NOTICE INVITING BIDS

The City of Stockton, California, will receive sealed bids until Thursday, March 30, 2017, 2:00 p.m., for the FFY 2015-2016 Street Resurfacing Project in accordance with the plans and specifications for Project No. PW1519. Federal Project No. STPL-5008(147). Each bid submitted for this project shall be on the official bid form obtained from the City of Stockton web site at www.stocktonca.gov/pwbid, and must conform to the requirements of the official bid documents, including the plans and specifications. Each bid shall be presented under sealed cover and shall be accompanied by the Bidder's Guaranty, Non-Collusion Declaration, and all of the required documents and information. Each bidder shall be licensed in accordance with applicable State laws.

The City of Stockton encourages the use of certified Disadvantaged Business Enterprise (DBE) firms to bid this project, and the City encourages bidders to employ certified DBE firms as subcontractors. The City has established a project-specific DBE Goal of 13%. As a condition of award, contractors must either A) meet the project-specific DBE goal, or B) demonstrate Good Faith Efforts as required in the “Disadvantaged Business Enterprises (DBE) Instructions to Bidders.” FAILURE TO MEET EITHER A) OR B) REQUIREMENTS WILL RENDER THE BID AS NON-RESPONSIVE. Refer to the “Disadvantaged Business Enterprise (DBE) Instructions to Bidders” document for additional information regarding these and other DBE requirements.

Each sealed bid shall be marked "BID" and shall indicate the project name, number, and bid opening date and shall be mailed or delivered to the Office of the City Clerk, City Hall, 425 N. El Dorado Street, Stockton, California 95202, at or before the hour stated. Bids so received shall be publicly opened, examined and declared by the City Clerk. Bidders and the public are invited to be present at the declaration of said bids.

A pre-bid meeting will be held on March 22, 11:30 a.m., City Hall Council Chambers, 425 N. El Dorado Street, Stockton, CA 95202.

Bidders are hereby notified that the successful bidder and any subcontractor under them shall pay prevailing wage rates in performing the contract.

A contract will be awarded to the lowest responsible bidder as defined in the Stockton Municipal Code; provided, however, that the City Council reserves the right to reject any and all bids and to re-advertise for bids or to provide for the work to be done by the City of Stockton.

The successful bidder shall be required to furnish a Labor and Material Bond and a Faithful Performance Bond, each in the sum of one hundred percent (100%) of the contract price. Said bonds shall be furnished by a company authorized to issue surety bonds in the State of California. On official forms furnished by City, said bonds shall be executed by the surety and contractor before or concurrently with the signing of the contract.

For questions about this project, please contact Thinh Phan, (209)937-8885, or email Thinh.Phan@stocktonca.gov.

BONNIE PAIGE
CITY CLERK, CITY OF STOCKTON
NOTICE TO CONTRACTORS

Official bid documents including plans and specifications for the following project are now available*:

FFY 2015-16 STREET RESURFACING PROJECT
PROJECT NO. PW1519
FEDERAL PROJECT NO. STPL 5008(147)
(FEDERAL AID CONTRACT)

Project Description: The FFY 2015-2016 Street Resurfacing Project (Pacific Avenue from Rivara Road to March Lane and Thornton Road from El Camino Avenue to Rivara Road). The scope of work includes base failure repairs, pavement patching/leveling, pavement grinding (cold planning), installing electrical traffic detector loops and detector hand holes, 1.5" and 3" asphalt concrete overlay, re-striping, extruded curbs, stamped concrete in median islands, ADA wheel chair ramps, truncated domes, two bus pads at BRT stops, removal and re-installation of curb, gutter and sidewalk.

Engineer's Estimate: Below $3.2 million
License Required: Class "A"
Mandatory Job Walk: N/A
Pre-Bid Meeting: March 22, 2017, 11:30 am, City Hall, Council Chambers
Bid Opening Date: Thursday, March 30, 2 p.m., City Hall, Clerk's Office
Funding Source: Federal Funds

*Note: Official bid documents, including plans and specifications, may be obtained from the City of Stockton web site at www.stocktonca.gov/pwbid

All bids submitted for this project must conform with the requirements of
the official bid documents, including plans and specifications, Instructions to Bidders, complete Bid Forms Package, and any Letters of Clarification issued during the bidding process. Bids must be submitted to the City Clerk’s Office on or before 2 p.m. on the Bid Opening Date.

City of Stockton
City Clerk's Office
City Hall
425 N. El Dorado Street
Stockton, CA 95202

If you would like additional information regarding this project, please contact Thinh Phan, Project Manager, at (209) 937-8885 or email at Thinh.Phan@stocktonca.gov
INSTRUCTIONS TO BIDDERS
Federal Aid Contracts

1. INSTRUCTIONS
The bidder shall carefully examine the instructions contained herein and satisfy himself/herself as to the conditions with which he/she must comply prior and with the conditions affecting the award of the contract.

This project will have a pre-bid meeting. The purpose is to explain the project and project requirements, answer questions, and provide an opportunity for Disadvantaged Business Enterprises (DBEs) and other small business firms to interact with larger firms prior to bids being prepared and submitted. Therefore, DBEs are strongly encouraged to attend and make known both their interest and areas of expertise.

The bidder’s attention is directed to the City of Stockton’s “Standard Specifications” for additional detailed information regarding the project requirements.

2. COMPETENCY OF BIDDERS

2.1 LICENSE- At the time of award, through contract acceptance, the selected Contractor shall be properly licensed in accordance with the laws of the State and the City of Stockton (Public Contract Code 10164).

2.2 CONTRACTOR REGISTRATION REQUIREMENTS- A Contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5. It is not a violation of this section for an unregistered Contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the Contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

Only vendors/contractors that are subject to the public works statutes would be required to register. A&E firms that are not doing or subcontracting out tasks subject to public work requiring prevailing wages are not subject to registration and public works laws. Design work is not subject to prevailing wages and, therefore, not considered public work, and the firm does not have to register. For example, A&E tasks that are subject to public works laws would be surveying, soil testing, material testing, and building/construction inspection, as there are prevailing wage determinations for these works.

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

Department of Industrial Relations- Contractor Registration information and web link: http://www.dir.ca.gov/Public-Works/PublicWorks.html
In compliance with Senate Bill 854 and the California Labor Code, all Bidders shall include with their Bid proof of registration from the Department of Industrial Relations (DIR) that includes the contractor’s Legal Name, Registration Number, License Type/Number for every contractor and subcontractor, regardless of tier. For subcontractor proof of registration that could not be included with the bid, the contractor will be allowed to submit subcontractor registration proof no later than four business days after bid opening.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Contractors must submit their certified payroll records directly to the Division of Labor Standards Enforcement Compliance Monitoring Unit, as well as the City of Stockton.

3. EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF THE WORK

3.1 CONTRACTOR’S RESPONSIBILITY- The bidder shall examine carefully the site of the work and the plans and specifications therefor. He/she shall investigate and satisfy himself/herself as to conditions to be encountered, the character, quality and quantity of surface, subsurface materials or obstacles to be encountered, the work to be performed, materials to be furnished, and as to the requirements of the bid, plans and specifications of the contract.

3.2 RESPONSIBILITY FOR UTILITIES- As part of the responsibility stated above and without limitation thereon, the Contractor shall be responsible at his/her own cost for any and all work, expense of special precautions caused or required by the existence or proximity of utilities encountered in performing the work, including, without limitation thereon, repair of any and all damage and all hand or exploratory excavation required. Attention is directed to the possible existence of underground facilities not known to the City or in a location different from that which is indicated on the plans or in the special provisions. The Contractor shall take reasonable steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service. If the Contractor discovers underground facilities not indicated on the plans or in the special provisions, he/she shall immediately give the Project Manager written notification of the existence of such facilities. Such facilities shall be protected from damage as directed by the Project Manager, and the Contractor will be paid for such work as extra work.

Where it is determined by the Project Manager that the rearrangement of an underground facility, the existence of which is not shown on the plans or in the special provisions, is essential in order to accommodate the improvement, the City will provide for the rearrangement of such facility by other forces, or such rearrangement shall be performed by the Contractor which will be paid for as extra work.

The bidder is cautioned that such utilities may include high pressure fluid pipe lines, communication cables or electrical cables which may be high voltage and the ducts enclosing such cables, and, when working or excavating in the vicinity thereof, the special precautions to be observed at his/her own cost shall also include, but may not be limited to, the following: all such cables and their enclosure ducts shall be exposed by careful hand excavation so as not to damage the ducts or cables nor cause injury to persons, and suitable warning signs, barricades and safety devices shall be erected as necessary or required.
4. **DISCREPANCIES OR ERRORS**

If omissions, discrepancies or apparent errors are found in the plans and specifications prior to the date of bid opening, the bidder shall submit a written request for clarification, which will be given in the form of addenda to all bidders if time permits.

5. **ADDENDA OR CLARIFICATIONS**

Each bid shall include all addenda or clarifications issued during the bidding period acknowledged by the bidder's signature thereon. Failure to so include or acknowledge an addendum or clarification may result in the bid being rejected as non-responsive.

6. **BIDDING DOCUMENTS**

6.1 **BID FORMS** - City of Stockton standard bid forms, which, when filled out and executed, may be submitted as a bid. Bids not presented on City forms shall be cause for considering the bid as non-responsive. The bid forms must be submitted in the same name style and manner as used on the bidder's license and pre-qualification. Bid forms may be obtained from the City of Stockton website at: [www.stocktonca.gov/pwbid](http://www.stocktonca.gov/pwbid)

All bids shall give the prices in the manner required by the bid and shall be signed by the bidder or his/her authorized representative, with his/her address. If the bid is made by an individual, his/her name, postal address, and signature must be shown. If the bid is made by a firm or partnership, the name and postal address of the firm or partnership and the signature of one or both partners must be shown; if made by a corporation, the bid shall show the name of the state under the laws of which the corporation was chartered, the name of the corporation and the title of the person who signs on behalf of the corporation. The corporate seal must be used. Only responsive bids will be considered. All bidders shall provide proof of DIR registration (print screen from DIR website [https://efiling.dir.ca.gov/PWCR/Search](https://efiling.dir.ca.gov/PWCR/Search)).

6.2 **LIST OF PROPOSED SUBCONTRACTORS** - Bidder shall list names of all subcontractors performing work in excess of one-half of one percent (0.5%) or $10,000 (whichever is greater) of the Bidder's total bid on the form provided in the bidding document. Each bidder shall give the name, business address, proof of DIR registration (print screen from DIR website [https://efiling.dir.ca.gov/PWCR/Search](https://efiling.dir.ca.gov/PWCR/Search)), contractor license number, description of work, and the dollar amount to be PAID the subcontractor, for each subcontractor that will be used on the project.

6.3 **BIDDER’S SECURITY** - All bids shall be accompanied by (1) cash, or (2) a cashier's check of a responsible bank, or (3) a check certified by a responsible bank, payable to the order of the City of Stockton for an amount not less than ten percent (10%) of the aggregate of the bid, or (4) bidder’s bond executed by a surety authorized by the Insurance Commissioner to transact business of insurance in California, and made out in favor of the City of Stockton for an amount not less than ten percent (10%) of the aggregate of the bid.

Within ten (10) days after the award of the contract, the City of Stockton will return all bidder’s security accompanying the bid that is not to be further considered in making the award. Retained bidder’s security will be held until the contract has been fully executed.

When the contract for doing said work has been duly entered into and the contract bonds accompanying same have been duly approved and filed, the City Clerk shall certify said facts by voucher to the Administrative Services Officer, who shall draw his/her warrant upon the special deposit fund for the return to the Contractor of said cash or bidder’s bond or the proceeds of said
check. If the bidder fails or refuses to enter into the contract to do said work or furnish said supplies or to furnish required bond within ten (10) days after the awards shall have become final, then the cash, cashier’s check or certified check shall be forfeited to the City as liquidated damages and shall be transferred to the general fund, or the obligation of the bidder’s bond shall be enforced and the proceeds placed in the general fund. The council does not have the power to relieve from or remit such forfeiture.

It is understood that the bid may be rejected at the sole discretion of the City Council of the City of Stockton.

6.4 TITLE VI- Title VI of the Civil Rights Act of 1964 requires that “no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” (42 USC Section 2000d).

http://www.dol.gov/oasam/regs/statutes/titlevi.htm

The City of Stockton is committed to complying with the requirements of Title VI in all of its federally funded programs and activities (Bid Forms).

6.6 QUALITY ASSURANCE- The City uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract (Exhibit A).

You may examine the records and reports of tests the Agency performs if they are available at the job site. Schedule work to allow time for QAP.

6.7 DISCRIMINATION AND HARASSMENT POLICY- The City of Stockton has a Discrimination and Harassment Policy (Exhibit B). The purpose of this policy is to reaffirm the City’s commitment to demonstrating respect for all individuals by strictly prohibiting discrimination and harassment, including sexual harassment in the workplace, to define the types of behavior and conduct prohibited by this policy, and to set forth a procedure for reporting, investigating and resolving complaints of discrimination and harassment in the workplace.

6.8 NON-COLLUSION DECLARATION- The bidder shall execute a Non-Collusion Declaration in the appropriate space provided in the bid form. Any bid made without such declaration or in violation thereof, and also any contract let thereunder shall be absolutely void unless a correct affidavit is received after the bid deadline with approval of the City Council.

7. SUBCONTRACTING (See also Section 6.2).

7.1 Pursuant to the provisions in Section 1777.1 of the Labor Code, the Labor Commission publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations at web site: http://www.dir.ca.gov/dlse/Debar.html

Contracts for federal-aid projects shall specify the minimum percentage of work that a Contractor must perform with “its own organization.” This percentage shall be not less than thirty percent (30%) of the total original contract price.
Before work is started on a subcontract, the Contractor shall file with the Project Manager a written statement showing the work to be subcontracted, the names of the subcontractors and the description of each portion of the work and the dollar amount to be subcontracted.

Contractor shall physically include (not to be incorporated by reference only) in each subcontracts, lower tier subcontracts, and purchase orders that may be made, the “Required Contract Provisions Federal-Aid Construction Clauses” contained in federal Form FHWA-1273 (Bid Forms).

7.2 NON-COMPLIANCE- Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

7.3 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS- The prime Contractor or subcontractor shall pay a subcontractor under this prime contract not later than 10 days of receipt of each progress payment received from the City of Stockton in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 10 days is applicable unless a longer period is agreed to in writing. Any violation of Section 7108.5 shall subject the violating Contractor or subcontractor to the penalties, sanctions and other remedies of that section. Any delay or postponement of payment over 30 days of receipt of each payment may take place only for good cause and with the City of Stockton’s prior written approval. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime Contractor or subcontractor in the event of a dispute involving late payment, or non-payment by the prime Contractor, deficient subcontract performance, or non-compliance by a subcontractor. This provision applies to both DBE and non-DBE subcontractors.

7.4 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS- The City of Stockton shall hold five percent (5%) retainage from the prime Contractor and shall make prompt and regular incremental acceptances of portions, as determined by the City, of the contract work, and pay retainage to the prime Contractor based on these acceptances. The prime Contractor or subcontractor shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the City of Stockton. Any delay or postponement of payment over 30 days may take place only for good cause and following written approval from the City of Stockton. Any violation of this provision shall subject the violating prime Contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime Contractor or subcontractor in the event of a dispute involving late payment, or non-payment by the prime Contractor, deficient subcontract performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime contractors and subcontractors.

7.5 CONTRACT COMPLIANCE- It is the responsibility of the prime Contractor to provide evidence of all subcontractor payments in accordance with the above stated Prompt Payment provisions. The prime Contractor shall provide access to such records at the request of the City of Stockton.

8. DISADVANTAGED BUSINESS ENTERPRISES (DBE)
This project is subject to Title 49, Part 26.13(b), Code of Federal Regulations [49 CFR 26.13(b)]:

Federal Instructions to Bidders Page 5 of 25 (Revised 09/22/16)
The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

You are required to take necessary and reasonable steps to ensure that Disadvantaged Business Enterprises (DBEs) have opportunity to participate in the contract (49 CFR 26). The term “Disadvantaged Business Enterprise” or “DBE” means a for-profit small business concern owned and controlled by a socially and economically disadvantaged person(s) as defined in 49 CFR 26.5.

To ensure there is equal participation of the DBE groups specified in 49 CFR 26.5, the City will specify a DBE goal for each Federal-aid transportation contract.

You are required to make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

You are required to either, A) meet the DBE goal shown in the Notice Inviting Bids, or B) demonstrate that you have made adequate good faith efforts to meet this goal.

FAILURE TO MEET EITHER A) OR B) REQUIREMENTS, ABOVE, WILL RENDER THE BID NON-RESPONSIVE.

It is your responsibility to verify that a subcontracting firm is properly certified as a DBE at the date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to: http://www.dot.ca.gov/hq/bep/find_certified.htm

Credit for materials or supplies you purchase from DBEs counts towards the goal in the following manner:

1. 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
2. 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55. Additional information regarding credit for trucking companies can be found under section “Subcontractor and DBE Records.”

8.1 PREBID MEETING- A prebid meeting is scheduled for this project (refer to “Notice Inviting Bids”). The meeting is to inform bidders of project requirements, subcontractors of subcontracting and material supply opportunities, and to provide DBEs the opportunity to meet and interact with prospective bidders.

8.2 DBE COMMITMENT SUBMITTAL- Bidders are required to submit DBE information on the form “Local Agency Bidder-DBE Commitment (Construction Contracts),” Exhibit 15-G (hereafter referred to as DBE Commitment form). Bidders can access current Caltrans forms for the New Race Conscious Program at the following website:
If the DBE Commitment form is not submitted with the bid, the DBE Commitment form must be received by the City no later than 4:00 p.m. on the 4th business day after bid opening. The apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the City.

Other bidders do not need to submit the DBE Commitment form unless the City requests it. If the City requests you to submit a DBE Commitment form, submit the completed form within 4 business days of the request.

Bidders are required to submit written confirmation from each DBE stating that it is participating in the contract. Include confirmation with the DBE Commitment form. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract.

When 100 percent of a contract item of work is not to be performed or furnished by a DBE, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A successful bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies. If a DBE is participating as a joint venture partner, the successful bidder should submit a copy of the joint venture agreement.

If you do not submit the DBE Commitment form within the specified time, the City will find your bid nonresponsive.

8.3 GOOD FAITH EFFORTS SUBMITTAL- If you have not met the DBE goal, you must complete and submit the "DBE Information - Good Faith Efforts," Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Bidders can access current Caltrans forms for the New Race Conscious Program at the following website: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm.

Only good faith efforts directed towards obtaining participation by DBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the City no later than 4:00 p.m. on the 4th business day after bid opening.

If your DBE Commitment form shows that you have met the DBE goal or if you are required to submit the DBE Commitment form, you may also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the City finds that the DBE goal has not been met.

Good faith efforts documentation must include at a minimum the following information and supporting documents:

1. Items of work you have made available to DBE firms. Identify those items of work you might otherwise perform with your own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to DBE firms.
2. Names of certified DBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the DBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified DBEs through all reasonable and available means and provide sufficient time to allow DBEs to respond.

