irrigation lines and cap all ends for future reconnection.

The Contractor shall modify, relocate or replace and/or extend all encountered irrigation lines or sprinkler heads so as to give full coverage to landscape area.

All repair and replacement of the irrigation system shall be done within five (5) days or sooner after disconnection. During disconnection period of existing irrigation systems, the Contractor shall maintain the existing grass, trees, shrubs, and other existing landscape in a live condition with temporary irrigation system and/or shall water the landscaped areas by hand. Homeowner's water supply shall not be used without written consent from each homeowner.

As determined in the field by the Engineer, the Contractor may be directed to extend the existing sprinkler system or place a P.V.C. sleeve into the landscaped area between the curb and sidewalk and other locations as necessary.

Prior to accepting work, the Contractor must turn the system on, and it must work properly in the presence of and to the satisfaction of the Engineer and property owner. The Contractor, at no cost to the City, shall replace any damaged and dead grass or landscaping beyond construction limits resulting from Contractor's operation or insufficient water supplies.

4. *Sod and Modified Class "A" Topsoil:*

The Contractor shall furnish and place Modified Class "A" Topsoil and new sod in accordance with Section 212-1 and Section 308 of the Standard Specifications for parkways and behind the right-of-way areas. The limits of sodding shall be as indicated in this specification.

During construction, the Contractor shall protect and support existing irrigation lines and sprinkler heads in place and intact. The Contractor shall adjust them to the proper level if necessary.

Prior to performing any landscaping work, Contractor shall place a 4-inch (4") thick imported Modified Class "A" Topsoil for the top layer of landscaping area.

The Modified Class "A" Topsoil shall consist of 80% content of Class "A" Topsoil per the Standard Specifications and 20% content of processed wood product of type "I" organic soil amendment per the Standard Specifications.

The Contractor shall place new sod in the areas adjoining the newly constructed concrete improvements that were disturbed by his/her operations.

The Contractor shall also place new sod for filled and regraded areas. The Contractor may be directed by the Engineer to sod other areas as necessary in conformance with these Specifications.

The Contractor shall select the type of new sod that matches or most matches the existing sod, or as directed by the Engineer.

Upon the completion of the removal of existing concrete improvements for which no replacement is required, the Contractor shall backfill the void with Modified Class "A" Topsoil for placing new sod as directed in those respective bid items.

5. *Miscellaneous Clearing and Grubbing:*

The Contractor shall trim all encountered bushes, hedges, plants, and vegetation having diameters equal to or less than six inches (6") measured at eighteen inches (18") above adjacent top of curb within construction limits, as directed by the Engineer. All roots and stumps shall be removed and/or ground to six inches (6") below subgrade. Upon completion of trimming, all debris shall be cleared from the site.

5. *Regrading:*

Some areas adjoining to new sidewalk will be lower or higher than new sidewalk grade. At these locations the Contractor shall be required to re-grade the area to a slope of 3:1 from the edge of the new

sidewalk to meet existing ground.

The Contractor may be directed to re-grade beyond the above ratio where necessary. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

All re-graded or filled areas shall receive four inch (4") thick Modified Class "A" Topsoil for placing new sod to match existing; therefore, the Contractor shall fill or excavate those areas accordingly. Sod shall be placed only where sod exists prior to cut and fill.

6. *Root Pruning:*

All root pruning to be performed must be coordinated with the City Arborist a minimum of 2 working days in advance of scheduled work. **The Contractor shall not cut any roots without the prior consent of the City Arborist.**

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT NEW 4" PCC SIDEWALK PER CITY OF CALTRANS STD. PLAN NO. A88A shall be at the contract unit price bid per **square foot (SF)** and shall include full compensation for all labor, materials, tools, equipment, and incidentals necessary to do all the work involved thereof, complete, in place, and accepted. Payment for the preceding requirements shall include:

1. Removing existing concrete sidewalk and other conflicting improvements at parkway repair locations, sawcutting, clearing and grubbing, unclassified excavation, and 4" Portland cement concrete construction.
2. Restoring sprinkler systems including all reducers for different pipe sizes, and from existing or new pipes to the sprinkler heads, connection points, all fittings, all tees and ells, backfill material for pipe trench, and all miscellaneous materials for proper installation and for construction of complete sprinkler systems.
3. Furnishing and placing Modified Class "A" Topsoil and new sod.
4. Performing Miscellaneous clearing and grubbing.
5. Re-grading the areas behind the new sidewalk as stated herein.
6. Removing and replacing existing PCC improvements in the parkway or behind R.O.W. at the marked limits or as directed by the Engineer in the field.
7. Adjusting utility and water meter boxes to finished grade.
8. Protecting in-place the existing mail boxes or installing new posts and reattach.
9. Grinding existing stumps only (if trees were previously removed by others).
10. Removing miscellaneous parkway concrete, and replacing with modified class "A" topsoil.
11. Providing one foot (1') wide AC slot patch (4"AC/4"CMB) paving behind sidewalk adjacent to asphalt concrete driveways at required locations.
12. Tree root pruning as directed and approved by the City Arborist.

No additional compensation will be allowed.

BID ITEM 19: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB RAMP PER SPPWC STD. PLAN NO. 111-5, WITH RETAINING CURB & DETECTABLE WARNING DEVICES PER FEDERAL & STATE ADA GUIDELINES (CASE & TYPE PER PLAN)

The work under this Bid Item shall include the following tasks:

1. ***Construction of 4" Concrete Curb Ramp:***

The Contractor shall construct new 4" Portland cement concrete curb ramp, including flares, monolithic and retaining curb, detectable warning surface, and other miscellaneous concrete construction conforming to Section 303-5 of the Standard Specifications, Federal and State ADA requirements, and SPPWC Standard Plan No. 111-5, Case and Type per plan.

Concrete shall be Class 520-C-2500.

Concrete for curb ramp shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

New improvements shall be constructed to grades indicated on the plans and in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

All removals shall be to the nearest existing score lines. Contractor shall walk the job with the City Inspector to mark removal limits prior to commencing work. All new score lines shall be tooled and spacing should match existing.

The Contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

For all concrete removals and replacements, the Contractor will not be allowed to excavate more locations than can be poured and completed by the end of the work week. All concrete removals shall be replaced by end the of the work week and completed in place unless authorized by the Engineer.

The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Damage to any existing improvements shall be remedied by sawcutting, removal and reconstruction at the Contractor's expense and to the satisfaction of the Engineer. Removals, relocations, and/or adjustments not covered by a separate bid item but necessary for the proposed concrete construction shall be included in the unit price bid for the various items of work involved.

Contractor shall submit a sample of the detectable warning surface to the Engineer for approval, prior to start of construction.

For all new P.C.C. curb ramp construction, the detectable warning surface required shall be WET SET DETECTABLE WARNING PANELS manufactured by **ADA Solutions, 323 Andover Street, Suite 3, Wilmington, MA 01887, Tel: (00) 647-1869, Fax: (978) 262-9125, www.adatale.com**, or approved equal.

The color of the detectable warning surfaces shall be black except for ramps adjacent to or within one block of a school. Ramps within one block of a school shall have Federal Yellow truncated domes.

The detectable warning surface shall be installed across the entire width of the bottom of the passageway ramp, and shall conform to ADA Requirements and SPPWC Standard Plan 111-5, as directed by the Engineer.

The detectable warning surface shall be installed in accordance with the manufacturer's recommendations and instructions; and the manufacturer shall provide a minimum 5-year warranty, guaranteeing replacement when there is a defect in the dome shape, color fastness, sound on cane acoustic quality, or deterioration of the detectable warning surface. The warranty period shall commence on the date of acceptance.

Any existing improvements damaged by the Contractor's operations shall be replaced in kind at the Contractor's expense and no additional compensation will be allowed therefore.

The first paragraph of Subsection 303-5.6 of the Standard Specification is hereby deleted and replaced with the following:

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk and ramps within construction limits where encountered for constructing new curb ramp. The remaining asphalt concrete pavement or PCC pavement adjacent to new curb ramp shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor may also be directed by the Engineer to sawcut and remove existing improvements and construct four inch (4") concrete over four inch (4") CMB in parkway areas (adjoining to ramp and sidewalk areas) or beyond public right-of-way to match existing improvements.

The Contractor shall protect all existing drainage pipes and structures, and other existing improvements not designated to be removed, in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of forty-eight-inch (48") clearance adjoining excavated areas within parkway limits for persons in wheelchairs and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private properties, where required.

2. *Unclassified Excavation:*

The unclassified excavation shall consist of all excavation for the construction of curb ramps. The Contractor shall also cut and remove any tree roots encountered within construction limit to at least six (6) inches below the subgrade.

3. *Irrigation Lines and Sprinkler Heads:*

The Contractor shall furnish and install all new pipe size to match existing but no less than ½” schedule 40, PVC pipe to tie into existing pipes, new sprinkler heads equal to or better than existing, and all appurtenances. All work shall conform to Sections 212-2 and 308-5 of the Standard Specifications and as directed by the Engineer.

The Contractor may salvage and reuse sprinkler heads that are still in reusable and functional condition for use at locations from which they were removed.

Any damage beyond the construction limit shall be repaired at the Contractor's expense per Section 7-9 of the Standard Specifications.

The Contractor shall cut interfering portions of existing irrigation lines and cap all ends for future reconnection.

The Contractor shall modify, relocate or replace and/or extend all encountered irrigation lines or sprinkler heads so as to give full coverage to landscape area.

All repair and replacement of the irrigation system shall be done within five (5) days or sooner after disconnection. During disconnection period of existing irrigation systems, the Contractor shall maintain the existing grass, trees, shrubs, and other existing landscape in a live condition with temporary irrigation system and/or shall water the landscaped areas by hand. Homeowner's water supply shall not be used without written consent from each homeowner.

As determined in the field by the Engineer, the Contractor may be directed to extend the existing sprinkler system or place a P.V.C. sleeve into the landscaped area between the curb and sidewalk and other locations as necessary.

Prior to accepting work, the Contractor must turn the system on, and it must work properly in the presence of and to the satisfaction of the Engineer and property owner. The Contractor, at no cost to the City, shall replace any damaged and dead grass or landscaping beyond construction limits resulting from Contractor's operation or insufficient water supplies.

4. *Sod and Modified Class "A" Topsoil:*

The Contractor shall furnish and place Modified Class "A" Topsoil and new sod in accordance with Section 212-1 and Section 308 of the Standard Specifications for parkways and behind the right-of-way areas. The limits of sodding shall be as indicated in this specification.

During construction, the Contractor shall protect and support existing irrigation lines and sprinkler heads in place and intact. The Contractor shall adjust them to the proper level if necessary.

Prior to performing any landscaping work, Contractor shall place a 4-inch (4") thick imported Modified Class "A" Topsoil for the top layer of landscaping area.

The Modified Class "A" Topsoil shall consist of 80% content of Class "A" Topsoil per the Standard Specifications and 20% content of processed wood product of type "I" organic soil amendment per the Standard Specifications.

The Contractor shall place new sod in the areas adjoining the newly constructed concrete improvements that were disturbed by his/her operations.

The Contractor shall also place new sod for filled and re-graded areas. The Contractor may be directed by the Engineer to sod other areas as necessary in conformance with these Specifications.

The Contractor shall select the type of new sod that matches or most matches the existing sod, or as directed by the Engineer.

Upon the completion of the removal of existing concrete improvements for which no replacement is required, the Contractor shall backfill the void with Modified Class "A" Topsoil for placing new sod as directed in those respective bid items.

6. *Miscellaneous Clearing and Grubbing:*

The Contractor shall trim all encountered bushes, hedges, plants, and vegetation having diameters equal to or less than six inches (6") measured at eighteen inches (18") above adjacent top of curb within construction limits, as directed by the Engineer. All roots and stumps shall be removed and/or ground to six inches (6") below subgrade. Upon completion of trimming, all debris shall be cleared from the site.

5. *Regrading:*

Some areas adjoining to new curb ramp will be lower or higher than new curb ramp and sidewalk grade. At these locations the Contractor shall be required to re-grade the area to a slope of 3:1 from the edge of the new sidewalk to meet existing ground.

The Contractor may be directed to re-grade beyond the above ratio where necessary. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

All re-graded or filled areas shall receive four inch (4") thick Modified Class "A" Topsoil for placing new sod to match existing; therefore, the Contractor shall fill or excavate those areas accordingly. Sod shall be placed only where sod exists prior to cut and fill.

6. *Root Pruning:*

All root pruning to be performed must be coordinated with the City Arborist a minimum of 2 working days in advance of scheduled work. **The Contractor shall not cut any roots without the**

prior consent of the City Arborist.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB RAMP PER SPPWC STD. PLAN NO. 111-5, WITH RETAINING CURB & DETECTABLE WARNING DEVICES PER FEDERAL & STATE ADA GUIDELINES (CASE & TYPE PER PLAN) shall be at the contract unit price bid per **each (EA)** and shall include all labor, tools, materials and equipment necessary to complete this work, sawcut, removal & disposal of existing improvements, excavation, subgrade preparation, root removal, all forms, P.C.C. ramp, curb & gutter improvements, retaining curb, spandrel improvements, grooving, detectable warning devices per Federal and State ADA requirements and as approved by the Engineer, utility adjustments and/or relocations, restoring form areas, and all other work as required to complete the work. Contractor shall submit a sample of detectable warning surface to the Engineer for approval 2 weeks prior to construction. No additional compensation will be allowed therefore. Wherever a traffic pull box, utility box or water meter box exists in the new ramp, the traffic pull box and all associated conduit, utility box and water meter box shall be relocated or adjusted to the ramp finished grade as directed by the Engineer, and the adjustment and/or relocation, including conduits, shall be included in the contract unit price bid. Payment for the preceding requirements shall include:

1. Removing existing concrete and miscellaneous improvements at curb ramp locations, sawcutting, clearing and grubbing, unclassified excavation, and 4" Portland cement concrete construction.
2. Restoring sprinkler systems including all reducers for different pipe sizes, and from existing or new pipes to the sprinkler heads, connection points, all fittings, all tees and ells, backfill material for pipe trench, and all miscellaneous materials for proper installation and for construction of complete sprinkler systems.
3. Furnishing and placing Modified Class "A" Topsoil and new sod.
4. Performing Miscellaneous clearing and grubbing.
5. Re-grading the areas behind the new sidewalk as stated herein.
6. Removing and replacing existing PCC improvements in the parkway or behind R.O.W. at the marked limits or as directed by the Engineer in the field.
7. Adjusting utility and water meter boxes to finished grade.
8. Protecting in-place the existing mail boxes or installing new posts and reattach.
9. Grinding existing stumps only (if trees were previously removed by others).
10. Removing miscellaneous parkway concrete, and replacing with modified class "A" topsoil.
11. Tree root pruning as directed and approved by the City Arborist.