3. Name of selected firm and its status as a DBE for each item of work made available. Include name, address, and telephone number of each DBE that provided a quote and their price quote. If the firm selected for the item is not a DBE, provide the reasons for the selection.

4. Name and date of each publication in which you requested DBE participation for the project. Attach copies of the published advertisements.

5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using DBE firms. If the agencies were contacted in writing, provide copies of supporting documents.

6. List of efforts made to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the DBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.

7. List of efforts made to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the DBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the DBE assisted, nature of the assistance offered, and date. Provide copies of supporting documents, as appropriate.

8. Any additional data to support demonstration of good faith efforts.

Please note that you may risk losing the bid if you rely on good faith efforts documentation in lieu of meeting the DBE goal. If your good faith efforts are found to be inadequate, your bid will be deemed nonresponsive. In determining whether a bidder has made good faith efforts, the City will take into account the performance of other bidders in meeting the contract. For example, if the apparent successful bidder fails to meet the contract goal, but others meet it, the City may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. The City will specifically consider the DBE commitments of the 2nd and 3rd bidders when determining whether the low bidder made good faith efforts to meet the DBE goal. Bidders not meeting a DBE contract goal are cautioned to not automatically assume that their documentation will be adequate to pass the good faith efforts test. All documentation will be very carefully scrutinized.

8.4 SUBCONTRACTOR AND DBE RECORDS- Caltrans Exhibit 12-B, Bidder's List of Subcontractors (DBE and Non-DBE) Parts I and II, is required to be completed by the contractor and submitted with your bid. Bidders can access current Caltrans forms for the New Race Conscious Program at the following website: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, ethnicity and gender of DBE firm owner as shown in the Caltrans Unified Certification Program database (http://www.dot.ca.gov/hq/bep/find_certified.htm), DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total
dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

By the end of every month during the contract or as requested, Contractor shall submit reports of payments made to all DBE subcontractors regardless of tier to the Engineer. Upon completion of the contract, a summary of these records shall be prepared on "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors" Form CEM-2402(F) (Exhibit 17-F) and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer. The form shall be furnished to the Engineer within 90 days from the date of contract acceptance. The amount of $10,000 will be withheld from payment until a satisfactory form is submitted. Bidders can access current Caltrans forms for the New Race Conscious Program at the following website: http://www.dot.ca.gov/hq/LocalPrograms/laforms/lapmforms.htm

Prior to the fifteenth of each month, the Contractor shall submit documentation to the Engineer showing the amount paid to DBE trucking companies. The Contractor shall also obtain and submit documentation to the Engineer showing the amount paid by DBE trucking companies to all firms, including owner-operators, for the leasing of trucks.

The Contractor shall obtain and submit documentation to the Engineer showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month. This documentation shall be submitted on "Monthly DBE Trucking Verification" Form CEM-2404(F) (Exhibit 16-Z). Bidders can access current Caltrans forms at the following website: http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/lapmforms.htm

8.5 DBE CERTIFICATION STATUS- If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract, "Disadvantaged Business Enterprises (DBE) Certification Status Change" Form CEM-2403(F) (Exhibit 17-O) indicating the DBEs' existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer within 90 days from the date of contract acceptance. Bidders can access current Caltrans forms at the following website: http://www.dot.ca.gov/hq/LocalPrograms/laforms/lapmforms.htm

8.6 PERFORMANCE OF SUBCONTRACTORS- The subcontractors listed by you in your bid proposal shall list therein the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of the total bid or $10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

DBEs must perform work or supply materials as listed in the “Local Agency Bidder - DBE Commitment” form (Exhibit 15-G). Do not terminate a DBE listed subcontractor for convenience and perform the work with your own forces or obtain materials from other sources without prior written authorization from the City.
The City grants authorization to use other forces or sources of materials for requests that show any of the following justifications:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. You stipulate a bond is a condition of executing the subcontract and the listed DBE fails to meet your bond requirements.
3. Work requires a contractors license and listed DBE does not have a valid license under Contractors License Law.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials.
5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE delays or disrupts the progress of the work.
7. Listed DBE becomes bankrupt or insolvent.

If a listed DBE subcontractor is terminated, you must make good faith efforts to find another DBE subcontractor to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal.

The substitute DBE must be certified as a DBE at the time of request for substitution.

The City will not pay for work or materials unless it is performed or supplied by the listed DBE, unless the DBE is terminated in accordance with this section.

8.7 PROMPT PAYMENT OF WITHHELD FUNDS TO CONTRACTORS- The City of Stockton shall hold five percent (5%) retainage from the prime Contractor and shall make prompt and regular incremental acceptances of portions, as determined by the City, of the contract work, and pay retainage to the prime Contractor based on these acceptances. The prime Contractor or subcontractor shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted, including incremental acceptances of portions of the contract work by the City of Stockton. Any delay or postponement of payment over 30 days may take place only for good cause and following written approval from the City of Stockton. Any violation of this provision shall subject the violating prime Contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime Contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime Contractor, deficient subcontractor performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime contractors and subcontractors.

8.8 DBEs AND EQUAL EMPLOYMENT OPPORTUNITY- Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her Equal Employment Opportunity (EEO) obligations under this contract.

b. Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR 26, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his/her best efforts to solicit bids from and to utilize
DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Lists of DBE construction firms may be obtained from the Caltrans website at the following URL:
http://www.dot.ca.gov/hq/bep/find_certified.htm

Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway Agency and the Federal Highway Administration.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the State Highway Agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Federal Highway Administration Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. Federal Highway Administration forms can be found at the following web link: http://www.fhwa.dot.gov/eforms/

9. LABOR STANDARDS PROVISIONS/CALIFORNIA LABOR CODE
The bidder shall understand that conditions set forth in Chapter 1, Part 7, Division 2 of the California Labor Code shall be considered part of the contract agreement. http://www.leginfo.ca.gov/cgi-bin/displaycode?section=lab&group=01001-02000&file=1770-1784

(A) PREVAILING WAGE RATES- The prime Contractor to whom the contract is awarded and any subcontractor must pay the higher of State or federal general prevailing wage rates as ascertained from time to time which shall be applicable to this project. Prevailing wages are required for locally funded projects over $1,000.00 (for repair, maintenance) and over $1,000.00 (for new construction). In accordance with the provisions of Section 1773 of the Labor Code, the Director of the Department of Industrial Wages of the State of California has determined the general prevailing rate of wages and employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided for in Section 1773.1, apprenticeship or other training programs authorized by Section 3093, and similar purposes applicable to the work to be done. These wages are set forth in the General Prevailing Wage Rates for this project and are available from the California Department of Industrial Relations' internet website at http://www.dir.ca.gov/OPRL/pwd/Determinations/Northern/Northern.pdf,
and from the federal Department of Labor at http://www.wdol.gov/dba.aspx. A copy of the wage rates are also posted on BidFlash.

Any revisions to the applicable federal wage rates, up to 10 days before bid opening, shall be identified by the issuance of an addendum with a copy of the revised wage rates. The final contract documents signed by the local agency and the Contractor will physically include a copy of the wage rates.

Pursuant to 1773.2 of the Labor Code, the Contractor shall be responsible for posting the State wage rates at a prominent location at the work site and shall maintain same in a good readable condition for the duration of the work. In those projects where federal funds are involved, as indicated by reference to or the inclusion of the Federal Wage Determination in these contract documents, the minimum wages to be paid shall be the highest of either the State or federal prevailing wage rates.

Should the Contractor choose to work on a Saturday, Sunday, furlough days, or a holiday recognized by the Labor Unions, the Contractor shall reimburse the City of Stockton the actual cost of engineering, inspection, superintendence, and/or other overhead expenses which are directly chargeable to the contract. Should such work be undertaken at the request of the City, reimbursement shall not be required.

Title 40, Chapter 31(VI), Section 3143 of the United States Code applies. If any laborer or mechanic employed by the Contractor or any subcontractor directly on the site of the work covered by the contract is discovered to have been paid a rate of wages less than the contract requires, then the City by written notice may terminate the Contractor’s right to proceed with the work in question. The City may have the work completed, by contract or otherwise, and the Contractor and the Contractor’s sureties shall be liable to the City for any excess costs the City incurs.

The wage rates determined by the Director of Industrial Relations included in the Notice to Contractors, Special Provisions, Proposal and Contract book for the project refer to expiration dates. Prevailing wage determinations with a single asterisk after the expiration date are in effect on the date of advertisement for bids and are good for the life of the contract. Prevailing wage determinations with double asterisks after the expiration date indicate that the wage rate to be paid for work performed after this date shall be paid and incorporated in the contract. The Contractor shall contact the Department of Industrial Relations as indicated in the wage rate determinations to obtain predetermined wage changes.

Attention is directed to the federal minimum wage rate requirements of this contract. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The City will not accept lower State wage rates not specifically included in the federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the federal wage determinations. Where federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.
The U.S. Department of Transportation (DOT) provides a toll-free “hotline” service to report bid rigging activities. Bid rigging activities can be reported Monday through Friday, between 8 a.m. and 5 p.m., eastern time, Telephone No. 1-800-424-9071. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report these activities. The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

(B) PAYROLL RECORDS - The prime Contractor to whom the contract is awarded shall insure that the prime and each subcontractor will, in accordance with Section 1776 of the Labor Code, maintain certified payroll records. A copy of said records shall be provided with each invoice to the Public Works Department, Attention: Contract Compliance Officer. It shall be the prime Contractor’s responsibility to obtain copies of the current prevailing wage rate determination for all subcontractors. Additionally, certified payroll records must be uploaded to the DIR website as required by labor code.

(C) APPRENTICESHIP STANDARDS - The prime Contractor shall comply with the provisions established in Section 1777.5 of the Labor Code concerning the (1) certified approval by local joint apprenticeship committees for the employment and training of apprentices, and (2) contribution of funds to administer and conduct apprenticeship programs.

10. LABOR NON-DISCRIMINATION
Attention is directed to the following notice that is required by Chapter 5, Division 4 of Title 2, California Code of Regulations “NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM” (GOV. CODE, SECTION 12990). Your attention is directed to the “Nondiscrimination Clause” set forth elsewhere, “Labor Non-discrimination,” which is applicable to Nonexempt State contracts and subcontracts, and to the “Standard California Nondiscrimination Construction Contract Specifications”: set forth therein. The Specifications are applicable to all Non-exempt State construction contracts of $5,000 or more.

11. BUY AMERICA REQUIREMENTS
Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];

2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or $2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;
2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

12. **USE OF UNITED STATES-FLAG VESSELS**
In compliance with the Cargo Preference Act of 1954 (CPA), 46 CFR §381, and the implementing regulations in 46 CFR §381.7, the Contractor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels;

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, “on-board” commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590;

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

13. **FEDERAL LOBBYING RESTRICTIONS**
Section 1352, Title 31, United States Code prohibits federal funds from being expanded by the recipient or any lower tier sub-recipient of a federal-aid contract to pay for any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of a federal-aid contract, the making of any federal grant or loan, or the entering into of any cooperative agreement. If any funds other than federal funds have been paid or the same purposes in connection with this federal-aid contract, the recipient shall submit an executed certification, and if required, submit a completed disclosure form as part of the bid documents.

A certification for federal aid contracts regarding payment of funds to lobby Congress or a federal agency is included in the proposal. Standard Form–LLL, “Disclosure of Lobbying Activities,” with instructions for completion of the Standard Form-LLL, “Disclosure of Lobbying Activities,” is also included in the Proposal. Signing the proposal shall constitute signature of the Certification.

The above referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding $100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Project Manager. The Contractor, subcontractors, and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors, and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

(A) A cumulative increase of $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered federal action; or
(B) A change in the person(s) or Individual(s) influencing or attempting to influence a covered federal action; or

(C) A change in the officer(s), employee(s), or member(s) contracted to influence or attempt to influence a covered federal action.

14. REMOVAL OF ASPEROS AND HAZARDOUS SUBSTANCES
When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe. The Contractor shall immediately cease work in the affected area and report the condition to the Project Manager in writing.

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract. If delay or work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions Listed elsewhere as “Right of Way Delays.”

15. BID ITEMS
The listed bid quantities are approximate only, being given as a basis for the comparison of bids, and the City of Stockton does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work or to omit portions of the work, as may be deemed necessary or advisable by the Project Manager.

Bids are required for the entire work. The amount of the bid for the comparison purposes will be the total of all items. The total price for each bid will be determined by extension of the unit price bid, multiplied by the estimated quantity, the unit price multiplied by the estimated quantity set forth for the item. In case of a discrepancy between the item total price and the total determined by extension of the unit price bid, multiplied by the estimated quantity, the unit price shall prevail. However, if the amount set forth as a unit price is ambiguous, unintelligible, or uncertain for any cause, or is omitted, or is the same amount as the entry in the “Total” column, then the amount set forth in the “Total” column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price. The total for lump sum items or lump sum bids shall be the amount set forth in the “Total” column.

All bids shall include for each item of work, in clearly legible figures, a unit price and a total price for the item in the respective space provided. Illegible or ambiguous figures shall be the cause for rejection.

In determining the amount by each bidder, the City may correct mathematical errors in addition, subtraction, multiplication, and division that appear obvious on the face of the bid. When such a mathematical error appears in the Bidding Schedule, the City shall have the right to correct such error and to compute the total amount bid by each bidder on the basis of the corrected figure or figures.
When any item, for which an item unit price and/or an item total price has been included in the Bidding Schedule, is omitted from the total bid, the item total price shall be added to the total bid to arrive at a corrected total bid.

If, so for any item, both the item unit price and the item total price are omitted from the Bid, then it shall be deemed incomplete and non-responsive, and the Bid shall be disregarded.

16. WITHDRAWAL OF BIDS
Bids may be withdrawn at any time up to the official bid opening only upon written request to the City Clerk.

17. PUBLIC OPENING OF BIDS
Bids will be publicly opened and read at the time and place indicated in the “Notice Inviting Bids.” Bidders or their authorized agents are invited to be present.

18. REJECTION OR IRREGULAR BIDS
When bids are signed by an agent other than the officer or officers of a corporation authorized to sign contracts on its behalf, or are signed by an agent other than a partner of partnership, or by an agent for an individual, a Power of Attorney must be on file with the Department of Public Works, prior to opening bids or shall be submitted with the bid; otherwise, the bid will be rejected as irregular or unauthorized.

19. COMPETITIVE BIDDING
If more than one bid is offered by an individual, firm, partnership, association, or any combination thereof, under the same or different names, all such bids may be rejected. A party who has quoted prices on materials or work to a bidder is not thereby disqualified from quoting prices to other bidders. All bidders are put on notice that any collusive agreement fixing the prices to be bid so as to control or affect the awarding of this contract is in violation of the competitive bidding requirements of the City and may render void any contract let under such circumstances. A non-collusion declaration is required.

20. LIQUIDATED DAMAGES
Bidders should note the provision for Liquidated Damages for this contract is specified in the contract Special Provisions.

21. CONTRACT BONDS
The Contractor shall furnish two (2) surety bonds, one performance bond guaranteeing the faithful performance of the work, and one labor and material bond securing the payment of laborers, mechanics or material personnel employed on the work under contract. The surety which provides the bonds must be authorized by the Insurance Commissioner to transact business of insurance in California. All alterations, extensions of time, extra and additional work and other changes authorized by these specifications or any part of the contract shall be made without securing the consent of the surety or sureties on the contract bonds.

22. BUSINESS LICENSE
The Contractor must obtain and maintain a valid City of Stockton business license throughout the fiscal periods embraced by the duration of the contract.
23. **INSURANCE**

Please see attached Exhibit C, Summary of Indemnity and Insurance Requirements Checklist. This form is for information and is not required to be submitted. Contractor shall not commence any work before obtaining, and shall maintain in force at all times during the duration and performance of this agreement the policies of insurance specified in Exhibit D, which is attached to this agreement and incorporated by this reference.

Maintenance of proper insurance coverage is a material element of this contract and that failure to maintain or renew coverage or to provide evidence of renewal may be treated as a material breach of contract.

The Proponent shall satisfy these insurance requirements concurrently with the signing of the contract prior to commencement of work. Please contact City of Stockton Risk Services at (209) 937-5037. Any exceptions to this language may result in a non-responsive proposal.

It shall be a requirement under this agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the Additional Insured.

Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured; whichever is greater.

The Additional Insured coverage under the Contractor’s policy shall be “primary and non-contributory” and will not seek contribution from the City of Stockton’s insurance or self-insurance and shall be at least as broad as CG 20 01 04 13.

The limits of Insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess Insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Stockton (if agreed to in a written contract or agreement) before the City of Stockton’s own Insurance or self-insurance shall be called upon to protect it as a named insured.

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Payment Bond in the amount of the self-insured retention (SIR) may be required.

Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or the City of Stockton.

The City of Stockton reserves the right to obtain a full certified copy of any Insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

Contractor shall maintain insurance as required by this contract to the fullest amount allowed by law and shall maintain insurance for a minimum of five years following the completion of this project. In the event Contractor fails to obtain or maintain completed operations coverage as required by this agreement, the city at its sole discretion may purchase the coverage required and the cost will be paid by Contractor.
Contractor agrees to include with all subcontractors in their subcontract the same requirements and provisions of this agreement including the indemnity and insurance requirements to the extent they apply to the scope of the Subcontractor’s work. Subcontractors hired by Contractor agree to be bound to Contractor and the City of Stockton in the same manner and to the same extent as Contractor is bound to the City of Stockton under the Contract Documents. Subcontractor further agrees to include these same provisions with any Sub-subcontractor. A copy of the City of Stockton Contract Document Indemnity and Insurance provisions will be furnished to the Subcontractor upon request. The General Contractor shall require all sub-contractors to provide a valid certificate of insurance and the required endorsements included in the agreement prior to commencement of any work and Contractor will provide proof of compliance to the city.

24. WORKER’S COMPENSATION INSURANCE
The successful bidder shall comply with all provisions of the Worker’s Compensation and Safety Laws of the State of California, Divisions IV and V of the Labor Code, and shall use all of the accepted and best safety practices for the public and/or his/her employees.

In accordance with Labor Code Section 1725.5 et seq., the successful bidder, prior to executing the contract to do the work, shall take out and maintain in full force and effect workers compensation insurance with an insurance carrier authorized to transact business in the State of California covering the bidder’s full liability for compensation to any persons employed who may be injured in the carrying out of said contract or the dependents thereof. Evidence of such workers compensation insurance shall be furnished to the city of Stockton with an insurance certificate prior to the commencement of the work and said certificates shall contain a provision that the coverage thereunder will not be canceled until at least thirty (30) days prior written notice has been given to the City.