No additional compensation will be allowed.

BID ITEM 20: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB RAMP PER CALTRANS STD. PLAN A88A, CASE PER PLAN

The work under this Bid Item shall include the following tasks:

1. ***Construction of 4" Concrete Curb Ramp:***

The Contractor shall construct new 4" Portland cement concrete curb ramp, including flares, monolithic and retaining curb, detectable warning surface, and other miscellaneous concrete construction conforming to Section 303-5 of the Standard Specifications, Caltrans Specifications, Federal and State ADA requirements, and Caltrans Standard Plan No. A88A, Case per plan.

Concrete shall be Class 520-C-2500.

Concrete for curb ramps shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

New improvements shall be constructed to grades indicated on the plans and in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

All removals shall be to the nearest existing score lines. Contractor shall walk the job with the City Inspector to mark removal limits prior to commencing work. All new score lines shall be tooled and spacing should match existing.

The Contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

For all concrete removals and replacements, the Contractor will not be allowed to excavate more locations than can be poured and completed by the end of the work week. All concrete removals shall be replaced by end the of the work week and completed in place unless authorized by the Engineer.

The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Damage to any existing improvements shall be remedied by sawcutting, removal and reconstruction at the Contractor's expense and to the satisfaction of the Engineer. Removals, relocations, and/or adjustments not covered by a separate bid item but necessary for the proposed concrete construction shall be included in the unit price bid for the various items of work involved.

Contractor shall submit a sample of the detectable warning surface to the Engineer for approval, prior to start of construction.

For all new P.C.C. curb ramp construction, the detectable warning surface required shall be WET SET DETECTABLE WARNING PANELS manufactured by **ADA Solutions, 323 Andover Street,**

Suite 3, Wilmington, MA 01887, Tel: (00) 647-1869, Fax: (978) 262-9125, www.adatale.com, or approved equal.

The color of the detectable warning surfaces shall be black except for ramps adjacent to or within one block of a school or within Caltrans Right of Way. Ramps within one block of a school or within Caltrans Right of Way shall have Federal Yellow truncated domes.

The detectable warning surface shall be installed across the entire width of the bottom of the passageway ramp, and shall conform to ADA Requirements and SPPWC Standard Plan 111-5, as directed by the Engineer.

The detectable warning surface shall be installed in accordance with the manufacturer's recommendations and instructions; and the manufacturer shall provide a minimum 5-year warranty, guaranteeing replacement when there is a defect in the dome shape, color fastness, sound on cane acoustic quality, or deterioration of the detectable warning surface. The warranty period shall commence on the date of acceptance.

Any existing improvements damaged by the Contractor's operations shall be replaced in kind at the Contractor's expense and no additional compensation will be allowed therefore.

The first paragraph of Subsection 303-5.6 of the Standard Specification is hereby deleted and replaced with the following:

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk and ramps within construction limits where encountered for constructing new curb ramp. The remaining asphalt concrete pavement or PCC pavement adjacent to new curb ramp shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor may also be directed by the Engineer to sawcut and remove existing improvements and construct four inch (4") concrete over four inch (4") CMB in parkway areas (adjoining to ramp and sidewalk areas) or beyond public right-of-way to match existing improvements.

The Contractor shall protect all existing drainage pipes and structures, and other existing improvements not designated to be removed, in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of forty-eight-inch (48") clearance adjoining excavated areas within parkway limits for persons in wheelchairs and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private properties, where required.

2. *Unclassified Excavation:*

The unclassified excavation shall consist of all excavation for the construction of curb ramps. The Contractor shall also cut and remove any tree roots encountered within construction limit to at least six (6) inches below the subgrade.

3. *Irrigation Lines and Sprinkler Heads:*

The Contractor shall furnish and install all new pipe size to match existing but no less than ½” schedule 40, PVC pipe to tie into existing pipes, new sprinkler heads equal to or better than existing, and all appurtenances. All work shall conform to Sections 212-2 and 308-5 of the Standard Specifications and as directed by the Engineer.

The Contractor may salvage and reuse sprinkler heads that are still in reusable and functional condition for use at locations from which they were removed.

Any damage beyond the construction limit shall be repaired at the Contractor's expense per Section 7-9 of the Standard Specifications.

The Contractor shall cut interfering portions of existing irrigation lines and cap all ends for future reconnection.

The Contractor shall modify, relocate or replace and/or extend all encountered irrigation lines or sprinkler heads so as to give full coverage to landscape area.

All repair and replacement of the irrigation system shall be done within five (5) days or sooner after disconnection. During disconnection period of existing irrigation systems, the Contractor shall maintain the existing grass, trees, shrubs, and other existing landscape in a live condition with temporary irrigation system and/or shall water the landscaped areas by hand. Homeowner's water supply shall not be used without written consent from each homeowner.

As determined in the field by the Engineer, the Contractor may be directed to extend the existing sprinkler system or place a P.V.C. sleeve into the landscaped area between the curb and sidewalk and other locations as necessary.

Prior to accepting work, the Contractor must turn the system on, and it must work properly in the presence of and to the satisfaction of the Engineer and property owner. The Contractor, at no cost to the City, shall replace any damaged and dead grass or landscaping beyond construction limits resulting from Contractor's operation or insufficient water supplies.

4. *Sod and Modified Class "A" Topsoil:*

The Contractor shall furnish and place Modified Class "A" Topsoil and new sod in accordance with Section 212-1 and Section 308 of the Standard Specifications for parkways and behind the right-of-way areas. The limits of sodding shall be as indicated in this specification.

During construction, the Contractor shall protect and support existing irrigation lines and sprinkler heads in place and intact. The Contractor shall adjust them to the proper level if necessary.

Prior to performing any landscaping work, Contractor shall place a 4-inch (4”) thick imported Modified Class "A" Topsoil for the top layer of landscaping area.

The Modified Class "A" Topsoil shall consist of 80% content of Class "A" Topsoil per the Standard Specifications and 20% content of processed wood product of type "I" organic soil amendment per the Standard Specifications.

The Contractor shall place new sod in the areas adjoining the newly constructed concrete improvements that were disturbed by his/her operations.

The Contractor shall also place new sod for filled and re-graded areas. The Contractor may be directed by the Engineer to sod other areas as necessary in conformance with these Specifications.

The Contractor shall select the type of new sod that matches or most matches the existing sod, or as directed by the Engineer.

Upon the completion of the removal of existing concrete improvements for which no replacement is required, the Contractor shall backfill the void with Modified Class "A" Topsoil for placing new sod as directed in those respective bid items.

7. *Miscellaneous Clearing and Grubbing:*

The Contractor shall trim all encountered bushes, hedges, plants, and vegetation having diameters equal to or less than six inches (6") measured at eighteen inches (18") above adjacent top of curb within construction limits, as directed by the Engineer. All roots and stumps shall be removed and/or ground to six inches (6") below subgrade. Upon completion of trimming, all debris shall be cleared from the site.

5. *Regrading:*

Some areas adjoining to new curb ramp will be lower or higher than new curb ramp and sidewalk grade. At these locations the Contractor shall be required to re-grade the area to a slope of 3:1 from the edge of the new sidewalk to meet existing ground.

The Contractor may be directed to re-grade beyond the above ratio where necessary. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

All re-graded or filled areas shall receive four inch (4") thick Modified Class "A" Topsoil for placing new sod to match existing; therefore, the Contractor shall fill or excavate those areas accordingly. Sod shall be placed only where sod exists prior to cut and fill.

6. *Root Pruning:*

All root pruning to be performed must be coordinated with the City Arborist a minimum of 2 working days in advance of scheduled work. **The Contractor shall not cut any roots without the prior consent of the City Arborist.**

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CURB RAMP PER CALTRANS STD. PLAN A88A, CASE PER PLAN shall be at the contract unit price bid per **each (EA)** and shall include all labor, tools, materials and equipment necessary to complete this work, sawcut, removal & disposal of existing improvements, excavation, subgrade preparation, root removal, all forms, P.C.C. ramp, curb & gutter improvements, retaining curb, spandrel improvements, grooving, detectable warning devices per Federal and State ADA requirements and as approved by the Engineer, utility adjustments and/or relocations, restoring form areas, and all other work as required to complete the work. Contractor shall submit a sample of detectable warning surface to the Engineer for approval 2 weeks prior to construction. No additional compensation will be allowed therefore. Wherever a traffic pull box, utility box or water meter box exists in the new ramp, the traffic pull box and all associated conduit, utility box and water meter box shall be relocated or adjusted to the ramp finished grade as directed by the Engineer, and the adjustment and/or relocation, including conduits, shall be included in the contract unit price bid. Payment for the preceding requirements shall include:

1. Removing existing concrete and miscellaneous improvements at curb ramp locations, sawcutting, clearing and grubbing, unclassified excavation, and 4" Portland cement concrete construction.
2. Restoring sprinkler systems including all reducers for different pipe sizes, and from existing or new pipes to the sprinkler heads, connection points, all fittings, all tees and ells, backfill material for pipe trench, and all miscellaneous materials for proper installation and for construction of complete sprinkler systems.
3. Furnishing and placing Modified Class "A" Topsoil and new sod.
4. Performing Miscellaneous clearing and grubbing.
5. Re-grading the areas behind the new sidewalk as stated herein.
6. Removing and replacing existing PCC improvements in the parkway or behind R.O.W. at the marked limits or as directed by the Engineer in the field.
7. Adjusting utility and water meter boxes to finished grade.
8. Protecting in-place the existing mail boxes or installing new posts and reattach.
9. Grinding existing stumps only (if trees were previously removed by others).
10. Removing miscellaneous parkway concrete, and replacing with modified class "A" topsoil.
11. Tree root pruning as directed and approved by the City Arborist.

No additional compensation will be allowed.

BID ITEM 21: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CROSS GUTTER PER CITY OF POMONA STD. PLAN NO. A-4-74 OVER 6" CMB

The Contractor shall sawcut, remove and reconstruct concrete cross gutters and spandrels, including integral curb improvements, in conformance with Section 303.5 of the Standard Specifications, and City of Pomona Standard Plan No. A-4-74, with lines and grades to meet existing. Six (6) inches of compacted (95%) crushed miscellaneous base shall be placed under new concrete improvements. No construction joint or cold joint shall be allowed. Only when new concrete improvement will be constructed in two different parts, will construction joint be allowed.

Concrete for cross gutters shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

Crushed Miscellaneous Base material and construction shall conform to Subsections 200-2.4 and 301-2 of the Standard Specifications, and as directed by the Engineer. The sieve size shall be $\frac{3}{4}$ " (fine). Contractor shall install Crushed Miscellaneous Base (CMB) with line and grades to match final subgrade elevations as shown on the plans.

Concrete shall be 520-C-2500.

New improvements shall be constructed in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Where new cross gutter joins existing cross gutter or spandrels, or where new concrete is to be constructed in two different parts, the Contracts shall dowel 2'-0" long, No. 4 bars into existing concrete. Bars shall be spaced 1'-0" on center beginning 6" from the edge.

Where work occurs adjacent to recently paved, overlaid, or slurry sealed street, the Contractor shall sawcut at the joint between the asphalt and the concrete to be removed, and shall protect the existing asphalt roadway in place.

It shall be the contractor's responsibility to verify the limits of construction with the City inspector for each of the cross gutters.

Construction of the cross gutter shall include the monolithic curb and gutter. Where a new curb ramp is proposed adjacent to the cross gutter, the curb and gutter shall be paid for as part of the curb ramp bid item, and the appropriate square footage shall be deducted from the total area of the cross gutter.

All intersections with cross gutters shall be opened to traffic at the close of each day. Adequate ramping or plating of the cross gutter location during the removal and grading phase shall be required, as directed by the Engineer. Plating of the cross gutter during curing phase shall be required in order to maintain traffic through the intersection at all times.

The Contractor shall verify existing grades in order to ensure full ADA compliance

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CROSS GUTTER PER CITY OF POMONA STD. PLAN NO. A-4-74 OVER 6" CMB shall be at the contract bid item price per **square foot (SF)** and shall include, sawcutting, removal and disposal of existing concrete improvements, unclassified excavation, subgrade preparation, compaction, furnishing and placement of CMB, steel reinforcement, dowels, and PCC cross gutter and integral curb improvements, and all other work as required to complete the work. The bid price for this item shall include excavation, placement and compaction of six inches (6") of crushed miscellaneous base (CMB) as a subbase for new cross gutter. All concrete flow lines shall be water-tested upon completion of finishing, and any irregularities causing water ponding shall be corrected and refinished at the Contract's sole expense. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 22: SAWCUT & REMOVE EX. AND CONSTRUCT PCC CROSS GUTTER PER SPPWC STD. PLAN NO. 123-2 OVER 6" CMB

The Contractor shall sawcut, remove and reconstruct concrete cross gutters and spandrels, including integral curb improvements, in conformance with Section 303.5 of the Standard Specifications, and SPPWC Standard Plan No. 123-2, with lines and grades to meet existing. Six (6) inches of compacted (95%) crushed miscellaneous base shall be placed under new concrete improvements. No construction joint or cold joint shall be allowed. Only when new concrete improvement will be constructed in two different parts, will construction joint be allowed.

The Contractor shall sawcut, remove and reconstruct concrete cross gutters and spandrels, including integral curb improvements, in conformance with Section 303.5 of the Standard Specifications, and SPPWC Standard Plan No. 122-2, with lines and grades to meet existing. Six (6) inches of compacted (95%) crushed miscellaneous base shall be placed under new concrete improvements. No construction joint or cold joint shall be allowed. Only when new concrete improvement will be constructed in two different parts, will construction joint be allowed.

Concrete for cross gutters shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

Crushed Miscellaneous Base material and construction shall conform to Subsections 200-2.4 and 301-2 of the Standard Specifications, and as directed by the Engineer. The sieve size shall be $\frac{3}{4}$ " (fine). Contractor shall install Crushed Miscellaneous Base (CMB) with line and grades to match final subgrade elevations as shown on the plans.

Concrete shall be 520-C-2500.

New improvements shall be constructed in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Where new cross gutter joins existing cross gutter or spandrels, or where new concrete is to be constructed in two different parts, the Contracts shall dowel 2'-0" long, No. 4 bars into existing concrete. Bars shall be spaced 1'-0" on center beginning 6" from the edge.