25. INDEMNIFICATION AND HOLD HARMLESS
With the exception that this section shall in no event be construed to require indemnification by Contractor to a greater extent than permitted under the public policy of the State of California, Contractor shall indemnify, protect, defend with counsel approved by City and at Contractor’s sole cost and expense, and hold harmless City, its Mayor, Council, officials, representatives, agents, employees, and volunteers from and against any and all claims, causes of action, liabilities, judgments, awards, losses, liens, claims, stop notices, damages, expenses, and costs (including without limitation attorneys’ fees, expert and consultant fees, and other expenses of litigation) of every nature, including, but not limited to, death or injury to persons, or damage to property, which arise out of or are in any way connected with the work performed, materials furnished, or services provided under this agreement, or from any violation of any federal, State, or municipal law or ordinance, or City policy, by Contractor or Contractor’s officers, agents, employees, volunteers or subcontractors. Contractor shall not be obligated to indemnify or defend City for claims finally determined by a court of law or arbitrator to arise from the active negligence or willful misconduct of the City. It is the intent of the Parties that this indemnity obligation is at least as broad as is permitted under California law. To the extent California Civil Code sections 2782, et seq., limit the defense or indemnity obligations of Contractor to City, the intent hereunder is to provide the maximum defense and indemnity obligations allowed by Contractor under the law. The indemnity set forth in this section shall not be limited by insurance requirements or by any other provision of this agreement.

With the exception that this section shall in no event be construed to require indemnification, including the duty to defend, by Contractor to a greater extent than permitted under the public policy of the State of California, the parties agree that Contractor’s duty to defend City is immediate and arises upon the filing of any claim against the City for damages which arise out of or are in any way
connected with the work performed, materials furnished, or services provided under this agreement by Contractor or Contractor’s officers, agents, employees, volunteers or subcontractors. Contractor’s duties and obligations to defend the City shall apply regardless of whether or not the issue of the City’s liability, breach of this agreement, or other obligation or fault has been determined. Contractor shall be immediately obligated to pay for City’s defense costs of the claim, including, but not limited to, court costs, attorney’s fees and costs, expert consultant and witness fees and costs, other witness fees, document reproduction costs, arbitration fees, and, if after final judgment an appeal is pursued, all of such costs for the appeal. At the conclusion of the claim, if there is any determination or finding of sole active negligence or willful misconduct on the part of the City, City will then reimburse Contractor for amounts paid in excess of Contractor’s proportionate share of responsibility for the damages within 30 days after Contractor provides City with copies of all bills and expenses incurred in the defense of the claim(s). It is agreed between the parties that this reimbursement provision assures Contractor is not obligated to defend or indemnify City in any amount greater than provided for under California law, including, without limitation, California Civil Code sections 2782, 2782.6, and 2782.8.

With the exception that this section shall in no event be construed to require indemnification by Contractor to a greater extent than permitted under the public policy of the State of California, and in addition to the other indemnity obligations in this agreement, Contractor shall indemnify, defend, and hold harmless City, its Mayor, Council, officials, representatives, agents, employees, and volunteers from and against all claims, losses, expenses, and costs including, but not limited to, attorneys’ fees, arising out of any claim brought against the City by an employee, office, agent, or volunteer of Contractor, regardless of whether such claim may be covered by any applicable workers compensation insurance. Contractor’s indemnification obligation is not limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under workers’ compensation acts, disability acts, or other employee benefit acts.

26. CONSTRUCTION AND DEMOLITION DEBRIS

In order to comply with the California Integrated Waste Management Act of 1989, Assembly Bill 939, the City of Stockton requires that permitted construction and demolition projects recycle at minimum fifty percent (50%) of all materials generated by the projects to divert project waste from the landfills.

26.1 CONSTRUCTION AND DEMOLITION RECYCLING PLAN- This plan is meant to assist contractors with identifying the types and quantities of materials that will be generated as a result of the project in order to find diversion outlets for these materials.

The Contractor is required to complete and submit a Construction/Demolition (C&D) Recycling Plan at the time of pre-construction meeting. A “Notice to Proceed” may not be provided, if the Contractor fails to submit the C&D Recycling Plan. (See sample: http://www.stocktonca.gov/government/departments/publicWorks/garbCon.html.)

26.2 CONSTRUCTION AND DEMOLITION DEBRIS RECYCLING REPORT- The Contractor must complete the Construction and Demolition (C&D) Debris Recycling Report within sixty (60) days of construction or demolition project completion (Notice of Completion). The completed form must be accompanied by the official weight tags or receipts verifying the information provided in the report and must be submitted to the City of Stockton Public Works Department, Solid Waste Division, Stewart Eberhardt Building, 22 E. Weber Ave., Room 301, Stockton, CA 95202. Failure to provide the C&D Recycling Report form will result in a five percent (5%) withholding of the contract amount. (See sample: http://www.stocktongov.com/government/departments/publicWorks/garbCon.html.)
27. **EQUAL EMPLOYMENT OPPORTUNITY (EEO) GOALS**
The City of Stockton reserves the right to identify employment goals to be applied to bidders of City contracts, requests for proposal, and materials and supplies. Contractors are required to certify (see Form EEO-1B) their on-going attempts to recruit and hire minorities and women into their permanent workforce.

28. **BID RIGGING**
The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800)424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT’s effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

29. **NON-RESPONSIVE BID PROPOSALS**
If any bidder fails to include, with their bid proposals the required forms, such bid(s) will be deemed non-responsive and will result in bid rejection.

30. **SAMPLE CONTRACT**
A sample contract is attached (Exhibit E) and could be subject to change.
CITY OF STOCKTON
Quality Assurance Program

1. Purpose

The purpose of the City of Stockton Quality Assurance Program (QAP) is to provide an outline of procedures to assist in achieving quality performance for:

- planning;
- preparing contracts, plans, and specifications; and
- assuring that acceptance and inspection sampling and testing meets City, State and Federal requirements.

The main elements addressed in this QAP are procedures for:

Acceptance Testing;
Testing of Manufactured Materials; and
Independent Assurance Requirements

This QAP has been adopted by the City of Stockton as a guide for quality assurance for planning, design, and construction of public streets and state highway improvements within the City of Stockton. This QAP has been written to conform with current Caltrans and FHWA requirements. It is not intended to be a substitute for professional engineering knowledge, training, experience or judgment.

2. Definition of Terms

- Acceptance Testing (AT) – Sampling and testing, or inspection, to determine the degree of compliance with contract requirements.
- Independent Assurance Program (IAP) – Verification that AT is being performed correctly by qualified testers and laboratories.
- Quality Assurance Program (QAP) – A sampling and testing program that will provide assurance that the materials and workmanship incorporated into the construction project are in conformance with the contract specifications. The main elements of a QAP are the AT, and IAP.
- Source Inspection – AT of manufactured and prefabricated materials at locations other than the job site, generally at the manufactured location.

3. Applicability

This QAP shall only apply to projects within the City of Stockton that are off the National Highway System (Off-NHS) and off the State Highway System (Off-SHS) and are financed wholly or in part by federal-aid funding. For such projects the use of this QAP shall be mandatory. The provisions of this QAP may also be applied to street and utility facility
projects within the City of Stockton that are Off-NHS and Off-SHS and are locally funded. For projects on the NHS, quality assurance requirements are detailed in the Code of Federal Regulations Title 23, Part 637.205. Therefore, federally funded projects wholly or in part on the National Highway System (On-NHS) must comply with the Caltrans QAP as detailed in Section 16.14 of the Caltrans Local Assistance Procedures Manual (LAPM).

4. Authority

This QAP was prepared under the supervision of, and has been approved by, the City of Stockton Director of Public Works or his designee (City Engineer), who is an appropriately registered civil engineer. Copies of this QAP shall be kept on file in the office of the City Engineer and shall be available for review upon request.

5. Amendments

Amendments to this QAP will require approval by the City of Stockton Director of Public Works or his designee, the City Engineer. Amendments may be approved in either of the following forms:

- By general amendment applicable to all applicable projects as described above; and
- By specific amendment included within the contract documents applicable to a specific project. In the event of a conflict between this QAP and the contract documents for a specific project, the contract documents shall prevail.

In the event of amendment(s), the applicable QAP shall be the latest edition in effect at the time the subject materials are actually incorporated into the project documents. The Director of Public Works or the City Engineer may also issue clarifications to this QAP as required.

6. Materials Testing

Sampling and testing will be performed by contract with a materials testing consultant. The contract with the materials testing consultant shall be arranged prior to advertising a project and addressed appropriately in the construction documents. The construction contractor shall not select or exercise any authority over the materials testing contractor or any of the sampling and testing unless specifically included in the contract documents for a specific project or otherwise approved by the City of Stockton Director of Public Works or the City Engineer in writing prior to the start of the actual sampling and testing work.

The materials testing consultant shall have a QAP that meets current Caltrans and FHWA requirements and shall provide a copy to the City upon request. Consultant(s) shall also forward copies of all subsequent amendments of their QAP(s) to the City.

The consultant's materials laboratory shall be under the responsible management of a California registered Engineer with experience in sampling, inspection and testing of construction materials. The Engineer shall certify the results of all tests performed by laboratory personnel under the Engineer's supervision. The materials laboratory shall contain certified test equipment capable of performing the tests conforming to the
provisions of this QAP

The materials laboratory used shall provide documentation that the laboratory complies with the following procedures:

Correlation Testing Program – The materials laboratory shall be a participant in one or more of the following testing programs:

- AASHTO Materials Reference Laboratory (AMRL)
- Cement and Concrete Reference Laboratory (CCRL)
- Caltrans' Reference Samples Program (RSP)

Certification of Personnel – The materials laboratory shall employ personnel who are certified by one or more of the following:

- Caltrans District Materials Engineer
- Nationally recognized non-Caltrans organizations such as the American Concrete Institute, Asphalt, National Institute of Certification of Engineering Technologies, etc.
- Other recognized organizations approved by the State of California and/or Recognized by local governments or private associations.

Certificates for personnel on a project shall be retained in the Resident Engineer’s (RE) project file(s) and shall be made available for review upon request. Sampling and testing by uncertified person(s) not previously approved by the Director of Public Works or the City Engineer, shall be acceptable only in extreme, unforeseen emergencies, and upon assurance by the Resident Engineer that the uncertified person is competent to perform the work.

Laboratory and Testing Equipment – The materials laboratory shall only use laboratory and testing equipment that is in good working order. All such equipment shall be calibrated at least once each year. All testing equipment must be calibrated by impartial means using devices of accuracy traceable to the National Institute of Standards and Technology. A decal shall be firmly affixed to each piece of equipment showing the date of the last calibration. All testing equipment calibration decals shall be checked as part of the IAP.

Records – Copies of the City’s QAP, the materials testing consultant’s QAP, records of samples and tests, material releases, and certificates of compliance for a project shall be incorporated into the RE’s project file, and shall be available for review upon request, and shall be retained for a period of three years following completion of the project. The RE shall complete and sign a Materials Certificate (Caltrans LAPM Exhibit 17-G). The Certificate shall be retained in the project construction files. All non-conforming materials incorporated into the work must be explained and justified on the Certificate.

7. Acceptance Sampling and Testing

Definition -- Acceptance Testing (AT) shall be defined as regular sampling and testing of materials entering a construction project to verify compliance with the specific project contract documents, City of Stockton Standard Plans and Specifications, and/or Caltrans
Start of Testing -- Sampling and testing should begin as soon as materials are placed on a project. Testing should be performed promptly to enable data evaluation and necessary measures to be taken by the RE and contractor.

Testing Laboratory -- AT will be performed by a materials laboratory certified to perform the required tests. The tests results will be used to ensure that all materials incorporated into the project are in compliance with the contract specifications.

Test Methods -- Except as otherwise specified and/or approved by the City, testing methods shall comply with California test methods (using English equivalent units). American Society of Testing and Materials (ASTM) test methods may also be acceptable, subject to City approval.

Tests to be Performed -- The following sampling and testing shall comprise the minimum scope of AT to be routinely completed for commonly used materials unless otherwise modified by the contract documents for a specific project, unless determined to be minor quantities by the RE, or as otherwise approved in writing by the Director of Public Works or the City Engineer.

Aggregate Base (AB) - Sieve Analysis, Sand Equivalent, R-Value and Maximum Density (Relative Compaction) for each new source and In-Place Density for AB sampled at the site.

Aggregate Sub-base (ASB) - Sieve Analysis, Sand equivalent, R-Value and Maximum Density for each new source and In-Place Density for AB sampled at the site.

Asphalt Concrete (AC) - Sieve Analysis for aggregate sampled at the plant. Asphalt Content and Maximum Density for each new source and mix design and In-Place Density for AC sampled at the site. (A Certificate of Compliance may be accepted for Liquid Asphalt.)

Grading and Trench Backfill - Maximum Density and In-Place Density at the site.

Structural Concrete - Sieve analysis for aggregate sampled at the plant. (A Certificate of compliance may be accepted for Aggregate Cleanliness, Aggregate Sand Equivalent, Admixtures, and Portland Cement Concrete.) Compressive Strength (Cylinders) at the site.

Where additional sampling and testing not described above is required, it shall be in accordance with Caltrans Frequency Tables (LAPM Exhibit 16-R), and the Caltrans Standard Specifications, unless otherwise modified by the contract documents for a specific project or otherwise approved in writing by the Director of Public Works or the City Engineer.

Frequency -- Sample locations and frequencies may be in accordance with the contract
specifications. If not so specified in the contract specifications, samples shall be taken at the locations and frequencies as shown in Appendix D, “Acceptance Sampling and Testing Frequencies” of the Caltrans QAP Manual (included as Attachment 1 to this QAP). The tables are intended as a guide; the actual quality of materials tested may justify decreasing or increasing the frequency of subsequent similar samples and tests.

In-Place density testing for trench backfill shall generally be completed at intervals not exceeding 500 linear feet of trench.

Test Result Reporting Guidelines -- Results should generally be submitted to the RE within three working days of sampling, or as dictated by the construction schedule, except as listed below:

- When the aggregate is sampled at material plants, test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 24 hours after sampling.
- When materials are sampled at the job site, test results for compaction and maximum density should be submitted to the Resident Engineer within 24 hours after sampling.
- When soils and aggregates are sampled at the job site:
  1. Test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 72 hours after sampling.
  2. Test results for “R” Value and asphalt concrete extraction should be submitted to the Resident Engineer within 96 hours after sampling.

When sampling products such as Portland Cement Concrete (PCC), cement-treated base (CTB), hot mix asphalt (HMA), and other such materials; the time of such sampling shall be varied with respect to the time of the day insofar as possible, in order to avoid a predictable sampling routine. Results may be expedited by using fax, telephone, or e-mail.

Summary Logs -- Material Testing Summary Logs shall be maintained by the RE for each material requiring multiple sampling and testing. Log data shall include station location, test sample depth, approximate quantity of sample material, test result, and tester identification.

Minor Materials/Quantities -- Relatively minor quantities of materials from a known, reliable source may be accepted without testing if the RE performs visual examination of the materials; or the manufacturer or supplier certifies that the material furnished complies with specification requirements.

Such records of acceptance shall be placed in the RE’s project files with related inspection notes. The following quantities are approximate amounts of maximum allowable minor materials/quantities:

- Aggregates and Sub-Aggregates (other than Portland Cement Concrete) - 100 tons per day or 500 tons per project.
- Bituminous Mixtures - 50 tons per day.
Bituminous Materials - 100 gallons per project.
Trench Compaction - 100 linear feet of trench.

Re-Testing -- Failing test results requires re-testing to isolate the failed area. The Log Summary shall cross-reference the retest to the initial failed test. Cost for repeated tests may be charged to the construction contractor if this has been included in the specifications.

Testing of Manufactured Materials -- During the Design phase of the project, the Project Engineer may submit a "Source Inspection Request" (Exhibit 16-V of the LAPM) to the Agency, consultant, or Caltrans for inspection and testing of manufactured and prefabricated materials by their materials laboratory. A list of materials that can be typically accepted on the basis of certificates of compliance during construction is found in Appendix F of the Caltrans QAP Manual (included as Attachment 2 to this QAP). All certificates of compliance shall conform to the requirements of the contract specifications, for examples see Appendix J of the Caltrans QAP Manual.

If the City request Caltrans to conduct the source inspection, and the request is accepted, all sampling, testing, and acceptance of manufactured and prefabricated materials will be performed by Caltrans' Office of Materials Engineering and Testing Services. For Federal-aid projects on the National Highway System (NHS), Caltrans will assist in certifying the materials laboratory, and the acceptance samplers and testers. For Federal-aid projects off the NHS, Caltrans may be able to assist in certifying the materials laboratory, and the acceptance samplers and testers.

8. Independent Assurance Program (IAP)

Definition -- Independent Assurance Program (IAP) shall be defined as procedures to verify that Acceptance Testing is being performed correctly and reliably, and to ensure that equipment is properly calibrated and personnel are adequately trained on proper testing procedures.

Applicability
IAP procedures shall be required for federally funded projects on and off the NHS system. For On-NHS projects, IAP procedures shall be in accordance with the Caltrans 'Quality Assurance Program Manual' and shall be completed by Caltrans personnel. For Off-NHS projects, IAP procedures shall be as specified herein unless otherwise modified by the contract documents for a specific project or as otherwise approved in writing by the Director of Public Works or the City Engineer. IAP procedures may also be applied to other street, highway and utility facility projects, both public and private, within the City of Stockton.

IAP Testing Options -- IAP for City projects will generally be performed by contract consultant testers or by other agency personnel. IAP personnel shall be certified in all required testing procedures, as part of IAP, and shall not be involved in any aspect of AT. IAP shall be performed on every type of materials test required for the project. Proficiency tests shall be performed on Sieve Analysis, Sand Equivalent, and Cleanness Value tests. All other types of IAP shall be witness tests.
Poor correlation between acceptance tester’s results and other test results may indicate probable deficiencies with the acceptance sampling and testing procedures. In cases of unresolved discrepancies, a complete review of AT shall be performed by IAP personnel, or an independent materials laboratory chosen by the Agency. IAP samples and tests are not to be used for determining compliance with contract requirements. Compliance with contract requirements is determined only by AT.

Type and Frequency of IAP -- The following shall comprise the minimum IAP scope to be routinely completed for AT of commonly used materials unless otherwise approved in writing by the Director of Public Works or the City Engineer.

Aggregate Bases and Sub-Bases - Sieve Analysis, Sand Equivalent, Maximum Density and In-Place Density. Witness test and split sample test at intervals not to exceed one year.

Asphalt Concrete - Sieve Analysis for aggregate sampled at the plant and In-Place Density. Witness test and split sample test at intervals not to exceed one year.

Grading and Trench Backfill - Maximum Density and In-Place Density. Witness test and split sample test at intervals not to exceed one year.

Concrete - Compressive Strength (Cylinders). Witness test and split sample test at intervals not to exceed one year.

The IAP frequency for commonly used materials not included above or for contract consultant testers shall be as specified in the consultant laboratory’s QAP or as otherwise approved by the City.

Test Result Reporting Guidelines -- Results should generally be submitted to the RE within five working days of sampling, or as dictated by the construction schedule. Results may be expedited by using fax, telephone, or e-mail. IAP results shall be recorded on either the Report of Witness Test (Exhibit 16-F of the LAPM) or the Corroboration Report (Exhibit 16-G of the LAPM).

Summary Logs -- IAP Summary Logs (Exhibit 16-H of the LAPM) shall be maintained by the RE for each material requiring IAP. The summary logs shall be included in the project files.