Where work occurs adjacent to recently paved, overlaid, or slurry sealed street, the Contractor shall sawcut at the joint between the asphalt and the concrete to be removed, and shall protect the existing asphalt roadway in place.

It shall be the contractor's responsibility to verify the limits of construction with the City inspector for each of the cross gutters.

Construction of the cross gutter shall include the monolithic curb and gutter. Where a new curb ramp is proposed adjacent to the cross gutter, the curb and gutter shall be paid for as part of the curb ramp bid item, and the appropriate square footage shall be deducted from the total area of the cross gutter.

All intersections with cross gutters shall be opened to traffic at the close of each day. Adequate ramping or plating of the cross gutter location during the removal and grading phase shall be required, as directed by the Engineer. Plating of the cross gutter during curing phase shall be required in order to maintain traffic through the intersection at all times.

The Contractor shall verify existing grades in order to ensure full ADA compliance

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Measurement and Payment for SAWCUT & REMOVE EX. AND CONSTRUCT PCC CROSS GUTTER PER SPPWC STD. PLAN NO. 123-2 OVER 6" CMB shall be at the contract bid item price per **square foot (SF)** and shall include, sawcutting, removal and disposal of existing concrete improvements, unclassified excavation, subgrade preparation, compaction, furnishing and placement of CMB, steel reinforcement, dowels, and PCC cross gutter and integral curb improvements, and all other work as required to complete the work. The bid price for this item shall include excavation, placement and compaction of six inches (6") of crushed miscellaneous base (CMB) as a subbase for new cross gutter. All concrete flow lines shall be water-tested upon completion of finishing, and any irregularities causing water ponding shall be corrected and refinished at the Contract's sole expense. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 23: CONSTRUCT LOCAL DEPRESSION PER SPPWC STD. PLAN NO. 313-3 AND DETAIL ON PLANS

The Contractor shall sawcut, remove and dispose of existing improvements, and construct new local depression in conformance with Section 303.5 of the Standard Specifications, and SPPWC Standard Plan No. 313-3, with lines and grades to meet existing.

Concrete for local depressions shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

New improvements shall be constructed in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Where work occurs adjacent to recently paved, overlaid, or slurry sealed street, the Contractor shall sawcut at the joint between the asphalt and the concrete to be removed, and shall protect the existing asphalt roadway in place.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Measurement and Payment for **CONSTRUCT LOCAL DEPRESSION PER SPPWC STD. PLAN NO. 313-3 AND DETAIL ON PLANS** will be made at the contract unit price bid per **square foot (SF)** basis and shall include all labor, tools, materials and equipment necessary for sawcutting, removal and disposal of existing concrete improvements, unclassified excavation, subgrade preparation, compaction, steel reinforcement, dowels, and PCC gutter and integral curb improvements, and all other work as required to complete the work. The bid price for this item shall include excavation for new local depression. When joining, new construction shall match existing improvements with proper line and grade to form a safe, smooth surface. All concrete flow lines shall be water-tested upon completion of finishing, and any irregularities causing water ponding shall be corrected and refinished at the Contract's sole expense. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BID ITEM 24: CONSTRUCT 9” PCC PAVEMENT OVER COMPACTED NATIVE (95%)

The Contractor shall sawcut, remove, and dispose of existing PCC and miscellaneous improvements, and construct new 9” Portland Cement Concrete (PCC) pavement over native materials, compacted to 95% relative compaction, as shown on the plans.

All related work shall conform to the provisions of Section 303-5 of the Standard Specifications, the Plans and these Specifications.

High-early strength concrete shall be used for 9” PCC pavement to comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

New improvements shall be constructed to grades indicated on the plans and in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Damage to any existing improvements shall be remedied by sawcutting, removal and reconstruction at the Contractor’s expense and to the satisfaction of the Engineer. Removals, relocations, and/or adjustments not covered by a separate bid item but necessary for the proposed concrete construction shall be included in the unit price bid for the various items of work involved.

The Contractor shall maintain safe access to all residents/ business establishment at all times throughout the duration of the contract. The only permitted interruption to access will be during placement of concrete. No establishment shall be denied access more than one day at a time. Contractor shall install steel plates after finishing the concrete, to provide access during the cure period. The Contractor shall pour new P.C.C. improvements in such a fashion as not to interrupt the access to residences near the job site.

Should a pavement area be excavated at the end of a workday, the Contractor shall provide temporary steel plating and temporary access ramps to residences/businesses, to the satisfaction of the Engineer. The plating and temporary access ramp shall be removed by the Contractor on the following day so that PCC pavement construction can be completed. The cost for the placement of the temporary ramp/plate, and its removal shall be included in the unit cost bid for the various items of work involved, and no additional compensation will be allowed therefore.

All root pruning to be performed must be coordinated with the City Arborist, a minimum of 2 working days in advance of scheduled work. **The Contractor shall not cut any roots without the prior consent of the City Arborist.**

Where work occurs adjacent to recently paved, overlaid, or slurry sealed street, the Contractor shall sawcut at the joint between the asphalt and the concrete to be removed, and shall protect the existing asphalt roadway in place.

Immediately after finishing operations are completed, Type 2 concrete curing compound shall be applied at rate of one gallon per 150 square feet.

Measurement and Payment for CONSTRUCT 9" PCC PAVEMENT OVER COMPACTED NATIVE (95%) will be made at the contract unit price bid per **square foot (SF)** basis and shall include all labor, tools, materials and equipment necessary for sawcutting, removal and disposal of existing concrete improvements, unclassified excavation, root pruning, subgrade preparation, compaction, sawcut for control joints, expansion joints, curing, finishing, dowels, and PCC improvements, and all other work as required to complete the work. When joining, new construction shall match existing improvements with proper line and grade to form a safe, smooth surface. All concrete flow lines shall be water-tested upon completion of finishing, and any irregularities causing water ponding shall be corrected and refinished at the Contract's sole expense. No additional compensation will be allowed.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Should the Engineer direct the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications, furnishing the admixtures and adding them to the concrete will be paid for as Extra Work as provided in Subsection 3-3, as amended by these Special Provisions.

BIDITEM 25: CONSTRUCT PCC BUS PAD PER CITY OF POMONA STD. NO. A-31-10

It shall be the contractor's responsibility to verify the limits of construction with the City inspector for each of the Bus Pads. Construction of the bus pads shall be per the project plans, the referenced City of Pomona Standard Plans, and any applicable details. Six (6) inches of compacted (95%) crushed miscellaneous base shall be placed under new concrete improvements.

Concrete for local depressions shall be High-early strength concrete and shall comply with the requirements in the latest SSPWC, Section 7-10 "Public Convenience and Safety." High-early strength concrete shall achieve a compressive strength of 2,000 p.s.i. within 48 hours of pouring and at least 2,500 p.s.i. after 28 days.

Crushed Miscellaneous Base material and construction shall conform to Subsections 200-2.4 and 301-2 of the Standard Specifications, and as directed by the Engineer. The sieve size shall be ¾" (fine). Contractor shall install Crushed Miscellaneous Base (CMB) with line and grades to match final subgrade elevations as shown on the plans.

New improvements shall be constructed in such a manner as to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

The contractor shall be responsible for contacting and coordinating with the respective bus agencies regarding the impact to each of the bus stops. The contractor will be required to prepare a phasing plan for the construction of bus pads in order to inform the transportation agency of the planned operations. The contractor shall obtain written approval from the transit agency regarding the phasing plan and implement the necessary temporary bust stops for the impact to the bus stop waiting areas.

12' minimum width sawcut, removal and full depth slot paving (with 2-sack slurry) adjacent to the edge of the buds pad shall be required. The surface area of the slot paving shall not be included in the bid item measurements.

Measurement & Payment for REPLACE PCC BUS PAD PER CITY OF POMONA STD. NO. A-31-10 shall be on a **Square Foot (SF)** basis and shall include furnishing all labor, equipment, tools and materials necessary for the item of work including removal & disposal of existing improvements and materials, and the construction of the new bus pad including coordinating with the City Inspector to verify the final location, slot paving, furnishing and placement of CMB, configuration and limits, and coordinating with the transportation agencies for phasing and bus stop impact, removals, preparation of subgrade, high early strength concrete, installation of base, temporary ramping, construction of work item, adjustment of miscellaneous utility items found within the limits of construction, finishing, and protection of the work item and all other items associated with this task and no further compensation will be allowed therefore.

BID ITEM 26: ADJUST WELL MONUMENT FRAME & COVER TO GRADE PER CITY AND CALTRANS REQUIREMENTS

All well monument frames and covers encountered during construction shall be protected in place and adjusted to grade per City of Pomona, and Caltrans standards and specifications.

The protection, documentation and filing of the required corner records for the centerline tie or monument held within the monument well shall be included in the contract lump sum price bid for Construction Survey and Monument Preservation.

Measurement & Payment for **ADJUST WELL MONUMENT FRAME & COVER TO GRADE PER CITY AND CALTRANS REQUIREMENTS** shall be at the contract unit price bid per **Each (EA)** basis and shall include furnishing all labor, equipment, tools and materials necessary for the adjustment of well monument frame and cover to finished grade, as shown on the plans, and as directed by the Engineer. No further compensation will be allowed therefore.

BID ITEM 27: REMOVE & RELPACE EX. ELECTRIC OR STREET LIGHT PULL BOX WITH NEW TRAFFIC RATED PULL BOX & ADJUST TO GRADE

The Contractor shall remove and dispose of existing pull box, and shall furnish and install new **traffic rated** pull boxes and adjust new pull box to grade, including existing conduits and conductors, as required, at locations shown on the plans, and as directed by the Engineer. All work shall conform to Caltrans Standards and Specifications (latest edition).

Payment for adjusting pull boxes to grade shall include construction of aggregate ballast as shown in SPPWC Standard No. 405-1 and adjustment of connecting conduit to a distance in each direction from the pull box, as directed by the Engineer.

Measurement & Payment for **REMOVE & REPLACE EX. ELECTRIC OR STREET LIGHT PULL WITH NEW PULL BOX & ADJUST TO GRADE** shall be at the contract unit price bid per **Each (EA)** pull box in place, and shall include furnishing all labor, equipment, tools, materials and incidentals necessary for the item of work including adjusting pull boxes, wire connections, and conduits to final grade as indicated on the plans and as directed by the Engineer. No further compensation will be allowed therefore.

BID ITEM 28: REMOVE & REPLACE EX. WATER METER BOX AND COVER WITH NEW WATER METER BOX AND COVER & ADJUST TO GRADE

Existing Pomona water meter boxes shall be adjusted to final grade by the Contractor, including all necessary preparation work during each phase of construction. The meter boxes shall not be rendered inaccessible at any time and shall be maintained readily accessible for shut-off at all times. **All new meter boxes shall be provided by the Contractor.**

Details for reconstructing water meter boxes for typical conditions anticipated to be encountered in the Work are shown on the City of Pomona Standard Plan, Water Std. #11 & #12. No guarantee is made and none shall be implied that these details cover all conditions that may exist within the Work site. The unit prices bid shall be considered as full compensation for reconstructing the meter boxes to grade, regardless of the condition encountered, and no additional payment will be made therefore.

Where relocation of the existing meter box is required, the Contractor shall be responsible for all necessary water shut offs, coordination with the water department, coordination with the property owner for access and on-site repairs, cutting of the existing service lines, installation of any necessary new pipe, joints and connections, and the relocation and reinstallation of the existing water meter at the ultimate location, and re-activation and verification of the water meter. A new or existing water meter box shall also be installed and adjusted to grade as part of this work item per plan designations.

If existing meter boxes are located on private property behind or under a gated fence. Relocation of water meter boxes will require coordination with the private property owner and replacement of existing private property improvements. It shall be the contractor's responsibility to coordinate with each home owner regarding the extent of the impact and proposed method of landscaping or hardscape remediation. All such private property repairs shall be included in the unit price for the relocation.

Variable sizes and types of existing meter boxes were observed throughout the project limits. It shall be the Contractor's responsibility to relocate, replace, and adjust the meter boxes in kind and size at no additional cost to the City based on existing conditions. All new meter boxes shall be per City of Pomona Water Std. #11 & #12.

Measurement & Payment for REMOVE & REPLACE EX. WATER METER BOX AND COVER WITH NEW WATER METER BOX AND COVER & ADJUST TO GRADE shall be at the contract unit price bid per **Each (EA)** water meter box in place, and shall include furnishing all labor, equipment, tools, materials and incidentals necessary for the item of work including water meter relocations, cutting and installing new pipe, coordination with the Pomona water department, purchasing, delivery and installation of existing or new meter boxes, disposal and hauling of existing boxes and adjustment to final grade, as indicated on the plans and as directed by the Engineer. The price of this item shall also include any incidentals for doing the work involved in constructing the meter valve box. No further compensation will be allowed therefore.

BID ITEM 29: REMOVE & REPLACE EX. WATER VALVE CAN & COVER WITH NEW WATER VALVE CAN & COVER & ADJUST TO GRADE PER CITY OF POMONA WATER STD. NO. 6 (DOUBLE ADJUST)

Contractor shall adjust existing water valve cans and covers to grade in conformance with City of Pomona Standard Plan No. 6, including double adjustment, and conforming to the provisions of Section 301-1.6 of the Standard Specifications, and the following additions and revisions, where shown on the plans or as required by the Engineer.

Water valves shall be protected in place and shall be accessible at all times during construction.

Valve covers shall be marked as to their location by the contractor prior to the placement of the pavement. The Contractor shall furnish new valve cans if existing cans are damaged during operation. Existing covers shall be salvaged to the City Yard and shall be replaced with new covers which shall be adjusted to new pavement grade 48 hours after paving operation.

The Contractor shall be responsible for maintaining location of, and access to, all water line gate valves during construction operations. The Contractor may salvage and utilize all existing caps or sleeves, but shall be required to furnish all sleeve extensions. Any lost caps or sleeves shall be replaced by the Contractor at his cost.

All existing broken water sleeves shall be removed and replaced by the Contractor.

Existing water valve and blow off can and lids shall be adjusted to grade by the Contractor, including all necessary preparation work, during each phase of construction and paving. The valve boxes and blow-off lids shall not be buried or otherwise rendered inaccessible at any time and the valves shall be maintained readily accessible for shut-off at all times.

Details of adjusting water valve boxes and blow-off lids for typical conditions anticipated to be encountered in the Work are shown on the City of Pomona Standard Plan, Water Std. No. 6. All valve adjustments shall also be done in accordance with the City of Pomona Water Division Standard Specifications included in appendix A. No guarantee is made and none shall be implied that these details cover all conditions that may exist within the Work site. The unit price bid per each shall be considered as full compensation for preparing and adjusting the valve boxes and blow-off lids, including their covers.

Included as part of the water valve can and lid adjustments will be the re-painting of all valve covers with blue paint. Paint color and type shall be submitted and approved by the City prior to its use.

Adjustment of gas valve can and lids shall also be included under this bid item.

Measurement & Payment for **REMOVE & REPLACE EX. WATER VALVE CAN & COVER WITH NEW WATER VALVE CAN & COVER & ADJUST TO GRADE PER CITY OF POMONA WATER STD. NO. 6 (DOUBLE ADJUST)** shall be at the contract unit price bid per **Each (EA)** existing valve (including replacement can and/or cover) adjusted to grade, and shall include full compensation for removal, salvage and disposal of existing improvements, providing all labor, tools, equipment, materials and incidentals necessary for doing the work in compliance with the applicable standards. No additional compensation shall be allowed.

Payment for the requirements of adjusting New valves to finished grade, including new water valve cans and covers, shall be included in the contract bid item price per each (EA) new valve constructed in place, and shall include full compensation for removal, salvage, and disposal of existing improvements, providing all labor, tools, equipment, materials and incidentals necessary for doing the work in compliance with the applicable standards. No additional compensation shall be allowed.

BID ITEM 30: INSTALL & REMOVE FIRE HYDRANT

Existing Pomona fire hydrant shall be removed, relocated, reconstructed and/or adjusted to final grade by the Contractor, including all necessary preparation work during each phase of construction. The fire hydrant shall not be rendered inaccessible at any time and shall be maintained readily accessible for operation and shut-off at all times. All new fire hydrants shall be provided by the Contractor.

Details for installation of fire hydrant for typical conditions anticipated to be encountered in the Work are shown on the City of Pomona Standard Plan, Water Std. #2. No guarantee is made and none shall be implied that these details cover all conditions that may exist within the Work site. The unit prices bid shall be considered as full compensation for installation of the fire hydrant to final grade, regardless of the condition encountered, and no additional payment will be made therefore.

Where installation of fire hydrant is required, the contractor shall be responsible for all necessary water shut offs, coordination and inspection with the water and fire department, coordination with the property owner for access and on-site repairs, cutting of the existing service lines, installation of any necessary new pipe, joints and connections, and the installation of the fire hydrant at the ultimate location, and activation and verification of the fire hydrant.

Variable sizes and types of existing fire hydrant may exist throughout the project limits. It shall be the contractor's responsibility to relocate, replace, and adjust the fire hydrant in kind and size at no additional cost to the City. All new fire hydrants shall be per City of Pomona Water Std. #2. All fire hydrant installations and models shall be approved by the City of Pomona and no additional payment will be made therefore.

Measurement & Payment for Install & Remove Fire Hydrant shall be on an **Each Item (EA)** basis and shall include furnishing all labor, equipment, tools and materials necessary for the item of work including fire hydrant installations, cutting and installing new pipe, coordination with the Pomona water department and/or fire department, purchasing, delivery, installation, and painting of fire hydrant, disposal and hauling of existing hydrants and adjustment to final grade, as indicated on the plans and as directed by the Engineer. The price of this item shall also include any incidentals for doing the work involved in constructing the fire hydrant. No further compensation will be allowed therefore.

BID ITEM 31: ADJUST SEWER OR STORM DRAIN MANHOLE FRAME & COVER TO GRADE PER CITY OF POMONA STD. NO B-14-68 (DOUBLE ADJUST)

Contractor shall be responsible for adjusting manhole covers during the paving operation to finished grade as shown on the plans, and as directed by the Engineer. Manhole adjustments shall be in accordance with City of Pomona Standard Plan No. B-14-68, including double adjustment, and shall conform to Section 302-5.8 of the SSPWC. The finished grade of the manhole and all associated paving around the manhole shall be flush with the finished surface within a 3/8" tolerance. The Contractor shall be required to adjust any manhole found not in conformance with these requirements, as determined by the Engineer, at their sole expense.

Adjustment of storm drain and sewer manholes as well as sewer cleanouts shall be included under this bid item.

All storm drain manholes shall be initially lowered to be below the anticipated pavement grinding and pavement removal elevations prior to pavement grinding & paving. Immediately upon completion of the paving operations, the Contractor shall then adjust all manhole covers to grade per these specifications and the project plans. This shall constitute double adjustment.

Measurement & Payment for **ADJUST SEWER OR STORM DRAIN MANHOLE FRAME & COVER TO GRADE PER CITY OF POMONA STD. NO B-14-68 (DOUBLE ADJUST)** shall be at the contract unit price bid per **Each Item (EA)** manhole in place, and shall include furnishing all labor, equipment, tools and materials necessary for the lowering and re-adjustment of manholes (double adjustment included) to finished grade as shown on the plans, and as directed by the Engineer. No further compensation will be allowed therefore.

BID ITEM 32: INSTALL CURB DRAIN PER SPPWC STD. PLAN NO. 150-3

The Contractor shall remove existing curb drain and construct new curb drain, including joining and reconnecting existing drain, as directed by the Engineer. The work shall include removal and replacement of the interfering portions of existing curb drain pipe that lie in the path of the construction to be performed. Existing curb drain pipe shall be replaced (size in kind) with Schedule 40 PVC conforming to SPPWC Std. Plan No. 150-3. The parkway shall be restored as directed by the Engineer, including new landscape planting or sod, and restoration of any existing irrigation facilities damaged by the work, to the satisfaction of the Engineer. All related work shall conform to the applicable provisions of the Standard Specifications, the Plans and these Specifications.

It shall be the contractor's responsibility to verify the configuration and limits of improvements required for the curb drain replacement. All sidewalk, curb and gutter, and associated existing improvements damaged as part of the parkway drain removal and replacement shall be replaced, in kind, as part of this work item.

Measurement & Payment for **INSTALL CURB DRAIN PER SPPWC STD. PLAN NO. 150-3** shall be at the contract unit price bid per **Each (EA)** basis and shall include furnishing all labor, equipment, tools and materials necessary for the removal of existing and construction of a new curb drain, complete and operational, including connection to existing drainage facilities, aprons and curb and gutter as needed, steel face plate and anchors, slot paving as necessary for construction of a new under sidewalk drain, and removal/excavation, disposal, and hauling of existing under sidewalk drain and/or sidewalk/curb and gutter pan as directed by the Engineer. The price of this item shall also include any incidentals for doing the work involved in constructing the under sidewalk drain. No further compensation will be allowed therefore.

BID ITEM 33: INSTALL PARKWAY DRAIN PER SPPWC STD. PLAN NO. 151-2

The Contractor shall remove existing parkway drain and construct new parkway drain, including joining and reconnecting existing drain, as directed by the Engineer. The work shall include removal and replacement of the interfering portions of existing parkway drain that lies in the path of the construction to be performed. Existing parkway drain shall be replaced (size in kind) in conformance with SPPWC Std. Plan No. 151-2. The parkway shall be restored as directed by the Engineer, including new landscape planting or sod, and restoration of any existing irrigation facilities damaged by the work, to the satisfaction of the Engineer. All related work shall conform to the applicable provisions of the Standard Specifications, the Plans and these Specifications.

It shall be the contractor's responsibility to verify the configuration and limits of improvements required for the parkway drain replacement. All sidewalk, curb and gutter, and associated existing improvements damaged as part of the parkway drain removal and replacement shall be replaced, in kind, as part of this work item.

Measurement & Payment for **INSTALL PARKWAY DRAIN PER SPPWC STD. PLAN NO. 151-2** shall be at the contract unit price bid per **Each (EA)** basis and shall include furnishing all labor, equipment, tools and materials necessary for the removal of existing and construction of a new parkway drain, complete and operational, including connection to existing drainage facilities, aprons and curb and gutter as needed, steel face plate and anchors, slot paving as necessary for construction of a new under sidewalk drain, and removal/excavation, disposal, and hauling of existing under sidewalk drain and/or sidewalk/curb and gutter pan as directed by the Engineer. The price of this item shall also include any incidentals for doing the work involved in constructing the under sidewalk parkway drain. No further compensation will be allowed therefore.

BID ITEM 34: OVER-EXCAVATION AT BULBOUTS/SIDEWALK PLANTERS

All work under this section shall be performed in conformance with provisions of Section 300 "Earthwork", Subsection 300-1 "Clearing and Grubbing", and Subsection 300-4 "Unclassified Fill".

Excavation shall be 12" below top of curb/pavement.

Measurement & Payment for the requirements of **OVER-EXCAVATION AT BULBOUTS/SIDEWALK PLANTERS** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor tools, equipment and materials required for sawcut, removal, and disposal of existing base materials, roadway section, bituminous pavement, concrete pavement, miscellaneous P.C.C. improvements, pavement reinforcing fabric/petromat, abandoned concrete and/or steel culverts, irrigation improvements, plants, shrubs, root pruning, removal of existing base material and other excavation necessary to establish the finished subgrade elevations for the bulbout planting improvements, as shown on the plans and as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 35: FURNISH & INSTALL IMPORTED CLASS A TOPSOIL

All work under this section shall be performed in conformance with provisions of Section 801-1 “Landscaping Materials” and Section 801-2 “Earthwork and Topsoil Placement”.

Measurement & Payment for the requirements of **FURNISH & INSTALL IMPORTED CLASS A TOPSOIL** shall be included in the contract unit price bid per **cubic yard (CY)**, and shall include all labor tools, equipment and materials required to complete the work, as shown on the plans and as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 36: FURNISH & INSTALL ARIZONA RIVER ROCK (MORTARED) PER PLAN

All work under this section shall be performed in conformance with provisions of Section 201-5 "Cement Mortar" and details shown on the Plans.

Measurement & Payment for the requirements of **FURNISH & INSTALL ARIZONA RIVER ROCK (MORTARED) PER PLAN** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor tools, equipment and materials required to furnish and install the Arizona River Rock, mortared in place, at locations and per details shown on the plans, as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 37: FURNISH & INSTALL GRAVEL MULCH PER PLANS

All work under this section shall be performed in conformance with all applicable Sections of the SSPWC, and per details shown on the Plans.

Measurement & Payment for the requirements of **FURNISH & INSTALL GRAVEL MULCH PER PLANS** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor tools, equipment and materials required to furnish and install the Gravel Mulch, complete in place, at locations and per details shown on the plans, as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 38: FURNISH & INSTALL BOULDERS PER PLANS

All work under this section shall be performed in conformance with all applicable Sections of the SSPWC, and per details shown on the Plans.

Measurement & Payment for the requirements of **FURNISH & INSTALL BOULDERS PER PLANS** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor tools, equipment and materials required to furnish and install the Gravel Mulch, complete in place, at locations and per details shown on the plans, as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 39: FURNISH & INSTALL IRRIGATION SYSTEM PER PLANS

All "irrigation system" work under this section shall be performed in conformance with provisions of Section 800-2 "Irrigation System Materials" and Section 801 "Installation" of the Standard Specifications and amended herein.

800-2 Irrigation System Materials

800-2.1 Pipe and Fittings

800-2.1.3 Revise to: Schedule 40 pipe shall be used for installation on discharge side of control valve and Schedule 40 pipe shall be used for continuously pressurized pipe on the supply side of control valves.

800-2.2 Valves and Valve Boxes

800-2.2.7 Revise to: Valve Boxes shall be:

1. 10" diameter round boxes for all gate valves, ball valves and quick couplers, Brooks 1100 series with bolt down cover for ball valves and gate valves and snap down cover for quick couplers.
2. 12" x 17" rectangular plastic box for all remote control valves. Brooks 1419 with bolt down cover.
3. Each electric control valve box cover shall have the valve station number stenciled 1" high with white enamel paint.

801-5.7.5 As-Built Drawings

ADD: The CONTRACTOR shall provide and keep up to date, a complete "as-

These drawings shall also serve as work progress sheets, and the CONTRACTOR shall make neat and legible annotations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for inspection and shall be kept in a location designated by the ENGINEER.

The CONTRACTOR shall dimension from two (2) permanent points of reference (curbs, road intersection, etc.) the location of the following items:

- a) Ball valves and gate valves
- b) The routing of the irrigation main lines.
- c) The routing of the control wire
- d) Sprinkler control valves
- e) Quick coupling valves.
- f) 120v. wire and conduit to automatic controller locations

On or before the date of the final inspection, the CONTRACTOR shall deliver the corrected and completed mylars to the ENGINEER. Delivery of the mylars will not relieve the CONTRACTOR of his responsibility of furnishing required information that

may be omitted from the prints. The CONTRACTOR shall provide an 8 ½” x 11” reduced copy for each controller to be hermetically sealed and placed inside each controller.

801-6 Guarantee

ADD: The ENGINEER reserves the right to make temporary repairs as necessary to keep the irrigation system equipment in operating condition. The exercise of this right by the ENGINEER shall not relieve the CONTRACTOR of his responsibility under the terms of the guarantee.

All work under this section shall be performed in conformance with all applicable Sections of the SSPWC, and per details shown on the Plans.

Measurement & Payment for the requirements of **FURNISH & INSTALL IRRIGATION SYSTEM PER PLANS** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor tools, equipment and materials required to furnish and install the Automatic Irrigation System, complete in place, at locations and per details shown on the plans, as required by the Engineer. No additional compensation will be allowed therefore.

BID ITEM 40: FURNISH & INSTALL 5-GALLON SHRUBS &

BID ITEM 41: FURNISH & PERFORM 90-DAY LANDSCAPE ESTABLISHMENT

All landscaping work under this section shall be performed in conformance with provisions of Section 800-1 "Landscape Materials" and Section 801 "Installation" complete as shown on the Plans and/or specified herein. Work includes, but is not limited to the following:

800-1.2 Soil Fertilizing and Conditioning Materials

800-1.2.3 Add: Commercial fertilizer shall be Gro-Power 5-3-1 as manufactured by the Southern California Fertilizer Co.

800-1.2.4 Organic soil amendment shall be Type 1

801-6 Maintenance and Plant Establishment (90 days)

The fifth paragraph of this subsection is hereby modified to require a 90 (ninety) calendar day maintenance period. The maintenance period shall begin after the City of Pomona has notified the CONTRACTOR of preliminary acceptance of all site improvements. Acceptance shall include but not be limited to the following:

All materials as set forth in the Contract shall be installed and operating according to City requirements; and shrubs shall not show any evidence of dieback or disease.