9. Project Certification

Upon completion of a Federal-aid project, a “Materials Certificate” shall be completed by the Resident Engineer. The City shall include the “Materials Certificate” in the Report of Expenditures submitted to the Caltrans District Director, Attention: District Local Assistance Engineer.

A copy of the “Materials Certificate” shall also be included in the project files. The Resident Engineer in charge of the construction shall sign the certificate. All materials
incorporated into the work which did not conform to specifications must be explained and justified on the "Materials Certification", including changes by virtue of contract change orders. See Appendix K of the Caltrans QAP Manual for an example.

10. Records

All material records of samples and tests, material releases and certificates of compliance for the construction project shall be incorporated into the Resident Engineer’s project file. If a Federal-aid project:

- The files shall be organized as described in Section 16.8 “Project Files” of the Caltrans Local Assistance Procedures Manual.
- The complete project file be available at a single location for inspection by Caltrans and Federal Highway Administration (FHWA) personnel.
- The project files shall be available for at least three years following the date of final project voucher.
- Sampling and Testing results shall be entered into a “Log Summary,” as shown in Appendix H of the Caltrans QAP Manual.

When two or more projects are being furnished identical materials simultaneously from the same plant, it is not necessary to take separate samples or perform separate tests for each project; however, copies of the test reports are to be provided for each of the projects to complete the records.

APPROVED BY: ____________________________
(Signature) C57830 6/30/14

CE# and Expiration Date

TITLE: City Engineer DATE: 10/25/13
## Appendix D - Acceptance Sampling and Testing Frequencies

Note: It may be desirable to sample and store some materials. If warranted, testing can be performed at a later date.

### Portland Cement (Hydraulic Cement)

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement/fly ash (Sampling only)</td>
<td>8-lb. sample</td>
<td>If possible, take a least one sample per job, even if the material is accepted based on a Certificate of Compliance.</td>
<td>ASTM D75, C494, CT 125, AASHTO T127, M85, M295</td>
<td>Standard for sampling hydraulic cement or fly ash.</td>
</tr>
<tr>
<td>Cement (Testing Only)</td>
<td>8-lb. sample</td>
<td>If the product is accepted based on a Certificate of Compliance, testing is not required. If the product is not accepted using a Certificate of Compliance, test at least once per job.</td>
<td>ASTM C109, CT 515, AASHTO T106</td>
<td>If testing appears warranted, fabricate six 2-in. mortar cubes using the Portland (or hydraulic cement). Test for compressive strength.</td>
</tr>
</tbody>
</table>

### Portland Cement Concrete (Hydraulic Cement Concrete)

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate for Hydraulic Cement Concrete (Sampling &amp; Testing)</td>
<td>50-lb. sample</td>
<td>Take one aggregate sample for each 1000 cu. yd. of PCC/HCC concrete. Test at least one sample per job.</td>
<td>ASTM D75, CT 125, AASHTO M6, T2, M80</td>
<td>Sample aggregate from belt or hopper (random basis).</td>
</tr>
<tr>
<td>Water (Sampling &amp; Testing)</td>
<td>Take a two-quart sample using a clean plastic jug (with lining) and sealed lid. Sample at the point of use.</td>
<td>If the water is clean with no record of chlorides or sulfates greater than 1%, no testing is required. If the water is dirty do not use it. Test only when the chloride or sulfates are suspected to be greater than 1%.</td>
<td>CT 403, CT 422, CT 417, AASHTO R23</td>
<td>If testing appears warranted, test for chlorides and sulfates.</td>
</tr>
</tbody>
</table>
# Appendix D (continued)

## Portland Cement Concrete (Hydraulic Cement Concrete) – Continued

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Entraining Admixtures (Sampling &amp; Testing)</td>
<td>Take a one-quart sample using a clean, lined can or plastic bottle, if liquid. If powder, take a 2.5 lb. sample.</td>
<td>If the product is accepted based on a Certificate of Compliance, testing is not required. Take one sample per job. Prior to sampling, check with Caltrans (METS) for acceptable brands and dosage rates.</td>
<td>ASTM C233, AASHTO M154, T157, C260</td>
<td>If testing appears warranted, test for sulfates and chlorides. Admixtures with sulfates and chlorides greater than 1% should not be used.</td>
</tr>
<tr>
<td>Water Reducers or Set Retarders (Sampling &amp; Testing)</td>
<td>If liquid, take a 1-qt. sample using a clean plastic can. If powder, take a 2.5 lb. sample.</td>
<td>If the product is accepted based on a Certificate of Compliance, no testing is required. If not, test once per job. Prior to using this product, please check with Caltrans (METS) for acceptable brands and dosage rates.</td>
<td>ASTM C494, AASHTO M194</td>
<td>If testing appears warranted, test for sulfates and chlorides. Admixtures with sulfates and chlorides greater than 1% should not be used.</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Sampling)</td>
<td>Approx. 150lb. (or 1 cu. ft.) near mixer discharge.</td>
<td>When tests are required, take at least one sample for each 500 to 1000 cu. yd. of PCC/HCC.</td>
<td>ASTM C172, C685, CT 539, AASHTO T141, M157</td>
<td>This describes a method to sample freshly-mixed concrete.</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge.</td>
<td>On projects with 500 cu. yd., or more, test at least one sample per job.</td>
<td>ASTM C143, AASHTO T119</td>
<td>This test determines the slump of the freshly-mixed concrete.</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge.</td>
<td>On projects with 500 cu. yd., or more, test at least one sample per job.</td>
<td>ASTM C360, CT 533</td>
<td>This test determines the ball penetration of the freshly-mixed concrete.</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge.</td>
<td>On projects with 500 cu. yd., or more, test at least one sample per job.</td>
<td>ASTM C231, CT 504, AASHTO T152</td>
<td>This test determines the air content of freshly-mixed concrete (pressure method).</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge.</td>
<td>On projects with 500 cu. yd., or more, test at least one sample per job.</td>
<td>ASTM C138, CT 518, AASHTO T121</td>
<td>This test determines the unit weight of freshly mixed concrete.</td>
</tr>
</tbody>
</table>
## Appendix D (continued)

### Portland Cement Concrete (Hydraulic Cement Concrete) – Continued

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approx. 150 lb/ (or 1 cu. ft.) near mixer discharge</td>
<td>Fabricate at least two concrete cylinders per project. Test for compressive strength at least once for each 500 to 1,000 cu. yd. of structural concrete.</td>
<td>ASTM C39 CT 521 AASHTO T22</td>
<td>This test is used to fabricate 6” x 12” concrete cylinders. Compressive strengths are determined, when needed.</td>
</tr>
<tr>
<td>Freshly-Mixed Concrete (Testing)</td>
<td>Approximately 210 lb. of concrete are needed to fabricate three concrete beams.</td>
<td>One sample set for every 500 to 1,000 cu. yd. of concrete.</td>
<td>ASTM C78 CT 31 AASHTO T97 &amp; T23</td>
<td>This test is used to determine the flexural strength of simple concrete beams in third-point loading</td>
</tr>
</tbody>
</table>

### Soils and Aggregates

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate (Sampling)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D75 CT 125 AASHTO T2</td>
<td>This test describes the procedures to sample aggregate from the belt or hopper (random basis).</td>
</tr>
<tr>
<td>Fine Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM C128 CT 208 AASHTO T84</td>
<td>This test determines the apparent specific gravity of fine aggregates for bituminous mixes, cement treated bases and aggregate bases.</td>
</tr>
<tr>
<td>Fine Aggregate (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM C128 CT 207 AASHTO T84</td>
<td>This test determines the bulk specific gravity (SSD) and the absorption of material passing the No. 4 sieve.</td>
</tr>
<tr>
<td>Coarse Aggregate (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>CT 206</td>
<td>This test determines the cleanliness of coarse aggregate.</td>
</tr>
</tbody>
</table>
### Appendix D (continued)

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coarse Aggregate (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM C127 CT 227 AASHTO T85</td>
<td>This test determines the specific gravity and absorption of coarse aggregate (material retained on the No. 4 sieve).</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM C136 CT 202 AASHTO T27</td>
<td>This test determines the gradation of soils and aggregates.</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D2419 CT 217 AASHTO T176</td>
<td>This test determines the Sand Equivalent of soils and aggregates.</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM C117 AASHTO T11</td>
<td>This test determines the gradation for materials finer that the No. 200 sieve (by washing method).</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D3744 CT 229 AASHTO T210</td>
<td>This test determines the Durability Index of soils and aggregates.</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One 50-lb. sample</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D2844 CT 301 AASHTO T190</td>
<td>This test determines the Resistance Value (R-) and expansion pressure of compacted materials.</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One random location for every 2,500 sq. ft.</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D2922 CT 231 AASHTO T238</td>
<td>This test determines field densities using the nuclear gage.</td>
</tr>
<tr>
<td>Soils and Aggregates (Testing)</td>
<td>One random location for every 2,500 sq. ft.</td>
<td>Take one sample for every 500 to 1,000 tons of materials. Test at least one sample per project.</td>
<td>ASTM D3017 CT 231 AASHTO T239</td>
<td>This test determines the water content using the nuclear gage.</td>
</tr>
</tbody>
</table>
### Appendix D (continued)

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Binder (Sampling)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Sample once per job at the asphalt concrete plant.</td>
<td>CT 125 ASTM D 979 AASHTO T 168, T48</td>
<td>This procedure describes the proper method to sample the asphalt binder.</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Sample once per job at the asphalt concrete plant.</td>
<td>ASTM D92, D117 AASHTO T 48</td>
<td>This test determines the flash point of the asphalt binder (by Cleveland open cup).</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D2872 &amp; D92 CT 346 AASHTO T240 &amp; T48</td>
<td>This test determines the rolling thin-film oven test (RTFO).</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D2042 AASHTO T44</td>
<td>This test determines the solubility of asphalt material in trichloroethylene.</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D2171 AASHTO T202</td>
<td>This test determines the dynamic viscosity, (absolute viscosity of asphalt @ 140 degrees F by the Vacuum Capillary Viscometer Poises).</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D5 AASHTO T49</td>
<td>This test determines the penetration of bituminous material @ 77 degrees F and percentage of original penetration from the residue.</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D113 AASHTO T51</td>
<td>This test determines the ductility of asphalt @ 77 degrees F.</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D2170 AASHTO T201</td>
<td>This test determines the kinematic viscosity of asphalt @ 275 degrees F (Centistoke).</td>
</tr>
</tbody>
</table>
## Appendix D (continued)

### Asphalt Binder - Continued

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D2171, AASHTO T202</td>
<td>This test determines the dynamic viscosity. (absolute viscosity of asphalt @ 140 degrees F by the Vacuum Capillary Viscometer Poises).</td>
</tr>
<tr>
<td>Asphalt Binder (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D36, AASHTO T53</td>
<td>This test determines the softening point of asphalt.</td>
</tr>
</tbody>
</table>

### Asphalt Emulsified

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulsified Asphalt (Sampling)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D140, D979, CT 125, AASHTO T 40, T168</td>
<td>This test describes the procedure to sample the emulsified asphalt.</td>
</tr>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D244, AASHTO T59</td>
<td>This test determines the sieve retention of emulsified asphalt.</td>
</tr>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D244, AASHTO T59</td>
<td>This test determines the weight per gallon of emulsified asphalt.</td>
</tr>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D244, AASHTO T59</td>
<td>This test determines the penetration of the emulsified asphalt.</td>
</tr>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D244, CT 330, AASHTO T59</td>
<td>This test determines the residue @ 325 degrees F evaporation of emulsified asphalt.</td>
</tr>
</tbody>
</table>
### Appendix D (continued)

#### Asphalt Emulsified - Continued

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D4402, AASHTO T201</td>
<td>This test determines the Brookfield viscosity.</td>
</tr>
<tr>
<td>Emulsified Asphalt (Testing)</td>
<td>One 0.5-gal. sample placed in a clean, sealed can.</td>
<td>Obtain one sample at the asphalt concrete plant for each 1,000 tons of asphalt concrete placed.</td>
<td>ASTM D88, AASHTO T72</td>
<td>This test determines the Saybolt-Furol viscosity of emulsified asphalt @ 77 degrees F (seconds).</td>
</tr>
</tbody>
</table>

#### Hot Mix Asphalt (Asphalt Concrete) – Concrete

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Concrete (Sampling)</td>
<td>Obtain one 30-lb. sample each day of production</td>
<td>Obtain one sample at the asphalt concrete plant for each 5,000 tons of asphalt concrete placed.</td>
<td>ASTM D75, D140, D979, CT 125, AASHTO T 40, T168</td>
<td>This test describes the procedure to sample the asphalt concrete.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>4” x 8” cores</td>
<td>Take one 4” x 8” core for every 500 ft of paved roadway.</td>
<td>ASTM D1188, D1560, D1561, D5361, CT 304, AASHTO T246, T247</td>
<td>This test determines the field density of street samples.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>Obtain one 30-lb. sample for each day of production</td>
<td>Obtain one sample for every five cores taken.</td>
<td>ASTM D1188, D1560, D1561, D5361, CT 304, AASHTO T246, T247</td>
<td>This test determines the laboratory density and relative compaction of asphalt concrete.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>4” x 8” cores</td>
<td>Obtain one sample for every five cores taken.</td>
<td>ASTM D2726, D1188, D5361</td>
<td>This test determines the specific gravity of compacted bituminous mixture dense-graded or non-absorptive.</td>
</tr>
</tbody>
</table>
### Hot Mix Asphalt (Asphalt Concrete) – Continued

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>One 30-lb sample</td>
<td>Obtain one sample for every 1,000 tons of asphalt concrete.</td>
<td>ASTM D1559, AASHTO T245</td>
<td>This test determines the resistance to plastic flow of prepared mixes as determined by the Marshall Method.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>One 30-lb sample</td>
<td>Obtain one sample for every 1,000 tons of asphalt concrete.</td>
<td>ASTM C117, D2172 (use Method B) AASHTO T164</td>
<td>This test determines the screen analysis of aggregates recovered from asphalt materials.</td>
</tr>
<tr>
<td>Geotextile Fabric (Placed Under the Asphalt Concrete) (Testing)</td>
<td>One 12 ft. x 3 ft. sample</td>
<td>Obtain one sample per job.</td>
<td>ASTM D4632, AASHTO M288</td>
<td>This test determines the weight per sq. yd. and grabs strength of geotextile fabrics.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>Sample any test location (random basis)</td>
<td>Obtain one sample for every 1,000 tons of asphalt concrete.</td>
<td>ASTM D2950, CT 375</td>
<td>This test determines the nuclear field density of in-place asphalt concrete.</td>
</tr>
<tr>
<td>Asphalt Concrete (Testing)</td>
<td>One 10-lb sample</td>
<td>Obtain one sample during every day of production.</td>
<td>ASTM D1560, D1561, CT 366, AASHTO T246, T247</td>
<td>This test determines the stability value of asphalt concrete.</td>
</tr>
<tr>
<td>Slurry Seals (Sample)</td>
<td>One 0.5 gal. sample in a clean, dry plastic container.</td>
<td>Obtain one sample per truck</td>
<td>ASTM D970, CT 125, AASHTO T 40, T168</td>
<td>This test describes the procedure for sampling the slurry seal.</td>
</tr>
<tr>
<td>Aggregate for Slurry Seals (Testing)</td>
<td>One 30-lb. sample.</td>
<td>Obtain at least one sample per project from the belt or hopper or stockpile and test for Sand Equivalent</td>
<td>ASTM D2419, CT 217, AASHTO T176</td>
<td>This test determines the Sand Equivalent of aggregates.</td>
</tr>
</tbody>
</table>
### Appendix D (continued)

#### Slurry Seals

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate for Slurry Seals (Testing)</td>
<td>One 30-lb. sample.</td>
<td>Obtain at least one sample per project from the belt, hopper, or stockpile and test for sieve analysis of fine sand.</td>
<td>ASTM C117, AASHTO T11</td>
<td>This test determines the sieve analysis of fine sand (gradation of materials finer than No. 200 sieve by wash grading).</td>
</tr>
<tr>
<td>Slurry Seals (Testing)</td>
<td>One 0.5 gal. sample in a clean, dry plastic container.</td>
<td>Test one sample per project and test for Abrasion.</td>
<td>ASTM D3910</td>
<td>This test determines the Wet Track Abrasion Test (2) (WTAT).</td>
</tr>
</tbody>
</table>

#### Steel

<table>
<thead>
<tr>
<th>Materials to be Sampled or Tested</th>
<th>Sample Size</th>
<th>Sampling/Testing Frequency</th>
<th>Typical Test Methods</th>
<th>Description or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Strand (Testing)</td>
<td>Sample strand at various sizes.</td>
<td>This item may be accepted using a Certificate of Compliance. Sample and test at least two steel strands per job when a Certificate of Compliance is not used.</td>
<td>ASTM A370, A416, E328, AASHTO T244</td>
<td>This test determines the tensile strength of uncoated seven-wire stress-relieved strand for pre-stressed concrete.</td>
</tr>
<tr>
<td>Steel Rebar (Testing)</td>
<td>Sample rebar at various sizes.</td>
<td>This item may be accepted using a Certificate of Compliance. Sample and test at least two steel rebar per job when a Certificate of Compliance is not used.</td>
<td>ASTM A615, A370, AASHTO T244</td>
<td>This test determines the steel reinforcement bar tensile strength and bend capability.</td>
</tr>
</tbody>
</table>
ATTACHMENT 2 -

Appendix F - Construction Materials Accepted by a Certificate of Compliance *

Soil Amendment
Fiber
Mulch
Stabilizing Emulsion
Plastic Pipe
Lime
Reinforcing Steel
Structural Timber and Lumber
Treated Timber and Lumber
Timber and Lumber
Culvert and Drainage Pipe Joints
Reinforced Concrete Pipe
Corrugated Steel Pipe and Corrugated Steel Pipe Arches
Structural Metal Plate Pipe Arches and Pipe Arches
Perforated Steel Pipe
Polyvinyl Chloride Pipe and Polyethylene Tubing
Steel Entrance Tapers, Pipe Down drains, Reducers, Coupling Bands and Slip Joints
Aluminum Pipe (Entrance Tapers, Arches, Pipe Down drains, Reducers, Coupling Bands and Slip Joints)
Metal Target Plates
Electrical Conductors
Portland Cement
Minor Concrete
Waterstop

* If Caltrans Standard Specifications May 2006 is part of contract specifications.

Note: Usually these items are inspected at the site of manufacture or fabrication and reinspected after delivery to the job site.
I. PURPOSE

The purpose of this policy is to reaffirm the City’s commitment to demonstrating respect for all individuals by strictly prohibiting discrimination and harassment, including sexual harassment in the workplace. This policy defines prohibited behavior and conduct, and sets forth a procedure for reporting, investigating and resolving complaints of discrimination, harassment, in the workplace, including retaliation and hostile work environment.

II. POLICY

A. The City of Stockton prohibits any form of discrimination and/or harassment of any person based on race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other category or attribute consistent with state or federal law. All such discrimination and harassment is unlawful and shall not be tolerated. In addition, under the federal Affordable Care Act (ACA), the City of Stockton prohibits discrimination and/or harassment, or retaliation against an employee who obtains coverage, receives a tax credit or subsidy through the Health Care “Market Place” or “Exchange.”