During the maintenance period, all plants and planted areas shall be kept well-watered and weed free at all times.

In order to expedite the plant establishment work, the CONTRACTOR shall maintain a sufficient number of men and adequate equipment to perform the work herein specified from the time any planting is done, until the end of the maintenance period.

Depressions caused by vehicles, bicycles, or foot traffic are to be filled, leveled and replanted.

Gopher and moles are to be exterminated, and their damages are to be repaired.

During the maintenance period, the CONTRACTOR shall apply 25 lbs. Gro-Power 5-3-1 per 1000 square feet to all planted areas on a 30 day interval (three (3) applications minimum) and notify the ENGINEER the day it will be done. Final application to be performed 10 days prior to final acceptance. All fertilizer to be delivered to the site and approved by the City prior to installation.

All paved areas including street curbs and gutters will be maintained in a neat and clean condition at all times, as directed by the ENGINEER.

Disease and pest control: Throughout the maintenance period, all plants shall be maintained in a disease and pest free condition. A licensed pest control operator shall be retained by the CONTRACTOR to recommend and apply pesticides, herbicides, and fungicides.

Each of the CONTRACTOR'S working crews shall have a responsible lead man who may represent CONTRACTOR to discuss work results with the designated representative of the City.

All work under this section shall be performed in conformance with all applicable Sections of the SSPWC, and per details shown on the Plans.

Measurement & Payment for the requirements of **FURNISH & INSTALL 5-GALLON SHRUBS** shall be included in the contract unit price bid per **each (EA)**, and shall include all labor, tools, equipment, materials and incidentals required to furnish and install the 5-gallon shrubs, complete in place, at locations and per details shown on the plans, as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **FURNISH & PERFORM 90-DAY LANDSCAPE ESTABLISHMENT** shall be included in the contract **lump sum (LS)** price bid, and shall include all labor, tools, equipment, materials and incidentals required to provide and perform the required landscape maintenance for 90-calendar days, as specified herein. No additional compensation will be allowed therefore.

BID ITEM 42: FURNISH & INSTALL PERMEABLE CONCRETE PAVERS PER PLAN

Materials under this section shall conform to provisions of Sections 202 -2.2, 213-5, and 200-1.5

The work under this section shall include the following tasks:

1. Inspecting the aggregate base for adequate preparation:

The aggregate base should be compacted a minimum 98% of standard Proctor density and optimum moisture. Variation in final base surface elevations should not +/- 3/4 inch when tested with a 10 ft. straightedge. The finished surface of a compacted aggregate base should not allow bedding sand to migrate into it. Bring to the attention of the Engineer any locations where the aggregate base is not adequately prepared.

2. Constructing edge constraints:

Edge constraints, where needed to isolate pervious pavers from site facilities, such as utility and pull boxes, light standards, traffic poles and hydrants, shall be constructed per plan and details. The unit price bid shall be considered as full compensation for preparing, adjusting and costume cutting of the pervious pavers around existing and proposed site conditions listed above and per plan and details.

3. Placement of geotech fabric and bedding sand:

The bedding course shall be prepared as per plan and details. Place bedding sand to an uncompacted nominal 1 inch thickness. Frozen or saturated sand shall not be used. Place screed pipes as needed to provide adequate working level, and screed across the pipes with a straight strike board. Remove screed pipes and fill resulting voids with bedding sand. Once screeded, sand shall not be disturbed.

4. Placing concrete pavers:

Place concrete pavers on screeded sand in a running bond pattern, aligned with and parallel to adjacent curbs and PCC sidewalk edges. When placing adjacent rows of the pattern, offset joints by a minimum of 3 inches, cutting pavers, as needed. Joint widths between pavers should be consistent and be between 1/16 and 3/16 inch, or snug against each other if spacer bars are present. Cut pavers shall be used to fill gaps along edges and corners. Do not cut pavers to less than 1/3 their original size. Instead fill voids with two cut pavers. After pavers are placed, compact with a vibrating plate compactor, using at least two passes to seat the pavers in the bedding sand. Apply dry bedding sand to the surface and sweep into the joints until full. Compact again, adding more sand, and recompacting until joints are full. Remove any excess sand.

Final surface elevations should not vary by more than 3/8 inch under a 10 ft. straightedge. The top of installed pavers may be 1/8 to 1/4 inch above the final elevations to compensate for possible minor settling.

Measurement & Payment for FURNISH & INSTALL PERMEABLE CONCRETE PAVERS PER PLAN shall be at the contract unit price per square foot (SF) and shall include full

compensation for all labor, materials, tools, equipment and incidentals necessary to do all the work involved thereof, complete in place, at locations and per details shown on the plans, and accepted by the Engineer. Payment for the preceding requirements shall include:

1. Protecting in-place existing PCC improvements, light standards, traffic poles, or other permanent incidental facilities.
2. Minor adjustments to existing utility or water meter boxes to finished grade.
3. Construction of concrete edge constraints at utility structures.

No additional compensation will be allowed.

- BID ITEM 43:** **TRAFFIC SIGNAL MODIFICATION–GAREY AVENUE & FOOTHILL BOULEVARD INTERSECTION &**
- BID ITEM 44:** **TRAFFIC SIGNAL MODIFICATION–GAREY AVENUE & BONITA AVENUE INTERSECTION &**
- BID ITEM 45:** **TRAFFIC SIGNAL MODIFICATION–GAREY AVENUE & ARROW HIGHWAY INTERSECTION &**
- BID ITEM 46:** **TRAFFIC SIGNAL MODIFICATION –GAREY AVENUE & ALVARADO STREET INTERSECTION &**
- BID ITEM 47:** **TRAFFIC SIGNAL MODIFICATION–HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION &**
- BID ITEM 48:** **TRAFFIC SIGNAL MODIFICATION–HOLT AVENUE & TOWNE AVENUE INTERSECTION &**
- BID ITEM 49:** **TRAFFIC SIGNAL MODIFICATION–HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION &**
- BID ITEM 50:** **TRAFFIC SIGNAL MODIFICATION–SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION**

The text of Section 307 of the *Greenbook* is hereby deleted and replaced with the following:

All work for furnishing, installing, modifying or removing signals, lighting, and electrical systems shall conform to the **Caltrans Standard Plans** and **Standard Specifications**, Section 86, “General”, and Section 87, “Electrical Systems” **2015 Edition**; except as noted in the Special Provisions and on the Plans. These standard plans and specifications are hereinafter referred to as State Standard Plans and State Standard Specifications. Copies of these documents may be obtained for the Caltrans Office of Construction Contract Standards website: www.dot.ca.gov/des/oe/construction-contract-standards.html or in writing to:

State of California
Department of Transportation
Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, CA 95815
Telephone: (916) 445-3520

Wherein Sections 86 or 87 reference is made to other sections of the State Standard Specifications, these sections are hereby included unless otherwise specified.

Wherein Sections 86 or 87 reference is made to Section 4-1.05, it shall mean Section 3-3 of the Standard Specifications for Public Works Construction and its supplements, and these Special Provisions.

The following special provisions are supplementary and in addition to the provisions of the State Standard Specifications, and are only called out if elaboration, amendments, specifying of options, or additions are required.

1.1 PEDESTRIAN COUNTDOWN MODULES

Pedestrian countdown signals shall conform to the provisions in Sections 86 and 87 of the Caltrans' State Standard Specifications, the Caltrans LED signal module/combination pedestrian signal Purchase Specifications and these Special Provisions.

Pedestrian countdown signals shall be LED type as approved under ITE standards and Caltrans' specifications.

The pedestrian countdown signals shall be 16"x 17" so as to fit into the City's existing Caltrans' Type "C" standard ICC style 16" pedestrian signal housing and shall be equipped with spade type wiring connections to fit into existing terminal blocks.

The pedestrian countdown signal should be equipped with an internal conflict monitor.

The "WALK" and "DON'T WALK" shall be the Caltrans' and ITE approved international symbols that are overlaid on one another. Both symbols shall be of the filled or full type not outline.

The digits on the countdown timer shall be of the Portland Orange color and shall be between six and eight inches in height. The digits shall have minimum of two rows of LEDs width and shall display a steady numerical countdown, i.e, not flashing during countdown.

The pedestrian countdown timer shall begin the "countdown" at the beginning of the flashing "DON'T WALK", not at the beginning of the "WALK". The countdown timer shall end coinciding with the end of the flashing "DON'T WALK".

All LED modules for traffic signal units shall be furnished by the Contractor.

1.2 CONDUIT

Conduit shall conform to the provisions in Sections 86 and 87 of the State Standard Specifications and these special provisions.

Schedule 80 P.V.C. conduit shall be used. Conduit shall be a nominal 4" diameter unless otherwise specified on the project plans.

Conduit shall be installed by directional boring where possible. Potholes and open-cut trenches shall be repaired per the City of Pomona standard plan A-26-02.

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

1.3 PULL BOXES

Pull boxes shall conform to the provisions in Sections 86 and 87 of the Standard Specifications and these Special Provisions.

Pull boxes shall be No. 6, with fiberlite lids unless otherwise indicated on plans.

- a. "TRAFFIC SIGNAL": Where pull box contains traffic signal conductors with or without street lighting conductors.
- b. "STREET LIGHTING": Where pull box contains street lighting conductors only. "High VOLTAGE" shall be added where street lighting voltage is above 600 volts.
- c. "EDISON": Where pull boxes contain Edison Company conductors. Pull box lids shall be type that lock down.

1.4 CONDUCTORS AND WIRING

Conductors and wiring shall conform to the provisions in Sections 86 and 87 of the State Standard Specifications and these special provisions.

The Contractor shall be responsible to install the number of conductors and/or cable(s) needed to operate the electrical system(s). Omissions in the conductor schedule or un-numbered conduit runs shall not constitute "Extra Work." This also pertains to conductors for future phases indicated on the plan(s) for installation.

Conductors shall be spliced by the use of "C" shaped compression connectors. Splices in low voltage circuits (600 volts maximum) shall be insulated by Caltrans Method B. Aluminum conductors shall not be substituted for copper.

All conductors shall be removed and replaced for the entire traffic signal, including equipment that is to be protected in place.

1.5 BONDING AND GROUNDING

Bonding and grounding shall conform to the provisions in Sections 86 and 87 of the State Standard Specifications and these special provisions.

Grounding jumper shall be attached by a 3/16 inch or larger brass bolt in the signal standard or pedestal and shall be run to the conduit, ground rod or bonding wire in adjacent pull box. Grounding jumper shall be visible after cap has been poured on foundations.

Equipment grounding conductors will be required in all conduits.

1.6 SERVICE

Service shall conform to the provisions in Sections 86 and 87 of the State Standard Specifications and these special provisions.

The Contractor shall notify the Engineer in writing at least 15 calendar days in advance of the date in which he desires any service connections or disconnects to be made. The Contractor shall be entitled to

no extension of time or other compensation for any delay to his operation resulting from his failure to give the prescribed notifications.

It will be the Contractor's responsibility to verify the location of the necessary connection for the traffic signal and lighting system. The City will make arrangements for and to pay for all fees due the utility company to provide the necessary connection for the traffic signal and lighting system. The Contractor shall be responsible for all costs involved in the installation of hand holes, conduit, risers, and vault entry as required by the utility company.

1.9 BATTERY BACK-UP SYSTEM (BBS):

General. The Battery Back-up System (herein referred to as BBS) shall be designed for outdoor applications, in accordance with the Caltrans Transportation Electrical Equipment Specifications (TEES), dated March 12, 2009, Chapter 1, Section 8 requirements. The BBS shall conform to Caltrans Specification for Battery Back-up System For Traffic Signals utilizing Light Emitting Diodes (LED) Traffic signal Modules.

The battery back-up system shall include, but not be limited to the following: inverter/charger, power transfer relay, batteries, a separate manually operated non-electronic bypass switch, and all necessary hardware and interconnect wiring. The BBS shall provide reliable emergency power to a traffic signal in the event of a power failure or interruption.

The BBS shall be compatible with State of California, Department of Transportation Specification Model 332 Cabinets, Model 170E Controllers, and cabinet components, for full-time operation.

The BBS shall be capable of providing power for full run-time operation for a full-LED signal intersection.

The BBS system shall be model FXM 1100QC as manufactured by Alpha Technologies, 7700 Riverfront Gate, Burnaby, BC V5J 5M4 Canada, or model PBM-1250 as manufactured by Myers, Custom Products, A Division of U.S. Traffic Corporation (Myers, Custom Products 2950 E. Philadelphia Street, Ontario, CA 91761). Or City approved equal.

BBS batteries and inverter shall be installed in a side mounted BBS Battery Cabinet supplied by the Contractor and installed on the Model 332L Cabinet. BBS Battery cabinet shall be painted San Dimas Brown. BBS Battery Cabinet shall be model SE48-1616 with exhaust fan as manufactured by Alpha Technologies, 7700 Riverfront Gate, Burnaby, BC V5J 5M4 Canada. Or City approved equal.

The Contractor shall supply and install the BBS and shall be complete and operational to provide the required service. The City shall require technical support by the equipment manufacturer / representative at "Turn On".

1.10 VIDEO DETECTION SYSTEM

I. General

This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using a video detection system (VDS) and/or multi-sensor detection system (MSDS) when called for on

the plans.

Multi-sensor systems shall utilize two different sensors of different technologies, video imaging and radar, to detect and track licensed and unlicensed vehicles at distances up to 600 feet (180 meters). The sensor system shall fuse vehicle information from the two sensors to provide highly accurate and precise detection for special or advanced applications.

The multi-sensor system shall use a primary detector rack mounted processor to interface with the traffic control cabinet. The module shall process information from both video imaging and radar sensors simultaneously in real-time.

1.1 System Configuration

The VDS shall consist of up to four video cameras, a video detection processor (VDP) capable of processing from one to four video or video/radar sources, output extension modules, access module, video monitor, video surge suppressors and a pointing device.

The MSDS shall consist of up to two video cameras and radar units, detection processors (DP) capable of processing from one to two intersection approaches, output extension modules, access module, surge suppressors, a setup tool and a pointing device.

1.2 System Software

The system shall include software that detects vehicles in multiple lanes using only the video image or radar information. Video detection zones shall be defined using only an on-board video menu and a pointing device to place the zones on a video image. Up to 24 detection zones per camera shall be available. Two additional trigger zones for the radar sensor shall be available and be configurable by using the same system setup menu on the DP. A separate computer shall not be required to program the detection zones. A portable setup tool shall be available for sensor alignment and adjustment of camera's field of view and focus.