B. It is an unlawful employment practice to discriminate against or to harass an unpaid intern or volunteer on the basis of any legally protected classification unless an exception applies, such as a bona fide occupational qualification.

C. The City will neither tolerate nor condone discrimination and/or harassment of employees by managers, supervisors, co-workers, or non-employees with whom City employees have a business service, or professional relationship.

D. All City employees and non-employees share a responsibility to assist in
maintaining an employment environment free of discrimination and harassment. This policy applies to all aspects of City employment, including, but not limited to, hiring, reassignment, placement, promotion, employment action, disciplinary action, layoff, reemployment, transfer, leave of absence, compensation and benefits, training; or other terms of treatment of that person in an unpaid internship, or another limited duration program to provide unpaid work experience for that person, or the harassment of an unpaid intern or volunteer.

E. All allegations of discrimination and/or harassment shall be investigated immediately by the City, in accordance with this policy. If it is determined that any prohibited activity has occurred, remedial action shall be taken. Such action may include discipline up to and including discharge. In addition, under applicable law, individual supervisors and employees may be subject to personal liability and/or punitive damages in any litigation arising as a result of such conduct.

F. All new hires shall attend harassment awareness training, and supervisors and managers shall attend harassment awareness and prevention training for supervisors every two years.

G. The City of Stockton prohibits retaliation against any employee or non-employee by another employee, non-employee, supervisor, or manager for reporting, filing, testifying, assisting or participating in any manner in any investigation, proceeding, or hearing conducted by the employer or a federal or state enforcement agency.

H. This policy applies to all officials, employees, volunteers, unpaid interns, agents, or contractors of the City.

I. This policy shall be administered by the Director of Human Resources.
III. DEFINITION AND EXAMPLES OF DISCRIMINATION AND HARASSMENT

A. “Discrimination,” as used in this policy, is any action, behavior, practice, or process that is intended to deny, or results in the denial of, employment rights, privileges, or benefits because of a person’s race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other prohibition identified under state and federal law. The following are examples of conduct that may constitute discrimination:

1. Soliciting applications from a source where all or most of potential workers are of the same race or color.

2. Considering a person’s gender as the basis for differences in pay, work assignments, performance evaluations, training, discipline, or any other area of employment; and

3. Questioning a job applicant about the existence, nature and severity of a disability.

B. “Harassment,” as used in this policy, consists of any conduct affecting another person because of his or her race, religious creed, color, national origin, ancestry, military and veterans status, physical or mental disability, medical condition, genetic characteristics or information, denial of family and medical care leave, marital status, sexual orientation, sex (including gender, gender identity, gender expression, transgender, pregnancy, childbirth and breastfeeding), political affiliation, age (40 and older), concerted labor activity, or any other category or attribute identified under state and federal law when such conduct has the purpose or the effect of: (1) creating an intimidating, hostile or offensive work environment; (2) unreasonably interfering with the employee’s or non-employee’s work performance; or (3)
CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

Subject: DISCRIMINATION AND HARASSMENT POLICY

<table>
<thead>
<tr>
<th>Directive No. HR-15</th>
<th>Page No. 4 of 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date:</td>
<td>Revised From:</td>
</tr>
<tr>
<td>5/1/2015</td>
<td>7/27/09</td>
</tr>
<tr>
<td></td>
<td>4/6/09</td>
</tr>
<tr>
<td></td>
<td>3/1/2010</td>
</tr>
<tr>
<td></td>
<td>(see below)</td>
</tr>
</tbody>
</table>

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

otherwise adversely affecting an employee’s or non-employee’s employment opportunities.

Harassment may take many forms, including, but not limited to, the following examples:

1. **Verbal Harassment:** Epithets, derogatory and offensive comments or slurs based on race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.

2. **Physical Harassment:** Assault, impeding or blocking movement that results in the physical interference with normal work or movement on the basis of race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.

3. **Visual Harassment:** The displaying of posters, photography, notices, bulletins, e-mails, cartoons or drawings with derogatory and offensive content based on race, religion, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, medical condition, gender, sexual orientation, political affiliation, age, or any other category or attribute identified under state and federal law.

C. “Sexual harassment,” as used in this policy, is a subcategory of harassment, and is specifically defined by law as unwanted sexual advances, requests for sexual favors or visual, verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made a term or condition of employment; or

2. Submission to or rejection of such conduct is used as a basis for employment decisions affecting the individual; or
3. Such conduct has the purpose or effect of unreasonably interfering with an employee’s or non-employee’s work performance or creating an intimidating, hostile or offensive working environment because of the persistent, severe or pervasive nature of the conduct.

Examples of Sexual Harassment include, but are not limited to the following:

a. Unwelcome sexual overtures or propositions.

b. Offering employment benefits or status in exchange for sexual favors.

c. Making or threatening retaliation after a negative response to sexual advances.

d. Visual conduct such as leering, making sexual gestures, displaying sexually suggestive objects or pictures, cartoons, calendars or posters.

e. Verbal conduct such as using epithets or slurs, telling sexually explicit jokes, or making derogatory or suggestive comments about a person’s body or dress.

f. Written communications of a sexual nature distributed in hard copy, soft copy or via a computer network.

g. Verbal abuse of a sexual nature, graphic verbal commentary about an individual’s body, sexually degrading words to describe an individual, suggestive or obscene letters, notes or invitations.

h. Physical conduct such as touching, assaulting, impeding or blocking movements.
i. Retaliation for making harassment reports or threatening to report harassment.

D. Affordable Care Act (ACA) Anti-Retaliation

Pursuant to section §1558 of the Affordable Care Act, the City prohibits discrimination or retaliation towards any employee who:

1. Receives a health insurance tax credit or subsidy through the Health Care “Marketplace” or “Exchange”, by which can trigger a penalty payable by the employer;
2. Reports potential violations of protections afforded under Title I of the Act, which provides guaranteed availability protections among other things;
3. Testifies in a proceeding concerning such violation;
4. Assists or participates in a proceeding concerning a violation; or
5. Objects to, or refuses to participate in, any activity, policy, practice, or assigned task that the employee reasonably believes to be in violation of any provision of the Title I of the Act.

An employee who believes that he or she has been discharged or otherwise discriminated against in violation of section §1558 of the Affordable Care Act may seek relief in accordance with the procedures, notifications, burdens of proof, remedies, and statutes of limitation set forth in section 2087(b) of title 15, United States Code.

IV. REPORTING AND COMPLAINT PROCEDURES

A. Immediate Action Required

The City’s reporting and complaint procedures provide for an immediate, thorough and objective investigation of discrimination or harassment claims, appropriate disciplinary action taken against any person found to have engaged in prohibited behavior, and appropriate alternative remedies to any
### CITY OF STOCKTON, CALIFORNIA
CITY MANAGER ADMINISTRATIVE DIRECTIVE

<table>
<thead>
<tr>
<th>Subject: DISCRIMINATION AND HARASSMENT POLICY</th>
<th>Directive No. HR-15</th>
<th>Page No. 7 of 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date: 5/1/2015</td>
<td>Revised From:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7/27/09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/6/09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/1/2010</td>
<td></td>
</tr>
<tr>
<td>(see below)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

Employee or non-employee subject to discrimination or harassment. To accomplish this, such incidents must be reported immediately to a supervisor or manager.

1. **Employee’s and Non-Employee’s Responsibilities when Subjected to Discrimination and/or Harassment**
   
   a. Employees or non-employees who believe they have been subjected to discrimination or harassment, or are aware of discrimination or harassment against others, shall report the situation immediately to his/her supervisor or manager, except as specified in subsection (b), below. Employees and non-employees shall report any such incidents occurring in the workplace, whether committed by coworkers, supervisors or managers, or third persons doing business with the City, such as customers or vendors, or other non-employees. If comfortable doing so, an employee or non-employee who has a complaint of discrimination or harassment is encouraged to directly inform the person(s) engaging in the behavior that such conduct is offensive and insist the behavior to stop.

   b. Employees and non-employees must immediately contact a supervisor or manager to register a complaint of discrimination or harassment, unless that supervisor or manager is the individual engaging in the unwanted behavior. In that case, the employee or non-employee may contact someone at the next supervisory level. If the employee or non-employee feels uncomfortable dealing directly with his or her immediate supervisor or manager, he or she may contact the department head, or the Director of Human Resources (or either of their designees) to register a complaint of discrimination or harassment.

   c. Employees and non-employees may file a formal complaint of harassment or discrimination with their department head or
with Human Resources. To assist the City in conducting a thorough investigation, complaints shall be submitted in writing and shall include specific details of the incident(s), the names of the individuals involved, the names of any witnesses, and any documentary evidence (notes, pictures, cartoons, etc.) that will corroborate the allegations.

d. Employees and non-employees shall immediately report any retaliation to a supervisor, manager, department head or Director of Human Resources (or designee). All retaliation complaints shall be immediately, objectively and thoroughly investigated in accordance with the investigation procedures. If a report of retaliation is substantiated, appropriate disciplinary action, up to and including discharge shall be taken.

2. Supervisor's or Manager's Responsibilities to Eliminate Discrimination and/or Harassment

a. A supervisor or manager is responsible for enforcing the City's discrimination and harassment policy. Supervisors or managers must ensure that all employees and non-employees are aware of the City's policy through open discussion of the policy at staff meetings and by posting the policy in a conspicuous location accessible to all staff members.

b. A supervisor or manager shall be cognizant of employees' and non-employees' behavior and shall not permit any employee or non-employee under their supervision to be subjected to or engage in any conduct prohibited by this policy.

c. A supervisor or manager who observes conduct prohibited by this policy shall immediately direct the employee or non-employee to cease the conduct.
### DISCRIMINATION AND HARASSMENT POLICY

<table>
<thead>
<tr>
<th>Directive No. HR-15</th>
<th>Effective Date:</th>
<th>Revised From:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5/1/2015</td>
<td>7/27/09, 4/6/09, 3/1/2010 (see below)</td>
</tr>
</tbody>
</table>

**Effective Date:** Revised From:
- 7/27/09
- 4/6/09
- 3/1/2010

**Revised From:**
- PER-015 (Sexual Harassment in the Workplace) revised from 10/21/94, 5/1/95, 1/1/98
- PER-037 (Sexual Harassment Investigative Procedures) revised from 2/15/93

---

**V. INVESTIGATION PROCEDURES**

**A. Determination of Responsibility for Investigation**

If a formal complaint is filed with the department head or the Director of Human Resources (or either of their designees), the department head and the Director of Human Resources shall consult with one another to determine whether the department or Human Resources shall conduct the fact-finding investigation into the allegations. Either the department head or the Director of Human Resources (or either of their designees), depending on who is

---

**B. Confidentiality.** The City will make every effort to protect the privacy and confidentiality of all parties involved, as well as any information and/or documentation obtained, to the extent possible consistent with a thorough investigation.

**C. Penalty for Non-Compliance.** The City shall take disciplinary action, up to and including discharge, against any supervisor or manager who fails in his/her responsibility to take immediate action in response to an employee’s or non-employee’s complaint of discrimination or harassment. Further, such disciplinary action shall be taken against a supervisor or manager who fails to stop discriminatory or harassing conduct committed in his/her presence or to stop such conduct about which the supervisor or manager has knowledge.
subject: discrimination and harassment policy

<table>
<thead>
<tr>
<th>directive no. hr-15</th>
<th>page no. 10 of 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>effective date: 5/1/2015</td>
<td></td>
</tr>
</tbody>
</table>
| revised from: 7/27/09
4/6/09
3/1/2010 |

(revised from 10/21/94, 5/1/95, 1/1/98
per-037 (sexual harassment investigative procedures) revised from 2/15/93

responsible for the investigation, shall issue written notification to the complainant and alleged harasser(s). The notification shall specify the nature of the complaint, and inform the parties that an investigation into the allegations of discrimination and/or harassment shall be conducted.

b. investigative guidelines

the investigation shall include the following steps taken in the order best suited to the circumstances:

1. identify and preserve the evidence.

2. confirm the name and position of the complainant. interview the complainant.

3. allow the complainant the opportunity to place the complaint in writing.

4. obtain the identity of the alleged harasser(s).

5. obtain as many details as possible regarding the incident(s) that prompted the complaint, including the number of occurrences, dates, times, locations, and witnesses (if applicable).

6. ascertain how the complainant felt about the alleged incident when it occurred; complainant's response(s) to the alleged behavior; and witness statements (if applicable).

7. ascertain if any threats or promises were made in connection with the alleged harassment.

8. ascertain if the complainant knows of or suspects that there are other victims of harassment by the same person(s).

9. ascertain whether the complainant has spoken to anyone, especially
supervisors, about the harassment.

10. Ascertain what resolution would be acceptable to the complainant.

11. Interview the alleged harasser to get his or her side of the story, including any possible motivation for a false allegation.

12. Interview witnesses who were identified by the complainant regarding the alleged harasser or other persons identified during the investigation.

13. Interview witnesses who were identified by the alleged harasser or other persons identified during the investigation.

14. Advise all participants that the investigation is "confidential" and not to engage in any retaliatory conduct, as such conduct is subject to disciplinary action up to and including discharge. Confidentiality will be maintained to the extent possible. An individual who is interviewed during the course of an investigation is prohibited from discussing the substance of the interview, except as otherwise directed by a supervisor or the Director of Human Resources. Any individual who discusses the content of an investigatory interview will be subject to discipline or other appropriate sanction.

15. Conduct follow-up interviews, if warranted.

16. Prepare report of findings and discuss with management and designated legal staff.

VI. RESPONDING TO THE COMPLAINT

A. Following the completion of the fact-finding investigation, either the department head or the Director of Human Resources (or either of their designees), depending on who is responsible for the investigation, shall
make a report of findings, along with a recommendation regarding the appropriate remedial action to be taken, if warranted. The recommendation shall be made after reviewing the findings of the investigation, giving consideration to all factual information, the nature of the alleged conduct, and the totality of the circumstances. If the investigation was conducted by the Director of Human Resources, or designee, the Director, or designee, shall confer with the affected department head and both shall concur on the remedial action to be taken, if any. If the investigation was conducted by the department head, the department head shall confer with the Director of Human Resources prior to making the report of findings and both shall concur on the remedial action to be taken, if any.

B. If either the department head or the Director of Human Resources does not concur with the findings and recommendation of the other, the City Attorney (or designee) shall review and resolve the matter in dispute.

C. Report of findings and recommendation shall be treated as a confidential document and no other distribution shall be made without first consulting with the City Attorney's Office. A completed investigation report will not be disclosed, except as it is deemed necessary to support a disciplinary action, to take remedial action, to defend the City in adversarial proceedings, or to comply with the law or court order.

D. Either the department head or the Director of Human Resources (or either of their designees), depending on who is responsible for the investigation shall provide a written response to the complainant and the person alleged to have committed the misconduct, discrimination and/or harassment. The response shall include a copy of the City’s discrimination and harassment policy and a memorandum indicating the City’s determination as to whether the complaint is:

1. **Unsustained**: The investigation failed to disclose sufficient evidence to substantiate the allegation(s).

2. **Unfounded**: The investigation proved that the act(s) or omission(s)
DISCRIMINATION AND HARASSMENT POLICY

Effective Date: 5/1/2015

Revised From:
7/27/09
4/6/09
3/1/2010
(see below)

complained of did not occur. The finding also applies when the individual employee(s) named in the complaint were not involved in the act(s) or omission(s) alleged.

3. Sustained: The investigation disclosed sufficient evidence to substantiate the allegation(s) made in the complaint; appropriate action will be taken.

E. Details regarding any specific fact-findings or disciplinary action to be taken will not be communicated to the complainant. The City Attorney shall review the response for legal sufficiency before dissemination.

F. The City shall close and retain the investigation file, in accordance with applicable laws, regulations, and City policy regarding retention of City records.

VII. DISCIPLINE

Disciplinary action imposed as a result of any investigation conducted pursuant to this policy shall be commensurate with the severity of the offense, up to and including discharge, even for a first offense.

VIII. ALTERNATIVE REMEDIES

If upon exhausting all internal remedies to file, investigate, and respond to a charges of discrimination/harassment, pursuant to title VII of the Federal Civil Rights Act of 1964 (42 U.S.C §§ 2000e et seq.), any person has a right to file a charge of discrimination/harassment with the Equal Employment Opportunity Commission (“EEOC”). In addition, pursuant to the California Fair Employment and Housing Act (Gov. Code §§ 12900 – 12996.) a person may also file a complaint of discrimination/harassment with the California Department of Fair Employment and Housing (“DFEH”). Employees or non-employees who believe that they have been subjected to discrimination/harassment may file a complaint with either of these
agencies. Both the EEOC and DFEH serve as neutral fact-finders and attempt to assist parties in resolving disputes voluntarily.

IX. COMMUNICATION OF POLICY

This policy shall be provided to all managers, supervisors, employees, volunteers, unpaid interns, agents or contractors of the City and shall be posted in the appropriate places. All employees shall participate in City approved harassment awareness training as directed by management or Human Resources; and all supervisors, as required by law, shall participate in City approved interactive harassment awareness training and education sessions at least once every two years, or as otherwise specified by law.

APPROVED:

[Signature]

KURT O. WILSON
CITY MANAGER
EXHIBIT C
SUMMARY OF INDEMNITY AND INSURANCE REQUIREMENTS CHECKLIST
( NOT REQUIRED TO BE SUBMITTED )

This checklist is provided to assist in ensuring proponents provide all documentation required by the insurance exhibit (Exhibit D). The insurance exhibit details the insurance terms to be met and is controlling.

Insurance Certificate(s)/Endorsement(s):

Certificate of Insurance:

_____ Name of Insured on Certificate matching Company named on Contract
_____ Certificate lists City of Stockton as Additional Insured
_____ Certificate Holder block reads: City of Stockton, Attn: Risk Services, 425 N El Dorado Street, Stockton CA 95202
_____ Insurance Coverages/Limits are correct per the insurance requirements exhibit
_____ General Liability is on occurrence basis
_____ Insurance Company acceptable financial rating (not less than “A: VII,” and California Admitted carrier)
_____ Endorsement(s) are attached to the insurance certificate(s)
_____ Declarations and endorsement page for the general liability are attached to the insurance certificate
_____ Additional Insured Endorsement(s) wording: “City of Stockton, its Mayor, Council, Officials, Employees, Agents and Volunteers are Additional Insureds.”
_____ Additional insured form is at least as broad as CG 20 10 11 85
_____ Endorsement(s) include:
  • Additional Insured endorsement for:
    ▪ current/ongoing operations (General Liability)
    ▪ completed operations (General Liability)
  • Primary and Non-Contributory (General Liability)
  • Waiver of Transfer of Rights of Recovery Against Others to Us (General Liability)
  • Waiver of Transfer of Rights of Recovery Against Others to Us (Workers’ Compensation)

Contract Bond(s):

_____ Name on Bond matches Company name on Contract
_____ Surety Admitted to transact Surety in California
_____ AMB Best Rated at least “A:VIII”
_____ Faithful Performance Bond(s) and Labor & Material Bond(s) at 100% of contract
_____ Maintenance Bond(s) at 20% of contract
_____ Bond(s) signed and sealed by Contractor and Surety

__________________________

Federal Instructions to Bidders Page 23 of 25
(Revised 09/22/16)
Exhibit D:  
**Insurance Requirements for Construction Contracts**  
(FFY 2015-16 Street Resurfacing Project (Pacific Avenue))

Contractor shall procure and maintain for the duration of the contract, *and for three (3) years thereafter*, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees, or subcontractors.