2. *Functional Capabilities*

2.1 Available System Configuration

a. The VDS and MSDS will be deployed at locations where site conditions and roadway geometry vary. These systems may also be deployed at locations where existing cabinets or equipment exist. Existing site configurations will dictate the availability of cabinet space and VDS and MSDS usage.

b. The proposed VDS and MSDS shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have identical user interface for system setup and configuration. The communications protocol to each configuration shall be identical and shall be hardware platform independent. The proposed VDS and MSDS shall have multiple configurations available for deployment as described in Table 1.

c. When shown on the plans the contractor shall furnish a multi-sensor system that utilize two different sensors of different technologies, video imaging and radar, to detect and track licensed and unlicensed vehicles at distances up to 600 feet. The sensor system shall fuse vehicle information from

the two sensors to provide highly accurate and precise detection for special or advanced applications.

Table 1. VDS Configuration

| Description | Video Inputs | Video Outputs | Mounting Configuration | Power Supply Requirements |
|--------------------------------------|---------------------|----------------------|--|----------------------------------|
| Single-Channel Rack Mounted | 1 | 1 | Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks) | 12/24 VDC Power From Rack |
| Dual-Channel Rack Mounted | 2 | 1 | Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks) | 12/24 VDC Power From Rack |
| Quad-Channel Rack Mounted (VDS only) | 4 | 1 | Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks) | 12/24 VDC Power From Rack |

2.2 System Interfaces

The following interfaces shall be provided for each of the configurations identified in Table 1.

a. **Video Input:** Each video input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source (camera sensor, DVD or video tape player). The interface connector shall be BNC type and shall be located on the front of the video processing unit. For four-channel VDPs, an adapter cable that converts a DB15 interface to 4 individual BNC connectors shall be used. The video input shall have the capability to select 75-ohm or high impedance (Hi-Z) termination.

b. **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.

c. **Video Output:** One video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to toggle through each input video channel. In the absence of a valid video signal, the channel shall be skipped and the next valid video signal shall be switched. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Overlays shall be able to be turned off by the user. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be positive locking BNC type. Friction type (e.g. RCA type) connectors shall not be allowed.

d. **Serial Communications:** A serial communications port shall be provided on the front panel. The serial port shall be compliant with EIA232 electrical interfaces and shall use a DB9 type connector. The serial 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. The interface protocol shall support multi-drop or point-to-multipoint communications. Each VDS shall have the capability to be addressable.

e. Contact Closure Output: Open collector contact closure outputs shall be provided. Four (4) open collector outputs shall be provided for the single, dual or quad channel rack-mount configuration. Additionally, the VDPs shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. Open collector outputs will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.

f. 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. The I/O module shall accommodate eight (8) inputs.

g. Detection LEDs: 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.

h. Test Switches: The front panel of the VDP shall have detector test switches to allow the user to place calls on each channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

i. Mouse Port: A USB mouse port shall be provided on the front panel of the rack mount video processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration. A mouse shall be provided with each video processor.

j. 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 open collector outputs. The extension module shall be connected to the VDP by an 8-wire twisted-pair cable with modular connectors. VDP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise. The extension module shall be available in both 2 and 4 channel configurations. EM configurations shall be programmable from the VDP. A separate I/O module with 32 outputs and 8 inputs using external wire harness for expanded flexibility shall also be available.

2.3 General System Functions

a. Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.

b. The VDP shall store up to three different detection zone patterns. The VDP 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.

c. The VDP shall detect vehicles in real time as they travel across each detection zone.

d. The VDP shall accept new detection patterns from an external computer through the EIA232 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.

e. The VDP system 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.

f. The VDP shall send its detection patterns to an external computer through the EIA232 port when requested when the external computer uses the appropriate communications protocol for uploading detection patterns.

g. The VDP 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.

h. The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined 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.

3. *Vehicle Detection*

3.1 Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.

3.2 The VDP shall provide up to 24 open collector output channels per camera input using one or more extension modules.

3.3 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 be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

3.4 Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from each video camera. No separate computer shall be required to program the detection zones.

3.5 Up to 3 detection zone patterns shall be saved for each camera within the VDP memory. The VDP's memory shall be non-volatile to prevent data loss during power outages.

3.6 The activation of the detection zone pattern for current use shall be done through a local menu selection. It shall be possible to activate a detection zone pattern from VDP memory and have that detection zone pattern displayed within 1 second of activation.

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

- 3.8 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.
- 3.9 The VDP shall provide dynamic zone reconfiguration (DZR). DZR enables 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.
- 3.10 Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.
- 3.11 The VDP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.
- 3.12 The VDP shall output a constant call during the background learning period of no more than 3 minutes.
- 3.13 Detection zone outputs shall be 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.
- 3.14 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 EIA232 port. The zone shall also have the capability to calculate and store average speed and lane occupancy at bin intervals of 10 seconds, 20 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes and 60 minutes.
- 3.15 The system will utilize a zone based constant call mode for a failsafe operation. When a zone goes to failsafe recall as a result of a low contrast or loss of power condition only the output channel associated with that zone will recall. All other channels will not be affected.
- 3.16 The system software will utilize a dual redundant hybrid tracking algorithm to enhance vehicle presence detection and data collection.
- 3.17 System software will include a moving shadow and occlusion rejection algorithm that is activated by selection of a drop down menu tab.
- 3.18 System software will include a menu selectable zone type labeled "Bike" that is specifically designed to detect bicycles.
- 3.19 System software will include a virtual QWERTY keyboard that is present when performing any labeling functions for the detection zones and cameras.
- 3.20 System software will include the ability to copy completed zones with one mouse click, drag and drop single zones, rows of zones together and entire detection configurations.

3.21 Detection zone indications will be a solid color outline of the entire zone when detecting vehicle presence. The activated zone color will be unique when the system senses a challenging condition such as fog or glare.

3.22 The detection system will be able to discriminate between bike and car actuations and be able to send bike and vehicle actuations from the same lanes to different detection outputs. Additionally the system shall allow an extension time for bikes that will not apply to vehicular traffic. The system will have the ability to count individual bike detections.

3.23 The DP shall support the requirements identified for VDP in addition to the following:

- a. The DP shall support 2 independent trigger points for radar outputs for dilemma zone applications.
- b. One radar sensor zone shall also count vehicles, calculate, and store the average speed and lane occupancy across the approach.
- c. In addition to the count type zone, the DP shall be able to calculate and/or acquire average speed and lane occupancy using both video and radar sensors. These values shall be stored in non-volatile memory for later retrieval.
- d. The DP shall have an “advance” zone type where detection outputs to the traffic controller is compensated for angular occlusion and distance.
- e. The DP shall employ color overlays on the video output.
- f. The DP shall have the ability to show phase status (green, yellow, or red) for up to 8 phases. These indications shall also be color coded.
- g. The user shall have the ability to enable or disable the display of the phase information on the video output.
- h. The DP 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.
- i. For alpha numeric user inputs, the DP shall utilize a virtual keyboard on the video overlay system to ease user input. The virtual keyboard shall use the standard QWERTY keyboard layout.
- j. The DP 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.
- k. When the user wishes to modify the location of a zone, the DP shall allow the user move a single

zone, multiple zones or all zones simultaneously.

- l. When the user wishes to modify the geometric shape of the zone, the DP shall allow the user to change the shape by moving the zone corner or zone sides.
- m. 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.
- n. For multiple camera input DPs, the user shall have the ability to enable automatic video output switching. The dwell time for each sensor input shall be user programmable.
- o. For radar sensor zones, the output can be triggered by presence of a vehicle only or by presence of a vehicle above a user-defined speed threshold.

4. *VDP and EM Hardware*

4.1 The VDP and extension module (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. Detector rack rewiring shall not be required.

The EM shall be available to avoid the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack. The extension module shall be connected to the VDP by an 8-wire cable with modular connectors, and shall output contact closures in accordance with user selectable channel assignments. The EM is available in 2, 4, or 32 channel configurations.

4.2 Input 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.

4.3 Input and Outputs

The VDP and EM shall include detector input and output pin out compatibility with industry standard detector racks. The 32-channel EM shall accommodate inputs through a 15-pin "D" connector and shall provide outputs through a 37-pin "D" connector on the front panel.

4.4 Video Inputs

VDPs shall include one, two or four BNC video input connections suitable for composite video inputs. The video input shall include a switch selectable 75-ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection.

4.5 Video Outputs

The front of the VDP shall include one BNC video output providing real time video output that can be

routed to other devices.

4.6 Operating Temperature

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

4.7 Status Indicators

The front face of the VDP shall contain indications, such as LED displays, to enable the user to view real time detections for each channel of detection when the system is operational. For convenience to the technician, 4 individual 3-position toggle switches shall be located on the front panel of the VDP to allow manual input of detection calls. Up-constant call; Middle-normal operation; Down-temporary manual call.

4.8 Serial Communication Port

The VDP shall include an EIA232 port for serial communications with a remote computer. This port shall be a 9-pin "D" subminiature connector on the front of the VDP.

4.9 On-board Memory

The VDP shall utilize non-volatile memory technology to enable the loading of modified or enhanced software through the EIA232 port and without modifying the VDP hardware.

4.10 Video Surge Suppression

An Edco CX-06M video surge suppresser shall be provided for each video input. The surge suppresser shall be directly grounded to the cabinet ground rod using 14 AWG minimum.

5. *Specification for a Rack Mounted Video Detection Single Point Interface Ethernet Device with MPEG4/H.264 Video Streaming (Edge connect module)*

This specification sets forth the minimum requirements for a module that provides a single point interface to multiple rack-mounted video detection units. This module shall also have the capability to stream up to 4 simultaneous video streams over an Ethernet interface.

5.1. Functional Capabilities

5.2 The interface device shall provide capabilities to enable multiple rack-mounted video detection processors to be locally and remotely accessed from a single point via one set of user interface devices. User interface devices are defined as a pointing device (mouse or track-ball) and video monitor.

5.3 Up to four video detection processor chains (video detection processor and extension modules) shall be accommodated.

5.4 The device shall allow the operator to switch video output display for any of the attached rack-mounted video detection processors by pressing a momentary switch or by using the remote access

software.

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

5.6 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.

5.7 Remote access to the device shall be through the built-in Ethernet port or EIA-232 port via access software running on a Microsoft Windows based personal computer.

5.8 An internet browser-based remote access firmware shall also be available for remote setup and diagnostics of the interface unit.

5.9 The interface unit shall support streaming video technology using MPEG4 and H.264 standards to allow the user to monitor video detection imagery over the Ethernet interface. Motion JPEG streaming video shall not be allowed.

5.10 The user shall be able to select which video input to be displayed on the output video monitor by repeatedly depressing the menu button.

5.11 The user shall be able to select a quad view of all of the four cameras simultaneously on the output video monitor by depressing the menu button.

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

5.13 The interface unit shall also have a browser interface that allows the user to configure the module.

5.14 The browser interface shall also allow the user to view the streaming video on the browser interface.

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

5.16 The interface unit shall support the streaming and display of D1, CIF, QCIF, VGA and QVGA video resolutions in a single stream or four concurrent streams in CIF resolution.

5.17 The interface unit shall allow the user to select a quad-view of all four input video signals to be shown on the browser interface.

5.18 The interface unit shall allow the user to manage the unit's Ethernet bandwidth usage by allowing the user to select the maximum bandwidth limit between 256 kbps and 7.0 Mbps.

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

5.20 The interface unit shall allow the user to upload new application firmware through the use of the browser interface.

5.21 Access to the interface unit shall be under password control and the browser interface shall allow the user to change the password.

5.22 The interface unit shall have the capability to perform IP port redirecting between the remote management software and each attached video detection processor. A unique IP port number shall be assigned for each video detection interface. The port number shall not be identical to the web browser interface of 80.

6. *Interface Device Hardware*

6.1 The interface device shall be specifically designed to mount in a standard TS-1, TS-2, and 170 type detector rack, using the edge connector to obtain power. No adapters shall be required to mount the interface device in a standard detector rack.

6.2 The interface device shall occupy no more than two slots in the detector rack and shall provide a loop-type handle for easy installation and removal.

6.3 The interface device shall be powered by 12 or 24 volts DC and shall not consume more than 6.25 watts. The unit shall automatically compensate for the different input voltages and shall be hot-swappable.

6.4 The interface device shall operate in a temperature range from -35°C to +74°C and a humidity range from 0% RH to 95% RH, non-condensing.

6.5 Video Ports - The interface unit shall accommodate a maximum of four composite video inputs and one video output.

6.6 Video inputs and video output shall be made via BNC connectors to ensure secure connections. RCA or other straight friction plug-in type connections shall not be allowed. Video inputs shall use a vendor supplied “octopus” cable to accommodate the four video inputs. Provisions shall be made to accommodate the mating cable to utilize jack screws for securing the octopus cable.

6.7 The interface unit shall accommodate either monochrome or color video signals conforming to NTSC or PAL video standards.

6.8 The interface unit shall automatically sense the video input signal and configure the video output port to either NTSC or PAL standards. Each video input signal shall be separately sensed to allow mixed video signals.

6.9 The interface unit shall interface with up to four video detection processors using RJ-45 interface connectors.

6.10 The interface unit shall support the use of USB pointing devices. The unit shall support either a USB mouse or trackball. Pointing devices shall not require vendor specific pointing device software drivers.

6.11 An EIA-232 communications port shall be provided for local and remote access. The connector for this port shall be a 9-pin “D” subminiature connector on the front of the interface unit. Provisions shall be made to accommodate mating cables to utilize jack screws for securing cables.

6.12 Hi-intensity LED status lights shall be provided to facilitate system monitoring. Indicators shall be provided to show the status of the internal processor, video lock and indication of which video input is being monitored.

6.13 An Ethernet port shall be integrated within the interface unit. The Ethernet port shall conform to 802.3 Ethernet specifications and shall auto-sense between 10 and 100 Mbps data rates. Industry standard TCP/IP (UDP and TCP packets) protocol shall be supported. The Ethernet connection shall be made through a RJ-45 connector.

7. *Advanced Wide Dynamic Range Color Video Detection Camera Specification w/o Connectors*

This specification sets forth the minimum requirements for cameras that are to be used by video detection systems.

The camera shall incorporate the following advanced features:

- Specifically designed for vehicle video detection applications
- Optimized to work with Iteris advanced detection algorithms
- Higher definition increase in horizontal and vertical lines improves color and clarity
- Quick-click connectors and adjustable camera mount streamline installation and minimize setup time-No Crimping tools required
- Zoom and focus can be adjusted from the ground from Lens adjustment module
- High performance in the most challenging lighting conditions
- Advanced proportional heater enhances performance in even the most adverse weather

7.1 Video Detection Camera

7.2 Video detection cameras used for traffic detection shall be furnished by the video detection processor (VDP) supplier and shall be qualified by the supplier to ensure proper system operation.

7.3 The camera shall produce a useable video image of the bodies 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 1.0 lux to 10,000 lux.

7.4 The imager luminance signal to noise ratio (S/N) shall be more than 50 dB. In harsh backlit conditions, vehicles can be detected flawlessly with >100dB of dynamic range.

7.5 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 CCD imager shall have a minimum effective area of 811(h) x 508(v) pixels.

7.6 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.

- 7.7 The camera shall utilize automatic white balance.
- 7.8 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.
- 7.9 The horizontal field of view shall be adjustable from 5.4 to 50.7 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 have a 27x zoom.
- 7.10 The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.
- 7.11 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.
- 7.12 The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.
- 7.13 The camera shall be housed in a weather-tight sealed enclosure. The enclosure shall be made of 6061 anodized aluminum. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.
- 7.14 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 6" diameter, less than 18" long, and shall weigh less than 6 pounds when the camera and lens are mounted inside the enclosure.
- 7.15 The enclosure shall be design so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.
- 7.16 The camera enclosure shall include a proportionally controlled Indium Tin Oxide heater design 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.
- 7.17 The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.
- 7.18 The glass face shall also employ a special coating to minimize the buildup of environmental debris such as dirt and water.
- 7.19 When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -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.
- 7.20 The camera shall be powered by 120-240 VAC 50/60 Hz. Power consumption shall be 30 watts or

less under all conditions.

7.21 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 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.

7.22 The camera shall provide 2 options for set up, diagnostic testing, and viewing of video. A lens adjustment module (LAM) supplied by the VDP supplier, when connected directly to the camera shall allow set up, diagnostic testing, and viewing of video while the camera is installed on a mast arm or pole. The (LAM) shall also allow set up, diagnostic testing, and viewing of the video from the cabinet when connected to the coaxial cable.

7.23 The video signal shall be fully isolated from the camera enclosure and power cabling

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

7.25 No BNC or other connector shall be used for the coaxial video cable termination at the camera.

7.26 The power connection at the camera shall use connector terminations that only require the use of wire strippers and a standard screwdriver. No special crimping tools or other types of terminations shall be used.

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

8. *Multi-Sensor Detection System Hardware*

The MSDS hardware shall consist of the following four elements:

- a. Video imaging camera sensor
- b. Radar sensor
- c. Sensor data combiner
- d. Detection processor

The MSDS shall be made in the U.S.A. in compliance with FTA “Buy America” regulations.

8.1 Video Imaging Camera Sensor

To accommodate deployment flexibility, the MSDS camera sensor shall be compatible will all DP platforms identified in Table 1. The MSDS camera sensor shall be supplied by the MSDS manufacturer.

8.1.1 The advanced camera enclosure shall utilize Indium Tin Oxide (ITO) technology for the heating element of the front glass. The transparent coating shall not impact the visual acuity and shall be optically clear.

- 8.1.2 Cable terminations at the data combiner for video and power shall not require crimping or special tools.
- 8.1.3 The camera sensor shall allow the user to set the focus and field of view via Wi-Fi connectivity.
- 8.1.4 The camera shall produce a useable video image of the bodies 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 1.0 lux to 10,000 lux.
- 8.1.5 The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.
- 8.1.6 The imager luminance signal to noise ratio (S/N) shall be more than 50 dB with the automatic gain control (AGC) disabled.
- 8.1.7 The imager shall employ three dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.
- 8.1.8 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.
- 8.1.9 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 550 TV lines.
- 8.1.10 The camera sensor 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 ranges of 1/4 to 1/10,000th second.
- 8.1.11 The camera sensor shall utilize automatic white balance.
- 8.1.12 The camera sensor 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.
- 8.1.13 The horizontal field of view shall be adjustable from 4.6 to 53.6 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 3.7mm to 44.0mm.
- 8.1.14 The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.
- 8.1.15 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.
- 8.1.16 The camera shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications. The housing shall allow the camera to be rotated to allow proper alignment between the

camera and the traveled road surface.

8.1.17 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.

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

8.1.19 The camera enclosure shall include a proportionally controlled Indium Tin Oxide heater design 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.

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

8.1.21 When mounted outdoors in the enclosure, the camera shall operate in a temperature range from -30 oF to +165 oF (-34 °C to +74 °C) and a humidity range from 0% RH to 100% RH. Measurement of satisfactory video shall be based upon DP system operation.

8.1.22 The camera sensor shall acquire its power from the sensor data combiner.

8.1.23 Recommended camera placement height shall be 18-33 feet (or 6-10 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 (105 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.

8.1.24 The video signal shall be fully isolated from the camera enclosure and power cabling

8.1.25 A weather-proof protective cover shall be provided to protect all terminations at the camera.

8.2 Radar Sensor

8.2.1 The radar sensor shall operate in the 24 GHz frequency band and shall operate on 1 of 7 available enumerated channels that is user selectable.

8.2.2 The radar detection range shall be 600 feet (180 meters) minimum, +/- 5%.

8.2.3 The radar sensor shall be able to track up to 20 independent objects simultaneously.

8.2.4 Object speed detection shall be within a range of 0 to 150 miles per hour +/- 1.0 miles per hour (240 km per hour ± 1.5 km per hour).

8.2.5 The radar sensor shall be able to detect vehicles in 1 to 4 traffic lanes.

8.2.6 The radar sensor shall be housed in a weather-tight sealed enclosure conforming to IP-67

specifications. The housing shall allow the radar to be adjusted to allow proper alignment between the sensor and the traveled road surface.

8.2.7 When mounted outdoors in the enclosure, the radar shall operate in a temperature range from 30 oF to +165 oF (-34 °C to +74 °C) and a humidity range from 0% RH to 100% RH.

8.2.8 The radar sensor shall communicate with the sensor data combiner.

8.2.9 The radar sensor shall acquire its power from the sensor data combiner.

8.3 Multi-Sensor Assembly

8.3.1 Both camera and radar sensors shall be housed in an overall, single enclosure assembly.

8.3.2 The overall size of the multi-sensor enclosure shall not exceed 14 inches x 15 inches x 17 inches (355mm x 380mm x 430mm).

8.3.3 The overall weight of the multi-sensor unit shall not exceed 11 pounds (5kg).

8.3.4 The effective projected area (EPA) shall not exceed 2.0 square feet (0.6 square meters).

8.3.5 The maximum power consumption for the multi-sensor assembly shall be less than 10 watts typical, 20 watts peak.

8.4 Sensor Data Combiner

8.4.1 A sensor data combiner that combines sensor information from both video and radar sensors shall be employed.

8.4.2 The sensor data combiner shall supply primary power to each sensor unit.

8.4.3 The sensor data combiner shall facilitate digital communications between the sensor data combiner and each of the sensor units.

8.4.4 The sensor data combiner shall get its primary power from an AC power source using industry standard 3-conductor cabling.

8.4.5 The sensor data combiner shall communicate with the detection processor using a single coax cable. Both video imaging and radar data shall use the single coax cable.

8.4.6 The sensor data combiner shall also employ industry standard Wi-Fi connectivity for remote sensor system setup using a mobile programming device such as a netbook or tablet computer. Video camera and radar sensor shall be able to be configured independently.

8.4.7 The sensor data signal shall be fully isolated from the mechanical enclosure and power cabling

8.4.8 Cable terminations at the sensor data combiner shall not require crimping tools.

8.4.9 The sensor data combiner shall be housed in a weather-tight sealed enclosure conforming to IP-67 specifications.

8.5 Detection Processor

8.5.1 Each sensor input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source. The interface connector shall be BNC type and shall be located on the front of the processing unit. The sensor input shall have the capability to be terminated into 75-ohms or high impedance (Hi-Z) using dip switches or software control from the user menu. The sensor input shall also facilitate the data from the radar sensor.

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

8.5.3 One video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to cycle through each input video channel. In the absence of a valid sensor signal, the channel shall be skipped and the next valid sensor signal shall be switched. The real time video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Overlays shall be able to be turned off by the user. Control of the overlays and sensor switching shall also be provided through the serial communications port. The video output interface connector shall be positive locking BNC type. Friction type (e.g. RCA type) connectors shall not be allowed.

8.5.4 A serial communications port shall be provided on the front panel. The serial port shall be compliant with EIA232 electrical interfaces and shall use a DB9 type connector mounted on the front panel of the DP. The serial 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. The interface protocol shall support multi-drop or point-to-multipoint communications. Each MSDS shall have the capability to be addressable. The DP shall support data rates of 1200 bps to 230,400 bps, inclusive.

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

8.5.6 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 DPs 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.

8.5.7 Detection status LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. Rack-mounted detection 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.

8.5.8 The front panel of the DP shall have detector test switches to allow the user to manually place calls on each DP output channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

8.5.9 A USB mouse port shall be provided on the front panel of the rack mount detection processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration. A mouse shall be provided with each detection processor.

8.5.10 Extension modules shall be connected to the DP by an 8-wire twisted-pair cable with modular RJ45 connectors. DP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise.

8.5.11 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 extension module shall be available in both 2 and 4 channel configurations. EM configurations shall be programmable from the DP. A separate I/O module with 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 shall also be available.

8.5.12 The DP 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 DP or EM in a standard detector rack. Detector rack rewiring shall not be required.

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

8.5.14 The DP shall enable the loading of modified or enhanced software through the EIA232 or USB port (using a USB thumb drive) and without modifying the DP hardware.

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

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

8.5.17 An Edco CX-06M video surge suppresser shall be provided for each sensor input. The surge suppresser shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.08mm2) minimum.

8 *Specification for a 17-inch Diagonal Rack Mount LCD Monitor*

General

This specification sets forth the minimum requirements for a 17-inch LCD color video monitor that is capable of being mounted in a 1U high 19-inch rack.

8.1 Functional Capabilities

8.2 The 17-inch diagonal color LCD monitor shall be housed in a sliding 1U high rack mount drawer.

8.3 The monitor shall be able to be flipped up vertically for viewing and flipped down horizontally for storage.

8.4 The drawer shall be able to be locked using a key to restrict unauthorized usage.

8.5 The LCD panel shall be industrial grade (Grade A) and employ thin film transistor (TFT) technology.

8.6 The LCD panel shall have a high contrast ratio of 700:1 minimum.

8.7 The LCD panel shall have a brightness level of 300 cd per square meter minimum.

8.8 The LCD panel shall have support computer resolution up to 1280 (horizontal) x 1024 (vertical).

8.9 The LCD panel shall support both NTSC and PAL video formats and shall be auto-sensing.

8.10 The LCD panel shall support 16.2 million display colors.

8.11 The typical pixel rise time shall be 2 milliseconds. The typical pixel fall time shall be 6 milliseconds.

8.12 The LCD panel shall have a pixel pitch of 0.264 (horizontal) x 0.264 (vertical) millimeters minimum.

8.13 The minimum viewing angle shall be 150 degrees horizontally and 135 degrees vertically.

8.14 The on screen display (OSD) shall enable control of brightness, contrast, phase & clock, color, horizontal and vertical positioning.

8.15 The LCD panel shall support VGA analog RGB, S-video and composite video interfaces.

8.16 The LCD panel shall have a MTBF rating of 50,000 hours minimum.

8.17 The monitor system shall be able to operate from 110 VAC or 220 VAC, 50 or 60 Hz.

8.18 The monitor system shall be FCC, VCCI, EMC and CE approved.

8.19 The monitor system shall operate between 0 and 50 degrees Celsius, 90% non-condensing.

8.20 The monitor system shall be able to accept mechanical shock of 10 G's peak acceleration (11 ms,

half sine wave)

8.21 The monitor system shall be able to accept vibrations of 5 to 500 Hz at 1 G RMS random vibration.

9.0 Physical Characteristics

9.1 The monitor system shall be 44.2 x 4.45 x 55 cm (17.4 x 1.75 x 21.6 in.) (W x H x D).

9.2 The monitor system shall weigh no more than 10.9 kg (24 pounds).

10. Warranty

The LCD monitor shall be warranted to be free of defects in material and workmanship for a period of not less than 3 years from date of receipt.

11. Installation

11.1 The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281 or approved equal. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. A BNC plug connector shall be used at the cabinet end. The coaxial video cable shall be stripped and terminated at the camera and cabinet per manufacturers' instructions (no BNC or other connector shall be used at the camera). The coaxial cable, BNC connector used at the cabinet termination, and crimping tool shall be approved by the supplier of the video detection system. The manufacturer's instructions must be followed to ensure proper connection.

11.2 The power cabling shall be 16 AWG three conductor cable with a minimum outside diameter of 0.325 inch and a maximum diameter of 0.490 inch. The power cable shall be terminated at the camera per manufacturers' instructions and shall only require standard wire strippers and a screw driver for installation (no special connectors or crimping tools shall be used for installation). The cabling shall comply with the National Electric Code, as well as local electrical codes. Cameras may acquire power from the luminaire if necessary and only when approved by the engineer.

11.3 The VDS or MSDS shall be installed by factory-certified installers as recommended by the supplier and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

11.4 A setup tool shall be provided for the MSDS. The setup tool will provide secure access to the Sensor Data Combiner. The secure access will be on two levels; the first is a ten digit hexadecimal wifi key embedded in the setup tool. The second is a user selectable alphanumeric password of between four and ten digits.

11.5 The setup tool shall provide the following Video Image Camera Sensor functions; Zoom and auto focus adjustments, low frame rate video and image snapshot storage functions.

11.6 The setup tool shall provide the following Radar Sensor functions; Height, operating channel and sensor offset adjustments. The setup tool shall provide a visualization of the roadway with icons representing vehicles at the approach along with simulated detector outputs and instantaneous vehicle speed. The icon will be one of three sizes representing the classification of the vehicle. The detector

trigger points shall be user adjustable along with the stop bar to MSDS distance.

11.7 The setup tool shall provide other general functions; MSDS labeling, password setting and Sensor Data Combiner firmware upgrades

11.8 The set up tool shall be provided on a personal computer having an embedded wifi module running at 2.4GHz.

11.9 The set up tool shall be provided on a tablet computer having an embedded wifi module running at 2.4GHz.

12. Limited Warranty

12.1 The supplier shall provide a limited three-year warranty on the VDS or MSDS. See suppliers standard warranty included in the Terms and Conditions of Sale documentation.