**MINIMUM SCOPE AND LIMIT OF INSURANCE**

Coverage shall be at least as broad as:

1. **Commercial General Liability** (CGL): Insurance Services Office Form CG 00 01 covering CGL on an “occurrence” basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

2. **Automobile Liability**: Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than **$1,000,000** per accident for bodily injury and property damage.

3. **Workers’ Compensation** insurance as required by the State of California, with Statutory Limits, and Employers’ Liability insurance with a limit of no less than **$1,000,000** per accident for bodily injury or disease.

4. **Surety Bonds** as described below.

If the contractor maintains higher limits than the minimums shown above, the City of Stockton requires and shall be entitled to coverage for the higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City of Stockton.

**Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by the City of Stockton Risk Services. At the option of the City of Stockton, either: the contractor shall cause the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City of Stockton guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
Other Insurance Provisions

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

1. **The City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers are to be covered as additional insureds** on the CGL and AL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor’s insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

2. For any claims related to this contract, the Contractor’s insurance coverage shall be endorsed as primary insurance as respects the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers. Any insurance or self-insurance maintained by the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers shall be excess of the Contractor’s insurance and shall not contribute with it. The City of Stockton does not accept endorsements limiting the Contractor’s insurance coverage to the sole negligence of the Named Insured.

3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the City of Stockton.

Claims Made Policies

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

1. The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.

2. Insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of contract work.

3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor must purchase extended reporting period coverage for a minimum of three (3) years after completion of contract work.

4. A copy of the claims reporting requirements must be submitted to the City of Stockton for review.

5. If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or
asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

**Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A: VII if admitted to do business in the State of California; If not admitted to do business in the State of California, insurance is to be placed with insurers with a current A.M. Best rating of no less than A+:X.

**Waiver of Subrogation**

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

**Verification of Coverage**

Contractor shall furnish the City of Stockton with original certificates and amendatory endorsements. If necessary, copies of the applicable insurance language, effecting coverage required by this contract may be included. All certificates and endorsements are to be received and approved by the City of Stockton Risk Services before work commences. Failure to obtain the required documents prior to the work beginning shall not waive the Contractor’s obligation to provide them. The City of Stockton reserves the right to require complete, certified copies of all required insurance policies, required by these specifications, at any time, for any reason or no reason.

Contractor shall, prior to the commencement of work under this Agreement, provide the City of Stockton with a copy of its Declarations Page and Endorsement Page for each of the required policies.

**Certificate holder address**

Proper address for mailing certificates, endorsements and notices shall be:

- City of Stockton
- Attention: Risk Services
- 425 N. El Dorado Street
- Stockton, CA 95202

City of Stockton Risk Services Phone: 209-937-5037
City of Stockton Risk Services Fax: 209-937-8558
**Maintenance of Insurance**

If at any time during the life of the Contract or any extension, the Contractor fails to maintain the required insurance in full force and effect, all work under the Contract shall be discontinued immediately. Any failure to maintain the required insurance shall be sufficient cause for the CITY to terminate this Contract.

**Subcontractors**

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

**Surety Bonds**

Contractor shall provide the following Surety Bonds:

1. Performance bond
2. Labor and Materials bond
3. Maintenance bond

The Performance Bond shall be in a sum equal to 100% of the contract price. The Maintenance Bond shall be equal to 20% of the contract price. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

**Special Risks or Circumstances**

City of Stockton reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.
***THIS IS A SAMPLE***
CONSTRUCTION CONTRACT

This contract is made and entered into on ______________, by and between NAME OF CONTRACTOR, a (INDICATE STATUS: STATE OF [NAME STATE] CORPORATION, PARTNERSHIP, OR SOLE PROPRIETORSHIP), with a business address at ADDRESS/CITY/STATE/ZIP, hereinafter called "CONTRACTOR," and CITY OF STOCKTON, a municipal corporation, hereinafter called "CITY."

W I T N E S S E T H:

WHEREAS, plans and specifications for the construction of PROJECT NAME (PROJECT NO. xx/FEDERAL PROJECT NO.xx), hereinafter called “PROJECT,” were regularly adopted by Council Motion –OR- Council Resolution No. ___________________, on _______________; and

WHEREAS, the contract for said work was regularly awarded to CONTRACTOR, by Council Motion –OR- Council Resolution No. _________________, on _______________.

NOW, THEREFORE, in consideration of the promises and of the mutual covenants herein contained, the parties hereto expressly agree as follows:

1. CONTRACTOR agrees:
   (a) To do the work and furnish all the labor, materials, tools, equipment, and insurance required for the construction of PROJECT in accordance with the plans and specifications adopted on ______________, by Council Motion –OR-Council Resolution No. ________________. The "contract documents," which include the bid documents, project plans, specifications, all letters of clarification, and the City of Stockton Standard Specifications and Plans, are incorporated into and made a part of this contract by this reference to the same extent as if fully set forth. Federal form FHWA 1273 is physically included in this contract as Exhibit C. In compliance with the Cargo Preference Act of 1954 (CPA), 46 CFR §381, and the implementing regulations in 46 CFR §381.7, the Contractor agrees:
1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels;

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, “on-board” commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590;

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

(b) To do and perform the work contemplated hereby in a good and workmanlike manner and to furnish all labor, materials, tools, and equipment necessary therefore at the prices specified in Exhibit "A," attached hereto and by reference made a part hereof, under the direction of and to the complete satisfaction of the Director of Public Works of the City of Stockton. Total compensation for services and reimbursement for costs shall not exceed ENTER CONTRACT AMOUNT, or as otherwise mutually agreed to in a Contract Change Order.

(c) CONTRACTOR shall not commence any work before obtaining, and shall maintain in force at all times during the duration and performance of this contract, the policies of insurance specified in Exhibit B, which is attached to this contract and incorporated by this reference, and as provided in the “contract documents” including
Section 7-1.06 of the City of Stockton Standard Specifications and Plans as adopted on September 27, 2016, by Council Resolution No. 2016-09-27-1213, effective September 27, 2016.

It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the Additional Insured.

Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured; whichever is greater.

The Additional Insured coverage under the Contractor’s policy shall be “primary and non-contributory” and will not seek contribution from the City of Stockton’s insurance or self-insurance and shall be at least as broad as CG 20 01 04 13.

The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess Insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the City of Stockton (if agreed to in a written contract or Agreement) before the City of Stockton’s own insurance or self-insurance shall be called upon to protect it as a named insured.

All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Payment Bond in the amount of the self-insured retention (SIR) may be required.

Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or the City of Stockton.

The City of Stockton reserves the right to obtain a full certified copy of any Insurance policy and endorsements.

Failure to exercise this right shall not constitute a waiver of right to exercise later.
Contractor shall maintain insurance as required by this contract to the fullest amount allowed by law and shall maintain insurance for a minimum of five years following the completion of this project. In the event contractor fails to obtain or maintain completed operations coverage as required by this Agreement, the City at its sole discretion may purchase the coverage required and the cost will be paid by contractor.

Contractor agrees to include with all Subcontractors in their subcontract the same requirements and provisions of this Agreement including the indemnity and insurance requirements to the extent they apply to the scope of the Subcontractor's work. Subcontractors hired by Contractor agree to be bound to Contractor and the City of Stockton in the same manner and to the same extent as Contractor is bound to the City of Stockton under the Contract Documents. Subcontractor further agrees to include these same provisions with any Sub-subcontractor. A copy of the City of Stockton Contract Document Indemnity and Insurance provisions will be furnished to the Subcontractor upon request. The General Contractor shall require all sub-contractors to provide a valid certificate of insurance and the required endorsements included in the Agreement prior to commencement of any work and contractor will provide proof of compliance to the City.

With the exception that this section shall in no event be construed to require indemnification by Contractor to a greater extent than permitted under the public policy of the State of California, Contractor shall indemnify, protect, defend with counsel approved by City and at Contractor’s sole cost and expense, and hold harmless City, its Mayor, Council, officials, representatives, agents, employees, and volunteers from and against any and all claims, causes of action, liabilities, judgments, awards, losses, liens, claims, stop notices, damages, expenses, and costs (including without limitation attorneys’ fees, expert and consultant fees, and other expenses of litigation) of every nature, including, but not limited to, death or injury to persons, or damage to property, which arise out of or are in any way connected with the work performed, materials furnished, or services provided under this Agreement, or from any violation of any federal, State, or municipal law or ordinance, or City Policy, by Contractor or Contractor’s officers, agents, employees, volunteers or subcontractors. Contractor shall
not be obligated to indemnify or defend City for claims finally determined by a court of law or arbitrator to arise from the active negligence or willful misconduct of the City. It is the intent of the Parties that this indemnity obligation is at least as broad as is permitted under California law. To the extent California Civil Code sections 2782, et seq., limit the defense or indemnity obligations of Contractor to City, the intent hereunder is to provide the maximum defense and indemnity obligations allowed by Contractor under the law. The indemnity set forth in this section shall not be limited by insurance requirements or by any other provision of this Agreement.

With exception that this section shall in no event be construed to require indemnification, including the duty to defend, by Contractor to a greater extent than permitted under the public policy of the State of California, the parties agree that Contractor’s duty to defend City is immediate and arises upon the filing of any claim against the City for damages which arise out of or are in any way connected with the work performed, materials furnished, or services provided under this Agreement by Contractor or Contractor’s officers, agents, employees, volunteers or subcontractors. Contractor’s duties and obligations to defend the City shall apply regardless of whether or not the issue of the City’s liability, breach of this Agreement, or other obligation or fault has been determined. Contractor shall be immediately obligated to pay for City’s defense costs of the claim, including, but not limited to, court costs, attorney’s fees and costs, expert consultant and witness fees and costs, other witness fees, document reproduction costs, arbitration fees, and, if after final judgment an appeal is pursued, all of such costs for the appeal. At the conclusion of the claim, if there is any determination or finding of sole active negligence or willful misconduct on the part of the City, City will then reimburse Contractor for amounts paid in excess of Contractor’s proportionate share of responsibility for the damages within 30 days after Contractor provides City with copies of all bills and expenses incurred in the defense of the claim(s). It is agreed between the parties that this reimbursement provision assures Contractor is not obligated to defend or indemnify City in an amount greater than provided for under California law, including, without limitation, California Civil Code sections 2782, 2782.6, and 2782.8.
With the exception that this section shall in no event be construed to require indemnification by Contractor to a greater extent than permitted under the public policy of the State of California, and in addition to the other indemnity obligations in this Agreement, Contractor shall indemnify, defend, and hold harmless City, its Mayor, Council, officials, representatives, agents, employees, and volunteers from and against all claims, losses, expenses, and costs including, but not limited to, attorneys’ fees, arising out of any claim brought against the City by an employee, office, agent, or volunteer of Contractor, regardless of whether such claim may be covered by any applicable workers compensation insurance. Contractor's indemnification obligation is not limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under workers’ compensation acts, disability acts, or other employee benefit acts.

The City’s acceptance of the insurance certificates required under this Agreement does not relieve the Consultant from its obligation under this paragraph. The indemnification obligations of this section shall survive the termination of this agreement. Any exceptions to this language may result in a proposal being deemed non-responsive.

Contractor/Subcontractor's responsibility for such defense and indemnity obligations shall survive the termination or completion of this agreement for the full period of time allowed by law.

The defense and indemnification obligations of this agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this agreement.

If any section, subsection, sentence, clause or phrase of this indemnification is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this indemnification.

(d) The performance of said work and the furnishing of said materials shall be executed in accordance with Section 8-1.04B of the City of Stockton Standard Specifications and Plans as adopted on September 27, 2016, by Council Resolution No.
2016-09-27-1213, effective September 27, 2016, and the provisions of the issued project specifications.

The Director will furnish CONTRACTOR a weekly statement showing the number of days charged to the contract for the preceding week, the number of days specified for completion of the contract, and the number of days remaining to complete the contract. CONTRACTOR will be allowed one (1) week in which to file a written protest setting forth in what respects said weekly statement is incorrect, otherwise the statement shall be deemed to have been accepted by CONTRACTOR as correct.

It is agreed by the parties to the contract that in case all the work called for under the contract in all parts and requirements, is not finished or completed within the number of days as set forth, damage will be sustained by CITY, and that it is and will be impracticable and extremely difficult to ascertain the actual damage which CITY will sustain in the event of and by reason of such delay; and it is therefore agreed that CONTRACTOR will pay to CITY the sum of XXX AND NO/100 DOLLARS ($XXX) per day for each and every calendar day's delay in finishing the work in excess of the number of days prescribed; and CONTRACTOR agrees to pay said liquidated damages as herein provided, and in case the same are not paid, agrees that CITY, may deduct the amount thereof from any monies due or that may become due CONTRACTOR under the contract.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the number of days as specified, CITY shall have the right to increase the number of days or not, as may seem best to serve the interest of CITY, and if CITY decides to increase the said number of days, CITY shall further have the right to charge to CONTRACTOR, CONTRACTOR's heirs, assigns or sureties, and to deduct from the final payment for the work, all or any part, as may be deemed proper, the liquidated damages as specified or the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the contract, and which accrue during the period of such extension, whichever is greater, except the cost of final surveys and preparation of final estimate shall not be included in such charges.
A working day shall not include, nor shall CONTRACTOR be assessed with liquidated damages nor the additional cost of engineering and inspection during any delay beyond the time named for the completion of the work caused by acts of God or of the public enemy, acts of CITY, fire, floods, epidemics, quarantine restrictions, strikes, and freight embargoes and subject to approval by the Director, inability to get materials ordered by CONTRACTOR or Subcontractor due to such causes provided that CONTRACTOR shall notify the Director in writing of the causes of delay within five (5) working days from the beginning of any such delay, and the Director shall ascertain the facts and the extent of the delay, and Director's findings of the facts thereon shall be final and conclusive.

If CONTRACTOR is delayed by reason of alterations made in these specifications, or by any act of the Director or of CITY, not contemplated by the contract, the time of completion shall be extended proportionately and CONTRACTOR shall be relieved during the period of such extension of any claim for liquidated damages, engineering or inspection charges or other penalties. CONTRACTOR shall have no claim for any other compensation for any such delay.

(e) Title VI of the Civil Rights Act of 1964 requires that “no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” (42 USC Section 2000d) http://www.dol.gov/oasam/regs/statutes/titlevi.htm.

The City of Stockton requires compliance with the requirements of Title VI in all of its programs and activities regardless of funding source.

(f) The City of Stockton has a Discrimination and Harassment Policy (Exhibit D). The purpose of this policy is to reaffirm the CITY’s commitment to demonstrating respect for all individuals by strictly prohibiting discrimination and harassment, including sexual harassment in the workplace, to define the types of behavior and conduct prohibited by this policy, and to set forth a procedure for reporting, investigating, and resolving complaints of discrimination and harassment in the workplace.
(g) The bidder shall understand that conditions set forth in Chapter 1, Part 7, Division 2 of the California Labor Code shall be considered part of the contract agreement. [http://www.leginfo.ca.gov/cgi-bin/displaycode?section=lab&group=01001-02000&file=1770-1784](http://www.leginfo.ca.gov/cgi-bin/displaycode?section=lab&group=01001-02000&file=1770-1784).

(h) CONTRACTOR and any Subcontractor shall pay each employee engaged in the trade or occupation not less than the prevailing hourly wage rate. In accordance with the provisions of Section 1770 of the Labor Code, the Director of Department of Industrial Relations of the State of California has determined the general prevailing rates of wages and employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided for in Section 1773.1, apprenticeship or other training programs authorized by Section 3093 and similar purposes applicable to the work to be done. CONTRACTOR performing the work under this contract shall obtain a copy of the wage rate determination and shall distribute copies to each Subcontractor (see Exhibit E). As the wage determination for each craft reflects an expiration date, it shall be the prime CONTRACTOR and each Subcontractor's responsibility to insure that the prevailing wage rates of concern is current and paid to the employee.

(i) The CONTRACTOR performing the work shall be responsible for obtaining a copy of the State wage rate determination. State wage rates may be obtained at [http://www.dir.ca.gov/OPRL/pwd/Determinations/Northern/Northern.pdf](http://www.dir.ca.gov/OPRL/pwd/Determinations/Northern/Northern.pdf). The CONTRACTOR shall be responsible for posting said wage rates at a prominent location at the work site and shall maintain same in a good readable condition for the duration of the work.

(j) Should the CONTRACTOR choose to work on a Saturday, Sunday or on a holiday recognized by the Labor Unions, the CONTRACTOR shall reimburse the CITY the actual cost of engineering, inspection, superintendence, and or other overhead expenses which are directly chargeable to the contract. Should such work be undertaken at the request of the CITY, reimbursement will not be required. To conform strictly with the provisions of Division 2, Part 7, Chapter 1, Article 2, of the Labor Code of the State of California. To forfeit as a penalty to CITY the sum of TWENTY-FIVE AND NO/100
DOLLARS ($25.00) for each laborer, worker, or mechanic employed by CONTRACTOR, or by any Subcontractor under CONTRACTOR, in the execution of this contract, for each calendar day during which any laborer, worker, or mechanic is required or permitted to work more than eight (8) hours and who is not paid the general prevailing rate of per diem wages for holiday and overtime work in violation of the provisions of Sections 1770 to 1781 of the Labor Code of the State of California. That all sums forfeited under the provisions of the foregoing sections shall be deducted from the payments to be made under the terms of this contract.

(k) The CONTRACTOR to whom the contract is awarded shall insure that the prime and each subcontractor will in accordance with Section 1776 of the Labor Code, maintain certified payroll records. A copy of said records shall be provided with each invoice to the Public Works Department, Attention Contract Compliance Officer. It shall be the CONTRACTOR’S responsibility to obtain copies of the current prevailing wage rate determination for all subcontractors. Additionally, certified payroll records must be uploaded to the DIR website as required by labor code.

(l) The CONTRACTOR shall comply with the provisions established in Section 1777.5 of the Labor Code concerning the 1) certified approval by local joint apprenticeship committees for the employment and training of apprentices, and 2) contribution of funds to administer and conduct apprenticeship programs, if applicable to the job.