12.2 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.

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

13. Maintenance and Support

13.1 The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection camera. 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.

13.2 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.

13.3 Installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Traffic Signal Technician certified.

13.4 All product documentation shall be written in the English language.

1.11 MEASUREMENT & PAYMENT

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION – GAREY AVENUE & FOOTHILL BOULEVARD INTERSECTION** shall be per the contract LUMP SUM (LS) price bid and shall conform to the provisions in Section 9, "Payment," of the State Standard Specifications and these special provisions. The lump sum price bid shall be considered as full compensation for all labor, tools, equipment, warranties, maintenance, materials, incidentals, and all things necessary to complete the work as shown on the plans, in place, and no additional compensation will be made therefore.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION – GAREY AVENUE & BONITA AVENUE INTERSECTION** shall be per the contract LUMP SUM (LS) price bid and shall conform to the provisions in Section 9, "Payment," of the State Standard Specifications and these special provisions. The lump sum price bid shall be considered as full compensation for all labor, tools, equipment, warranties, maintenance, materials, incidentals, and all things necessary to complete the work as shown on the plans, in place, and no additional compensation will be made therefore.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION – GAREY AVENUE & ARROW HIGHWAY INTERSECTION** shall be per the contract LUMP SUM (LS) price bid and shall conform to the provisions in Section 9, "Payment," of the State Standard Specifications and these special provisions. The lump sum price bid shall be considered as full compensation for all labor, tools, equipment, warranties, maintenance, materials, incidentals, and all things necessary to complete the work as shown on the plans, in place, and no additional compensation will be made therefore.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION – GAREY AVENUE & ALVARADO STREET INTERSECTION** shall be per the contract LUMP SUM (LS) price bid and shall conform to the provisions in Section 9, "Payment," of the State Standard Specifications and these special provisions. The lump sum price bid shall be considered as full compensation for all labor, tools, equipment, warranties, maintenance, materials, incidentals, and all things necessary to complete the work as shown on the plans, in place, and no additional compensation will be made therefore.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION** shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing new traffic signals, lighting and electrical systems, combinations or units thereof, including but not limited to foundations, poles, mast arms, conduit, cable, pull boxes, signal heads, signal indications, pedestrian signal system, emergency pre-emption system, cabinet, controller, service, battery back-up system, luminaires, boring, restoring curb, sidewalk, landscaping, pavement associated with conduit work, and appurtenances damaged or destroyed during construction, and salvaging existing materials as shown and specified on the plans, as specified in Section 9 of the Standard Specifications and these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall NOT include compensation for loop detectors or other systems that are otherwise covered in separate bid items.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION-HOLT AVENUE & TOWNE AVENUE INTERSECTION** shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing new traffic signals, lighting and electrical systems, combinations or units thereof, including but not limited to foundations, poles, mast arms, conduit, cable, pull boxes, signal heads, signal indications, pedestrian signal system, emergency pre-emption system, cabinet, controller, service, battery back-up system, luminaires, boring, restoring curb, sidewalk, landscaping, pavement associated with conduit work, and appurtenances damaged or destroyed during construction, and salvaging existing materials as shown and specified on the plans, as specified in Section 9 "Payment" of the Standard Specifications and these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall NOT include

compensation for loop detectors or other systems that are otherwise covered in separate bid items.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION** shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing new traffic signals, lighting and electrical systems, combinations or units thereof, including but not limited to foundations, poles, mast arms, conduit, cable, pull boxes, signal heads, signal indications, pedestrian signal system, emergency pre-emption system, cabinet, controller, service, battery back-up system, luminaires, boring, restoring curb, sidewalk, landscaping, pavement associated with conduit work, and appurtenances damaged or destroyed during construction, and salvaging existing materials as shown and specified on the plans, as specified in Section 9, "Payment" of the Standard Specifications and these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall NOT include compensation for loop detectors or other systems that are otherwise covered in separate bid items.

Measurement & Payment for the requirements of **TRAFFIC SIGNAL MODIFICATION-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION** shall include full compensation for furnishing all labor, materials including hardware, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing new traffic signals, lighting and electrical systems, combinations or units thereof, including but not limited to foundations, poles, mast arms, conduit, cable, pull boxes, signal heads, signal indications, pedestrian signal system, emergency pre-emption system, cabinet, controller, service, battery back-up system, luminaires, boring, restoring curb, sidewalk, landscaping, pavement associated with conduit work, and appurtenances damaged or destroyed during construction, and salvaging existing materials as shown and specified on the plans, as specified in Section 9, "Payment" of the Standard Specifications and these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall NOT include compensation for loop detectors or other systems that are otherwise covered in separate bid items.

BID ITEM 51: FURNISH & INSTALL TYPE E TRAFFIC DETECTOR LOOP, and Replace DLC

Subsection 302-1.9, "Traffic Signal Loop Detectors," of the Standard Specifications is deleted. Loop detectors shall be replaced, as shown on the Plans, and as directed by the Engineer, including DLC's to controller cabinet.

Loop detectors shall conform to the provisions in Sections 86 and 87 of the State Standard Specifications, State Standard Plans No. ES-5A and ES-5B, and these Special Provisions.

The Work to be done hereunder consists of furnishing and installing loop detectors at the locations shown on the Plans and where destroyed during cold milling or other removal operations. The Contractor shall replace the same number of detectors as are destroyed.

Loop wires shall be State Type 1. The Contractor shall install loops and lead-in wire prior to surface course construction, and shall install loops 4 inches below finished pavement grade. The Contractor shall install 4 turns of wire in each advance loop. For forward loops, route the lead-in cables directly forward to the crosswalk or stop bar, then route in the cross walk or parallel to the stop bar to the curb.

The Contractor shall wire the loops in series, alternating clockwise to counter-clockwise.

Measurement & Payment for **FURNISH & INSTALL TYPE E TRAFFIC DETECTOR LOOP, and REPLACE DLC** shall be at the contract unit price bid per **Each (EA)** basis and shall include all materials, labor, and equipment necessary to perform all operations to remove and install traffic loops through the project site during construction, in the areas shown on the Plans, including DLC's to controller cabinet, as directed by the Engineer. Replacement loops shall be as specified in Caltrans Standard Specifications Section 9 "Payment", and as stated herein. Contractor shall coordinate with the Engineer for final placement of loops. Any traffic loops that are damaged during construction, outside the areas shown on the exhibits or shown as protect in-place shall be fully replaced at the Contractors expense and to the satisfaction of the Engineer. No further compensation will be allowed therefore.

BID ITEM 52: TRAFFIC SIGNING, THERMOPLASTIC STRIPING, MARKINGS & RAISED PAVEMENT MARKERS AT ALL INTERSECTIONS

All existing thermoplastic shall be removed prior to cold milling of the asphalt concrete and shall be disposed of at a hazardous waste facility by the Contractor. Proof of proper disposal will be required to be submitted to the City prior to payment authorization.

A. PERMANENT ROADWAY SIGNING:

Signs shall conform to the provisions in Section 56, "Signs," of the State Standard Specifications, the State Specifications for Reflective Sheeting on Aluminum Signs, the State Specifications for Aluminum Single-Sheet and Laminated-Panel Signs and these Special Provisions. All signs shall have 3M 1160 (or approved equal) anti-graffiti film.

The Work to be done hereunder consists of furnishing and installing signs, sign posts, re-posting existing signs, and replacing existing sidewalks where removed for sign post installation.

The signs to be re-posted shall be relocated as shown on the Plans or at locations approved by the Engineer. Any post damaged shall be replaced by the Contractor at its sole expense.

B. PAVEMENT MARKERS, MARKINGS, AND TRAFFIC STRIPING:

Section 214, "Pavement Marker," Subsection 310-5.6, "Painting Traffic Striping, Pavement Markings, and Curb Marking," and Section 312, "Pavement Marker Placement and Removal," of the Standard Specifications are supplemented by the following:

The Contractor shall restripe existing striping and curb markings obliterated by new construction, whether or not shown on the Plans for replacement.

The Contractor shall remove markers, markings, and striping where necessary to adjust the configuration of existing striping to new striping. The Contractor shall remove markers flush with existing pavement. The Contractor shall remove markings and striping by wet sandblasting or light grinding, as approved by the Engineer.

All striping and markings shall be alkyd thermoplastic, 1.5 mm to 2.5 mm thick in conformance with State Specification 84-2, except for Bike Lane striping, as shown on the Plans and as directed by the City Traffic Engineer. Bike lane striping will be completed with paint in conformance with State Specification 84-3, as shown on the Plans and as directed by the City Traffic Engineer. Permanent striping to be installed at least 10 days after the final asphalt lift has been placed.

At locations where existing painted curb is to be reconstructed, the Contractor shall paint the new curb as directed by the Engineer within 10 working days after completing curb reconstruction. The paint shall be water-based with a 2-year guarantee against color fading. Prior to the start of construction, the Contractor shall submit to the City written proof of the manufacturer's 2-year guarantee.

The Contractor shall re-paint all existing painted curb in kind, regardless of whether shown on the plans or not. The locations for curb repainting shown on the plans are representational and may not reflect the full extent of the curb paint markings.

The Contractor shall furnish to the Engineer samples of materials not less than 3 weeks in advance of the date the materials are to be applied.

The Contractor shall notify the Engineer after completing layout/cat-tracking and at least 3 working days before commencing installation of striping, markings and markers for review and approval of the striping layout.

The Contractor shall include pavement markers for all striping and shall install markers, striping and markings in accordance with the Plans and the details shown in the Caltrans Standard Plans.

The Contractor shall install a Type I pavement marker at all fire hydrant locations.

C. MEASUREMENT & PAYMENT:

Measurement & Payment for TRAFFIC SIGNING, THERMOPLASTIC STRIPING, MARKINGS & RAISED PAVEMENT MARKERS AT ALL INTERSECTIONS shall be on a **Lump Sum (LS)** basis and shall include furnishing all labor, equipment and materials necessary for signing and striping, including but not limited to the removal of existing thermoplastic and/or striping and pavement markers by approved methods, installation of raised pavement markers, thermoplastic/paint legends and striping, painting new curb to match existing, re-painting all existing curb paint markings, delineators, signs and new signposts in the public right of way and private property. This work shall conform to the SSPWC, Sections 210 and 310 and no further compensation will be allowed therefore.

BID ITEM 53: ADJUST EXISTING BENCH TO GRADE

All existing benches encountered during construction shall be protected in place and adjusted to grade per the plan requirements.

The protection, preservation, and adjusting of the required bench shall be paid for as part of the adjust existing bench to grade bid item.

Measurement & Payment for Adjust Existing Bench to Grade shall be on an **Each Item (EA)** basis and shall include furnishing all labor, equipment, tools and materials, coordination with advertisement and transit authority necessary for the adjustment of bench as shown on the plans, and as directed by the Engineer. No further compensation will be allowed therefore.

ALTERNATE BID ITEM A-1: VIDEO DETECTION SYSTEM-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION

ALTERNATE BID ITEM A-2: VIDEO DETECTION SYSTEM-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION &

ALTERNATE BID ITEM A-3: VIDEO DETECTION-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION

Video Detection System shall conform to the provisions of 1.10 VIDEO DETECTION SYSTEM of these Special Provisions.

Measurement & Payment for the requirements of **VIDEO DETECTION SYSTEM-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price include all labor, tools, equipment, materials and incidentals required to furnish and install a video detection system, complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore. The lump sum price shall ALSO include a credit for all materials, labor and incidentals associated with the loop detectors that would not need to be installed.

Measurement & Payment for the requirements of **VIDEO DETECTION SYSTEM-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price include all labor, tools, equipment, materials and incidentals required to furnish and install a video detection system, complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore. The lump sum price shall ALSO include a credit for all materials, labor and incidentals associated with the loop detectors that would not need to be installed.

Measurement & Payment for the requirements of **VIDEO DETECTION SYSTEM-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price include all labor, tools, equipment, materials and incidentals required to furnish and install a video detection system, complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore. The lump sum price shall ALSO include a credit for all materials, labor and incidentals associated with the loop detectors that would not need to be installed.

ALTERNATE BID ITEM A-4: ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION &

ALTERNATE BID ITEM A-5: ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & TOWNE AVENUE INTERSECTION &

ALTERNATE BID ITEM A-6: ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION &

ALTERNATE BID ITEM A-7: ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION

Accessible Pedestrian Signals shall conform to the provisions in Section 86 and 87 of the Standard Specifications.

Measurement & Payment for the requirements of **ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price shall apply the credit amount for the removal of the ADA compliant push buttons from the base bid and shall including all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & TOWNE AVENUE INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price shall apply the credit amount for the removal of the ADA compliant push buttons from the base bid and shall including all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price shall apply the credit amount for the removal of the ADA compliant push buttons from the base bid and shall including all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **ACCESSIBLE PEDESTRIAN SIGNAL SYSTEM (APS)-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION** shall be contract **lump sum (LS)** price bid. The contract lump sum price shall apply the credit amount for the removal of the ADA compliant push buttons from the base bid and shall including all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

- ALTERNATE BID ITEM A-8:** **LED LUMINAIRES-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION &**
- ALTERNATE BID ITEM A-9:** **LED LUMINAIRES-HOLT AVENUE & TOWNE AVENUE INTERSECTION &**
- ALTERNATE BID ITEM A-10:** **LED LUMINAIRES-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION &**
- ALTERNATE BID ITEM A-11:** **LED LUMINAIRES-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION**

LED Luminaires per plan.

Measurement & Payment for the requirements of **LED LUMINAIRES-HOLT AVENUE & HAMILTON BOULEVARD INTERSECTION** shall be the contract unit cost price bid and shall include all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **LED LUMINAIRES-HOLT AVENUE & TOWNE AVENUE INTERSECTION** shall be the contract unit cost price bid and shall include all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **LED LUMINAIRES-HOLT AVENUE & SAN ANTONIO AVENUE INTERSECTION** shall be the contract unit cost price bid and shall include all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

Measurement & Payment for the requirements of **LED LUMINAIRES-SAN BERNARDINO AVENUE & INDIAN HILL BOULEVARD INTERSECTION** shall be the contract unit cost price bid and shall include all labor tools, equipment, materials and incidentals required to complete the work in place, per details shown on the plans, and as required by the Engineer. No additional compensation will be allowed therefore.

PART 7

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