2. CITY agrees:

(a) To pay CONTRACTOR for the work herein contemplated in the following manner: Progress payments will be made on or about the first day of each calendar month, in such sum as shall make the aggregate of payment up to such day equal to ninety-five percent (95%) of the proportional contract price, upon the basis of the progress certificate of the Director of Public Works as to the amount of work done and the proportional amount of the contract price represented therefore; and all of the remaining part of the contract price not as aforesaid paid, shall be paid at the expiration of thirty-five (35) days from the completion of said work of construction and the certification by the Director of Public Works of such completion.
(b) Pursuant to Section 22300 of the Public Contract Code, CONTRACTOR will be permitted, at its request and sole expense, to substitute securities for any monies withheld by the CITY to ensure performance under the contract. Said securities will be deposited either with the CITY or with a State or federally chartered bank as escrow agent. Securities eligible for this substitution are those listed in Section 16430 of the California Government Code or bank or savings and loan certificates of deposit. CONTRACTOR shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

3. CHANGE ORDERS:

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

Any such changes will be set forth in a contract change order which will specify, in addition to the work done in connection with the change made, adjustment of contract time, if any, and the basis of compensation for such work. A contract change order will not become effective until approved by the City Manager and/or the City Council.

Processing of change orders shall be in accordance with Section 4-1.05A of the City of Stockton Standard Specifications and Plans as adopted by Council on September 27, 2016, by Resolution No. 2016-09-27-2013, effective September 27, 2016, or as otherwise amended by Council. When the compensation for an item of work is subject to adjustment under the provisions of Standard Specifications and Plans, Section 4-1.05A, CONTRACTOR shall, upon request, promptly furnish the Engineer with adequate detailed cost data for such item of work.

4. AUDITS:

(a) CITY reserves the right to periodically audit all charges made by CONTRACTOR to CITY for services under the contract. Upon request, CONTRACTOR
agrees to furnish CITY, or a designated representative, with necessary information and assistance.

(b) CONTRACTOR agrees that CITY or its delegate will have the right to review, obtain and copy all records pertaining to performance of the contract. CONTRACTOR agrees to provide CITY or its delegate with any relevant information requested and shall permit CITY or its delegate access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this requirement. CONTRACTOR further agrees to maintain such records for a period of five (5) years after final payment under the contract.

5. It is expressly understood and agreed by and between the parties hereto that a waiver of any of the conditions of this contract shall not be considered a waiver of any of the other conditions thereof.

6. It is further understood and agreed by and between the parties hereto that time is of the essence of this contract in all respects.

IN WITNESS WHEREOF, the parties hereto have hereunto affixed their hands and seals the day and year first above written.

ATTEST:
BONNIE PAIGE
CITY CLERK

By:__________________________________________

KURT O. WILSON
CITY MANAGER

APPROVED AS TO FORM & CONTENT:
JOHN M. LUEBBERKE
OFFICE OF THE CITY ATTORNEY

By:__________________________________________

LIST NAME OF CONTRACTOR

By:__________________________________________

DEPUTY CITY ATTORNEY
Tax Identification No.
***COPY/PASTE CONTRACTOR’S BID SCHEDULE HERE AS EXHIBIT A***
OBTAIN INSURANCE REQUIREMENT EXHIBIT FROM RISK SERVICES AND INCLUDE HERE AS EXHIBIT B
PLACE FHWA 1273 HERE AS EXHIBIT C (Obtain from Bid Forms Boilerplate)
PLACE DISCRIMINATION AND HARASSMENT POLICY HERE AS EXHIBIT D
PLACE FEDERAL WAGE RATES HERE AS EXHIBIT E
BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS:

That we, NAME OF CONTRACTOR, a (INDICATE STATUS: STATE OF [NAME STATE] CORPORATION, PARTNERSHIP, OR SOLE PROPRIETORSHIP), as Principal and ________________________________, a corporation, organized and existing under the laws of the State of _______________ and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the City of Stockton, a municipal corporation, duly created and existing under and by virtue of the laws of the State of California, as obligee, in the just and full sum of SPELL OUT CONTRACT AMOUNT AND xx/100 DOLLARS ($xxx enter dollar amount), in lawful money of the United States of America (being 100% of the contract price) for the payment whereof well and truly to be made to the said CITY, the said Principal and Surety bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that the above bounded Principal has simultaneously entered into a contract with the CITY, to do and perform the following work, to wit:

NAME OF PROJECT
(PROJECT NO. xxx/FEDERAL PROJECT NO. xxx)

NOW, THEREFORE, if the above bounded Principal, CONTRACTOR, Company or Corporation or its Subcontractor, shall well and truly perform the work contracted to be done under said contract, then this obligation to be null and void; otherwise to remain in full force and effect.

No prepayment or delay in payment and no change, extension, addition or alteration of any provision of said contract, or in said plans or specifications agreed to between the said CONTRACTOR and the said CITY, and no forbearance on the part of the said CITY shall operate to relieve any Surety or Sureties from liability on this bond,
and consent by said Surety is hereby given, and the said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

SIGNED AND SEALED on_______________________________

APPROVED AS TO SURETY: By _____________________________

PRINCIPAL

_______________________________

SURETY

APPROVED AS TO FORM & CONTENT:
JOHN M. LUEBBERKE
OFFICE OF THE CITY ATTORNEY

By _____________________________

ATTORNEY-IN-FACT

By _____________________________

DEPUTY CITY ATTORNEY
BOND FOR LABOR AND MATERIAL

KNOW ALL MEN BY THESE PRESENTS:

That we, NAME OF CONTRACTOR, a (INDICATE STATUS: STATE OF [NAME STATE] CORPORATION, PARTNERSHIP, OR SOLE PROPRIETORSHIP), as Principal and ______________________, a corporation, organized and existing under the laws of the State of _______________ and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the City of Stockton, a municipal corporation, duly created and existing under and by virtue of the laws of the State of California, and unto any and all material suppliers, persons, companies, or corporations furnishing materials, provisions, provender or other supplies used in, upon, for or about the performance of the work contemplated to be executed or performed under the contract hereinafter mentioned, and all persons, companies, or corporations renting or hiring teams, or implements of machinery, for or contributing to said work and all persons who perform work or labor upon the same, and all persons who supply both work and materials, and whose claims have not been paid by the contractor, company or corporation in the just and full sum of SPELL OUT DOLLAR AMOUNT AND xx/100 DOLLARS ($xxx enter dollar amount), in lawful money of the United States of America (being 100% of the contract price) for the payment whereof well and truly to be made to said City of Stockton and to said persons jointly and severally, the said principal and Surety bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligations is such that the above bounden Principal has simultaneously entered into a contract of even date herewith, with the CITY, to do and perform the following work, to-wit:

NAME OF PROJECT
(PROJECT NO. xxx/FEDERAL PROJECT NO.)

NOW, THEREFORE, if the above bounden Principal, CONTRACTOR, Company or Corporation or its Subcontractor, fail to pay for all materials, provisions, provender, or other supplies, or teams, used in, upon, for or about the performance of the work
contracted to be done, or for any work or labor done thereon of any kind, the Surety on this bond will pay the same, in an amount not exceeding the sum specified in this bond, provided that any and all claims hereunder shall be filed and proceedings had in connection therewith as required by the provisions of Division 3, Part 4, Title 15, Chapter 5, Article 1 of the Civil Code of California, provided that in case suit is brought upon this bond, a reasonable attorney's fee shall be awarded by the Court to the prevailing party in said suit; said attorney's fee to be fixed as costs in said suit, and to be included in the judgment therein rendered.

No prepayment or delay in payment and no change, extension, addition or alteration of any provision of said contract or in said plans or specifications agreed to between the said CONTRACTOR and the said CITY and no forbearance on the part of the said CITY shall operate to relieve any surety or sureties from liability on this bond, and consent to make such alterations without further notice to or consent by any such surety is hereby given, and the said sureties hereby waive the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

SIGNED AND SEALED on ________________________________.

APPROVED AS TO SURETY: By ____________________________

PRINCIPAL

SURETY

APPROVED AS TO FORM & CONTENT:
JOHN M. LUEBBERKE
OFFICE OF THE CITY ATTORNEY

By ____________________________

ATTORNEY-IN-FACT

By ____________________________

DEPUTY CITY ATTORNEY
SPECIAL PROVISIONS

***************************************************************************

FFY 2015-16
STREET RESURFACING
PROJECT
(PACIFIC AVENUE)

CITY PROJECT NO. PW1519
FEDERAL PROJECT NO. STPL 5008(147)

***************************************************************************

Revised: March 06, 2017
Special Provisions

for

FFY 2015-16 Street Resurfacing Project
(Pacific Avenue)
City Project No. PW1519
Federal-Aid Project No. STPL-5008(147)

Prepared by
Omar Al Hindi, Project Manager
Thinh Phan, Project Engineer

These Special Provision for the City of Stockton, Public Works Department: 2015-16 Street Resurfacing Project, have been prepared by, or under the direct supervision of the following Registered Civil Engineer:

Jodi Almassy
SPECIAL NOTES .................................................................................................................................................. 6
SECTION 1 SPECIFICATONS AND PLANS .............................................................................................................. 6
1-1.01 Specifications ............................................................................................................................................... 6
1-1.02 Plans ............................................................................................................................................................... 7
1-1.03 Contractor’s Responsibility .......................................................................................................................... 7
1-1.04 Terms and Definitions .................................................................................................................................. 7
SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS ......................................................................................... 8
2-1.01 General ......................................................................................................................................................... 8
SECTION 3 AWARD AND EXECUTION OF CONTRACT ................................................................................................... 8
3-1.01 Pre-Bid Conference ....................................................................................................................................... 8
3-1.02 Contract Award ............................................................................................................................................. 9
3-1.03 Bid Protest .................................................................................................................................................... 9
3-1.04 Contract Execution .................................................................................................................................... 9
SECTION 4 BEGINNING WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES ......................................................... 9
SECTION 5 GENERAL ................................................................................................................................................ 11
5-1.01 Understanding of Conditions ........................................................................................................................ 11
5-1.02 Location ....................................................................................................................................................... 12
5-1.03 Partial Payment ............................................................................................................................................ 12
5-1.04 Increased or Decreased Quantities ............................................................................................................... 12
5-1.05 Guaranty ....................................................................................................................................................... 12
5-1.06 Construction Control ................................................................................................................................... 12
5-1.07 Inspections .................................................................................................................................................. 12
5-1.08 Environmental Protection .......................................................................................................................... 12
5-1.09 Bird Protection ............................................................................................................................................. 13
5-1.10 Cultural Resources ....................................................................................................................................... 13
5-1.11 Roadway Excavation (Hazardous Materials) ............................................................................................... 14
5-1.12 Maintaining Public Convenience and Safety .............................................................................................. 17
5-1.16 Encroachment Permit from City, County, Utilities, Railroads and Others ...................................................... 20
5-1.17 Schedule ..................................................................................................................................................... 20
5-1.18 Pre-construction Survey ................................................................................................................................ 21
5-1.19 Public Notification ....................................................................................................................................... 21
5-1.20 Non-Highway Facilities and Obstructions .................................................................................................... 22
5-1.21 Site Maintenance and Cleanup ..................................................................................................................... 23
5-1.22 Disposal of Materials .................................................................................................................................. 23
5-1.23 Pre-construction Meeting ............................................................................................................................ 23
5-1.24 Submittals ...................................................................................................................................................... 23
5-1.25 Progress Schedule ....................................................................................................................................... 25
5-1.26 Payments ...................................................................................................................................................... 25
5-1.27 Unsatisfactory Progress ................................................................................................................................. 25
5-1.28 Noise Control Requirement ........................................................................................................................ 26
5-1.29 Dust Control ................................................................................................................................................ 26
5-1.30 Maintaining Existing and Temporary Electrical System ............................................................................ 27
5-1.31 Staging Areas ................................................................................................................................................ 27
5-1.32 As-built/Record Drawings ............................................................................................................................ 27
5-1.33 Relations with California Regional Water Quality Control Board ............................................................. 27
5-1.34 Increased or Decreased Quantities ............................................................................................................... 28
5-1.35 Differing Site Conditions ............................................................................................................................ 28
5-1.36 Changes and Extra Work ............................................................................................................................. 28
5-1.37 Notice of Potential Claim ............................................................................................................................ 29
5-1.38 Stop Notice Withholds ................................................................................................................................ 29
5-1.39 Records .......................................................................................................................................................... 29
SPECIAL NOTES

1. Refer to Section 3, "Award and Execution of Contract," of these special provisions for the time allotted for the successful bidder to sign and return the contract document to the City.

2. Any addendum and bid inquiries will be posted on the City websites. An e-mail notification will be issued to all registered plan-holders. Please make sure you are registered as a plan holder as soon as possible.

3. Refer to Section 5-1.41, "Required Forms to be Submitted," of these special provisions for the forms and certifications.


All bids submitted for this project must conform to the requirements of the official bid documents, including plans and specifications.

SECTION 1 SPECIFICATIONS AND PLANS

1-1.01 Specifications

The work described herein shall be done in accordance with the current City of Stockton, Department of Public Works, Standard Specifications and the current Editions of the State of California, Department of Transportation Standard Specifications and Standard Plans and in accordance with the following Special Provisions. To the extent the California Department of Transportation Standard Specifications implement the STATE CONTRACT ACT they shall not be applicable since the City of Stockton is not subject to said ACT.

In case of conflict or discrepancy between any of the Contract Documents, the order of documents listed below shall be the order of precedence, with the first item listed having the highest precedence.

1. Contract Change Order (Modifications or changes last in time are first in precedence).
2. Addenda to Contract Agreement
3. Contract Agreement
4. Permits
5. Notice Inviting Bids and Instructions to Bidders
6. Addendums and Letters of Clarification
7. Special Provisions
8. Project Drawings
9. City of Stockton Standard Specifications
10. City of Stockton Standard Drawings
11. Caltrans Standard Specifications
12. Caltrans Standard Plans

With regards to discrepancies or conflicts between large-scale drawings and small-scale drawings, the larger scale shall govern.

With regards to discrepancies or conflicts between detailed drawings and referenced standard drawings or
plans, the detailed drawings shall govern.

In the event where provisions of codes, safety orders, contract documents, referenced manufacturer’s specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications, the special provisions, or the plans, the Contractor shall apply to the Engineer in writing for such further explanations as may be necessary and shall conform to them as part of the contract. All responses from the Engineer shall also be in writing. In the event of any doubt or question arising respecting the true meaning of these specifications, the special provisions or the plans, reference shall be made to the Engineer, whose decision thereon shall be final.

1-1.02 Plans

The bidder's attention is directed to the provisions in Section 1-1.04, “Terms and Definitions,” of the Standard Specifications and Section 1-1.07 “Definitions,” of the Caltrans Specifications.

1-1.03 Contractor's Responsibility

The Contractor shall examine carefully the site of the work and the plans and specifications therefore. The Contractor shall investigate to their satisfaction as to conditions to be encountered, the character, quality and quantity of surface, subsurface materials or obstacles to be encountered, the work to be performed, materials to be furnished, and as to the requirements of the bid, plans and specifications of the contract.

1-1.04 Terms and Definitions

Wherever in the Standard Specifications, Special Provisions, Notice to Contractors, Proposal, Contract, or other contract documents the following terms are used; the intent and meaning shall be interpreted as follows:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>City or Owner</td>
<td>City of Stockton</td>
</tr>
<tr>
<td>Director</td>
<td>Director of Public Works, City of Stockton</td>
</tr>
<tr>
<td>Standard Specifications</td>
<td>City of Stockton Latest Standard Plans and Specifications and any amendments and revisions thereto</td>
</tr>
<tr>
<td>Caltrans Specifications</td>
<td>Current and Latest State of California, Dept. of Transportation, and any amendments or revisions thereto.</td>
</tr>
<tr>
<td>Laboratory</td>
<td>City of Stockton's Department of Public Works or consultant laboratory</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Public Works, City of Stockton</td>
</tr>
<tr>
<td>Engineer</td>
<td>City Engineer, City of Stockton, acting either directly or through properly authorized Engineer agents and consultants.</td>
</tr>
</tbody>
</table>
Working Day defined as any eight (8) hour day, except as follows: Saturdays, Sundays, City-observed holidays, and other days the City is closed as shown on the City of Stockton Working Calendar, days on which the Contractor is prevented by inclement weather or conditions resulting immediately there from adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on that operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 General

The bidder’s attention is directed to the “Notice to Bidder” for the date, time and location of the Pre-Bid meeting.

SECTION 3 AWARD AND EXECUTION OF CONTRACT

3-1.01 Pre-Bid Conference

A pre-conference will be held for this project; check the City website for the schedules date and time.

The addendum and bid inquiries will be posted on the City website. An e-mail notification will be issued to all registered plan-holders. It is the contractor’s/sub-contractor’s sole responsibility to register as a plan holder. If a firm is not registered as a plan holder, they will not receive the notifications about addendum/bid inquiries/other information related to the project. To register as a plan holder, please send an e-mail to Miguel Mendoza at Miguel.Mendoza@stocktonca.gov referencing the project name.

3-1.02 Contract Award

Each prospective bidder shall be required to bid on all items. Failure to bid an item shall be just cause for considering the bid as non-responsive. The City reserves the right to reject all bids. The bidders must be responsible and their bids must be responsive.

If the City awards the Contract, the basis of the award will be the lowest responsible bidder whose proposal complies with all requirements prescribed.

Bidders and listed DBEs are encouraged to be available the day of bid opening to answer questions.

The contract shall be executed by the successful bidder and shall be returned, along with the contract bonds, so that it is received by the City within ten (10) working days after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address:

City of Stockton Public Works Department
Attention: Thinh Phan
1465 S. Lincoln Street
Stockton, CA 95202
3-1.03 Bid Protests

All parties wishing to file a protest shall comply with the procedures set forth below:

All protests regarding the bidding process or the award, or intended award, of any contract must be submitted in writing to the City Attorney on or before 5:00 p.m. of the fifth business day following the opening of all bids, unless a different time period is specified in the Notice Inviting Bids or other bid solicitation documents. All protests must be addressed to:

City Attorney
City of Stockton
425 North El Dorado Street, 2nd Floor
Stockton, Ca 95202

The part filing the protest must have actually submitted a bid for the work. A subcontractor of a bidder may not submit a bid protest.

The protest shall contain a full and complete statement specifying in detail the grounds of the protest and the facts in support thereof. The protest must be hand delivered or sent via mail so that it is received by the City Attorney within the time period set forth above. The protest document must include the following:

- A complete statement of the factual and legal basis for the protest;
- The protest must include the name, address and telephone number of the person representing the protesting party; and
- The protesting party must concurrently transmit a copy of the written protest document and any attached documentation to all other bidders who may have a reasonable prospect of receiving the award depending upon the outcome of the protest.

The procedure and time limits set forth herein are mandatory and the bidder's sole and exclusive remedy in the event of protest. No bidder may bring an action or proceeding challenging the bidding process or any award, or intent to award, any contract unless the above procedures are followed. The failure of a party originating a protest to comply with these procedures shall constitute a waiver of any right to further pursue the protest, including filing a government code claim or legal proceeding. The City reserves the right to modify the bid protest procedures in the Notice Inviting Bids or other bid solicitation documents and to require any protesting party to submit additional or clarifying information or documentation in support of any protest.

3-1.04 Contract Execution

The bidder's attention is directed to the provisions in Section 3, "Award and Execution of Contract," of the Caltrans Specifications and these special provisions for the requirements and conditions concerning award and execution of contract. Bid protests are to be delivered to the address noted above.

SECTION 4 BEGINNING WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall perform and complete the proposed work in a thorough and workmanlike manner, and to furnish and provide in connection therewith all necessary labor, tools, implements, equipment materials and supplies.

Attention is directed to the provisions in Section 8-1.04B, “Standard Start,” of the Standard Specifications and these Special Provisions.
At no time shall construction begin without receiving notice that the contract has been approved by the City Attorney or an authorized representative. The Contractor shall follow the sequence of construction and progress of work as specified in Section 9-1.01, “Description of Work,” and Section 14-1.01, “Contractor Work Procedure” of these Special Provisions.

The Contractor shall diligently prosecute all work items to completion.

**Time of Completion**
Attention is directed to the provisions in Section 8-1.05, “Time,” of the Caltrans Standard Specifications and these Special Provisions.

The contract for the performance of the work and the furnishing of materials shall commence within ten (10) days from the Notice to Proceed date and shall be diligently prosecuted to completion before the expiration of the working days specified in this section from the date of said commencement.

The Contractor shall diligently prosecute the contract work to completion within **Ninety (90) working days**. The days to finish the punch list, provided by the City, are included in the Working Days.

Should the Contractor choose to work on a Saturday, Sunday, City Holidays or on a holiday recognized by the labor unions, the Contractor shall reimburse the City of Stockton the actual cost of engineering, inspection, testing, superintendent, and/or other overhead expenses which are directly chargeable to the contract. Should such work be undertaken at the request of the City, reimbursement will not be required.

**Liquidated Damages**
Attention is directed to the provisions in Section 8-1.10, Liquidated Damages,” of the Caltrans Specifications and these Special Provisions.

The Contractor shall pay liquidated damages to the City of Stockton in the amount of $3,000.00 (Three Thousand Dollars) per day for each and every calendar day that the work remains incomplete after expiration of the contract working days specified in these Special Provisions.

In addition, the Contractor shall pay the following sums for the associated liquidated damages and penalties:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to provide and/or non-compliance to or violation of accepted construction scheduling and/or phasing, per Section 5-1.12 and 5-1.16</td>
<td>$250.00</td>
<td>per each calendar day</td>
</tr>
<tr>
<td>Failure to provide and/or non-compliance with accepted Traffic Control Plans per Section 5-1.12</td>
<td>$250.00</td>
<td>per each calendar day</td>
</tr>
<tr>
<td>Failure to provide adequate Project Site Maintenance 24/7, per Sections 5-1.12, 5-1.19 and 5-1.21</td>
<td>$250.00</td>
<td>per each calendar day</td>
</tr>
<tr>
<td>Failure to open the project street to unrestricted traffic at the expiration of the lane closure hours, per Section 5-1.12, 12-2.10 and 13-1.06</td>
<td>$250.00</td>
<td>per each half-hour delay</td>
</tr>
<tr>
<td>Failure to appropriately response to the notice of signal failure within two hours of the notification, per Section 5-1.30</td>
<td>$500.00</td>
<td>per each day/incident</td>
</tr>
<tr>
<td>Failure to follow proper procedure for storage of equipment and/or</td>
<td>$250.00</td>
<td>per each calendar day/incident</td>
</tr>
<tr>
<td>Materials in public streets, per Section 5-1.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Failure to provide and maintain sufficient temporary striping and markings. Failure to install layout lines (cat-tracks) within 72 hours and/or permanent markings installed within 10 working days of the Engineer's approval of the cat tracks, per Section 10-1.08, 10-1.09 and 10-1.10.</td>
<td>$500.00 per each calendar day</td>
<td></td>
</tr>
<tr>
<td>Failure to provide adequate sweeping on curb, gutter, sidewalk and street pavement on a daily basis, before and after cold mill and paving operations, and per various applicable sections of these Special Provision</td>
<td>$500.00 per each calendar day</td>
<td></td>
</tr>
<tr>
<td>Failure to pave within 5 days of grinding a roadway</td>
<td>$500.00 per each calendar day</td>
<td></td>
</tr>
</tbody>
</table>

**CITY OF STOCKTON HOLIDAY SCHEDULE FOR 2016**

- Monday, January 16, 2017……………………………………………Martin Luther King, Jr.’s Birthday
- Monday, February 13, 2017……………………………………………Lincoln's Birthday Observance
- Monday, February 20, 2017…………………………………………..Washington's Birthday
- Friday, March 31, 2017………………………………………………..Cesar Chavez Day
- Monday, May 29, 2017………………………………………………...Memorial Day
- Tuesday, July 04, 2017………………………………………………..Independence Day Observance
- Monday, September 04, 2017………………………………………...Labor Day
- Monday, October 09, 2017…………………………………………..Columbus Day
- Friday, November 10, 2017…………………………………………Veteran's Day Observance
- Thursday and Friday, November 23 and 24, 2017………………….Thanksgiving Holidays
- Monday, December 25, 2016…………………………………………Christmas Day Observance
- Monday, January 1, 2017………………………………………………New Year's Day

Similar holidays are scheduled in year 2018.

Full compensation for any costs required to comply with the provisions in this section shall be considered to be included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.

**SECTION 5 GENERAL**

**5-1.01 Understanding of Conditions**

Bidders will be required to carefully examine these Special Provisions and attachments to judge for themselves as to the nature of the work to be done and the general conditions relative thereto and the submission of a proposal hereunder shall be considered prima-facie evidence that the bidder has made the necessary investigation and is satisfied with respect to the conditions to be encountered, the character, quantity and quality of the work performed.

Bidders must be thoroughly competent and capable of satisfactorily performing the work covered by the proposal, and when requested, shall furnish such statements relative to previous experience on similar work, the plan or procedure proposed, and the organization and the equipment available for the contemplated work, and any other as may be deemed necessary by the Project Engineer in determining such competence and
It shall be understood that the Contractor shall be required to perform and complete the proposed work in a thorough, workmanlike and professional manner, and to furnish and provide in connection therewith all necessary labor, tools, equipment, materials and supplies. The Contractor is responsible to take all necessary precautions and use best practices in the industry to perform all work required completing the project.

5-1.02 Location

Please see project map and plans for the limits of the project and other details. Also, see plan sheet no. 3 for the list of street sections, which estimated quantities, utilities, and other details. The quantities in the plans sheet are considered as an estimate and shall not be construed as exact.

5-1.03 Partial Payment

The five percent (5%) retention for those portions of work not accepted or not part of any incremental acceptance as determined by the City will remain with the City until 35 days after the date the Notice of Completion was recorded.

5-1.04 Increased or Decreased Quantities

The City, at its sole discretion, may increase or decrease or eliminate completely the quantities of the items of work to be completed under this contract. In such an event, compensation for all work completed shall be paid at the contract unit prices bid regardless of the final quantity of work actually completed.

5-1.05 Guaranty

The work furnished under these specifications shall be guaranteed for a period of one (1) year from date of acceptance thereof against defective materials, equipment and workmanship. Upon receipt of notice from the City of failure of any part of the materials, equipment, or workmanship during the guaranty period, the affected part or parts shall be replaced with new material and/or equipment, and at the expense of the Contractor.

5-1.06 Construction Control

The City reserves the right to order discontinuance of any equipment in use. This will be determined at the discretion of the Engineer on the basis that the use of said equipment would prohibit obtaining the best possible result.

Additional operated equipment may be requested by the Engineer for the above reasons. Failure to comply with the Engineer's request concerning equipment use or removal will be deemed sufficient cause for shutting down all work until the requirements are met. Days lost for this type of shutdown will be charged as workable days.

5-1.07 Inspections

All work under this contract shall be under the control and inspection of the Engineer or his/her appointed representative. The Contractor shall be responsible for notifying the Engineer forty-eight (48) hours in advance of all stages of construction to arrange for inspection. The Contractor/sub-contractor shall report to the Engineer before starting the work on each working day.

5-1.08 Environmental Protection

The Contractor shall be responsible for all applicable permits and licenses required for the construction and completion of the project.
Any Contractor or person engaged in activities that will or may result in pollutants entering the City storm drainage system shall undertake all practicable measures to reduce the introduction of such pollutants. The Contractor shall be fully responsible for removing the materials out of the storm system irrespective of its condition before the construction work.

The Contractor shall follow Caltrans’ best management practices regarding environmental protection and comply with all City regulations, ordinances, and City Storm Water Quality Control Criteria Plan. It is available for download at:

Full compensation for furnishing all labor, materials, tools, equipment, and incidental for doing all work involved in environmental protection shall be included in the various bid items and no additional compensation will be made therefore.

5-1.09 Bird Protection

The Department anticipates nesting or attempted nesting by migratory and non-game birds (raptors) from February 15 to September 1. All construction activities are prohibited within 1,320 ft. of an active Swainson’s hawk nest without written authorization from the Engineer.

A preconstruction survey shall be conducted by a qualified biologist no more than seven (7) days prior to start of construction activities if construction occurs during the nesting season to identify birds in trees in the vicinity of construction. Survey report shall be prepared by a qualified biologist and submitted to the Engineer prior to any construction. The supplemental report of the survey may be submitted during or after the construction as needed.

The California Department of Fish and Game shall be contacted to determine the appropriate buffer if a nesting raptor (other than Swainson’s Hawk) is detected within 1,320 feet of the site. If evidence of bird nesting is discovered, the Contractor shall not disturb the nesting birds or nests until the birds have naturally left the nests. If evidence of Swainson’s hawk nesting is discovered after beginning work, the Contractor shall immediately stop work and notify the Engineer. Construction can resume a distance of two times the dripline of the tree away from the nest measured from the nest. Temporary Fence (Type ESA) shall be placed around the tree at the defined limits. A qualified biologist shall determine the need and applicability of any temporary restrictions, buffers, or monitoring for construction activities and/or consultation with the Department of Fish & Game. A written report regarding the outcome of the survey shall be submitted to the Engineer prior to any construction activities.

Attention is directed to Section 8-1.06 “Suspensions” of the Standard Specifications. Nothing in this section shall relieve the Contractor from providing for public safety in conformance with the provisions in Section 7-1.04 “Public Safety” of the Standard Specifications.

Full compensation for submitting the required field survey, placement of ESA fencing, preparing the report and any supplemental reports as required in these special provisions shall be considered as included in the prices paid for its line item and the various contract items of work involved and no additional compensation will be allowed therefore.

5-1.10 Cultural Resources

The California Public Resources Code Chapter 1.7, Section 5097.5 makes it a misdemeanor for anyone to knowingly disturb an archaeological historical feature. California Public Resources Code Sections 5097.98 and 5097.99 require protection of Native American remains which may be found and outlines procedures for handling any burials found. Additional protocols for human remains are given in the State Health and Safety Code.
Sections 7050.5 and 5097.98.

The California Administrative Code, Title 14, Section 4308, requires that no person disfigure any object of historical interest or value. The California Penal Code, Title 14, Part 1, Section 622-1/2 makes it a misdemeanor to destroy anything of historical value within any public place. Should human skeletal material or archaeological remains be found during construction activities, all work must be stopped within sixty (60) feet radius of the discovery and within any nearby area suspected to overlie the discovery. The Contractor must notify the Engineer immediately. Construction activities within sixty (60) feet radius of the discovery must remain stopped until the Contractor has been notified that construction in the vicinity of the find may resume. If, in the opinion of the Engineer, the Contractor's operations are delayed or interfered with due to investigations made of the archaeological find, the State will compensate the Contractor for such delays by an equal amount of working days. Section 8-1.07, "Delays," of the Caltrans Standard Specifications shall not apply. Any delays related to this section will be compensated by granting the Contractor extra working days upon written request to the Engineer. No other compensations will be allowed.

Full compensation for conforming to the above requirements shall be considered as included in the contract prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

5-1.11 Roadway Excavation (Hazardous Materials)

Earthwork involving material containing aerially deposited lead and petroleum hydrocarbons shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Attention is directed to the following sections of these special provisions dealing with Asphalt Grindings Containing Yellow Paint that is tested to have Lead and Chromium and Aerially Deposited Lead.

Asphalt grindings containing thermoplastic paint that is tested to have lead and chromium content and material containing aerially deposited lead in the average concentrations (using the 95 percent Upper Confidence Limit) greater than 5.0 mg/L soluble lead, as tested using the Toxicity Characteristic Leaching Procedure Test is Federally regulated hazardous waste and shall be transported to and disposed of at a Class I Disposal Site. Material excavated from these areas shall be transported by a hazardous waste transporter registered with the DTSC using the required procedures for creating a manifest for the material. The vehicles used to transport the hazardous material shall conform to the current certifications of compliance of the DTSC.

Lead Compliance Plan

The Contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead while handling yellow and white thermoplastics, yellow paint or while handling material containing aerially deposited lead. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) requirements when working with lead.

The Lead Compliance Plan shall contain the elements listed in Title 8, California Code of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The plan shall be submitted to the Engineer for review and acceptance at least 7 days prior to beginning work in areas containing aerially deposited lead.

The Lead Compliance Plan shall include perimeter air monitoring incorporating upwind and downwind locations as approved by the Engineer. Monitoring shall be by personal air samplers using National Institute of Safety and Health Method 7082. Sampling shall achieve a detection limit of 0.05 μg/m3 of air per day. Daily monitoring shall take place while the Contractor clears and grubs and performs earthwork operations. A single representative daily sample shall be analyzed for lead. Results shall be analyzed and provided to the Engineer.
within 24 hours. Average lead concentrations shall not exceed 1.5 μg/m³ of air per day. If concentrations exceed this level the Contractor shall stop work and modify the work to prevent release of lead. Monitoring shall be done under the direction of, and the data shall be reviewed by, and signed by, a Certified Industrial Hygienist.

The Contractor shall not work in areas containing aerially deposited lead within the project limits, unless authorized in writing by the Engineer, until the Engineer has accepted the Lead Compliance Plan.

Before starting any activity that presents the potential lead exposure, personnel who have no prior training or are not current in their training status, including Department personnel, shall complete a safety training program provided by the Contractor. The safety training program shall meet the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead."

Personal protective equipment, training, and washing facilities required by the Contractor's Lead Compliance Plan shall be supplied by the Contractor.

The Engineer will notify the Contractor of acceptance or rejection of the submitted or revised Lead Compliance Plan not more than two (2) days after submittal of the plan.

Excavation and Transportation Plan
Within two (2) days after the Engineer's approval of the Lead Compliance Plan, the Contractor shall submit three (3) copies of an Excavation and Transportation Plan to the Engineer. The Engineer will have two (2) days to review the plan. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the plan within two (2) days of receipt of the Engineer's comments. The Engineer will have two (2) days to review the revisions. Upon the Engineer's approval of the plan, three (3) additional copies incorporating the required changes shall be submitted to the Engineer. Minor changes to or clarifications of the initial submittal may be made and attached as amendments to the Excavation and Transportation Plan. In order to allow construction to proceed, the Engineer may conditionally approve the plan while minor revisions or amendments are being completed.

The Contractor shall prepare the written, project specific Excavation and Transportation Plan establishing the procedures the Contractor will use to comply with requirements for identifying, classifying, locating, excavating, stockpiling, transporting, and placing (or disposing) of asphalt grindings (that has yellow thermoplastic that is tested to have lead and chromium content) and material containing aerially deposited lead, and providing quantities of Roadway Excavation (Hazardous Material) prior to excavating hazardous material. The plan shall conform to the regulations of the DTSC and Cal-OSHA. Contractor shall use his own EPA ID number to dispose all hazardous waste material on the project. The sampling and analysis portions of the Excavation and Transportation Plan shall meet the requirements for the design and development of the sampling plan, statistical analysis, and reporting of test results contained in USEPA, SW 846, "Test Methods for Evaluating Solid Waste," Volume II: Field Manual Physical/Chemical, Chapter Nine, Section 9.1. The plan shall contain, but not be limited to the following elements:

A. Excavation schedule (by location and date),
B. Temporary locations of stockpiled material,
C. Sampling and analysis plans for areas after removal of a stockpile,
   1. Location and number of samples,
   2. Analytical laboratory,
D. Sampling and analysis plan for soil cover,
E. Sampling and analysis plan for post excavation
F. Dust control measures,
G. Air monitoring,
   1. Location and type of equipment,
   2. Sampling frequency,
3. Analytical laboratory,
H. Transportation equipment and routes,
I. Method for preventing spills and tracking material onto public roads,
J. Truck waiting and staging areas,
K. Site for disposal of hazardous waste,
L. Example of Bill of Lading to be carried by trucks transporting lead contaminated material. The Bill of Lading shall contain: US DOT description including shipping name, hazard class, and ID number; handling codes; quantity of material; and volume of material. Copies of the bills of lading shall be provided to the Engineer upon placement of material in its final location. Trucks carrying lead contaminated material shall not leave the highway right of way.
M. Spill Contingency Plan for material containing aerially deposited lead.

Dust Control
Excavation, transportation, placement, and handling of material containing aerially deposited lead shall result in no visible dust migration. The Contractor shall have a water truck or tank on the job site at all times while clearing and grubbing and performing earthwork operations in work areas containing aerially deposited lead. Contractor shall provide a vacuum sweeper on a daily basis to maintain a dust free project.

Stockpiling
Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or one foot of non-hazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

Material Transportation
Prior to traveling on public roads, loose and extraneous material shall be removed from surfaces outside the cargo areas of the transporting vehicles and the cargo shall be covered with tarpaulins or other cover, as outlined in the approved Excavation and Transportation Plan. The Contractor shall be responsible for costs due to spillage of material containing lead during transport.

The Department considers the Contractor as the generator of the hazardous material, and the Contractor will be obligated for further cleanup, removal, or remedial action for such material handled or disposed of in conformance with the requirements specified in these special provisions and the appropriate State and Federal laws and regulations and county and municipal ordinances and regulations regarding hazardous waste. Contractor shall use his own EPA ID number for all hazardous waste material disposal.

Disposal
Surplus material for which the lead and petroleum hydrocarbon content is not known shall be analyzed for aerially deposited lead and TPH as motor oil by the Contractor prior to removing the material from within the project limits. The Contractor shall submit a sampling and analysis plan and the name of the analytical laboratory to the Engineer at least 15 days prior to beginning sampling or analysis. The Contractor shall use a laboratory certified by the California Department of Health Services. Sampling shall be at a minimum rate of one sample for each 200 cubic yards of surplus material and tested for lead using EPA Method 6010 or 7000 series.

Materials containing aerially deposited lead shall be disposed of within California. The disposal site shall be operating under a permit issued by the appropriate California Environmental Protection Agency board or department.

The Contractor will use his own Environmental Protection Agency Generator Identification Number for hazardous waste disposal. The Engineer will sign all hazardous waste manifests. The Contractor shall notify the Engineer five (5) days before the manifests are to be signed.

The Contractor will obtain his own State of California Board of Equalization Identification Number for hazardous
waste disposal. The Engineer will sign all hazardous waste manifests. The Contractor shall notify the Engineer five (5) days before the manifests are to be signed.

Sampling, testing, analyzing, transporting, and disposing of material containing aerially deposited lead excavated outside the pay limits of excavation will be at the Contractor's expense.

Measurement and Payment
The contract lump sum price for Lead Compliance Plan shall include full compensation for furnishing all labor, materials, tools, equipment, disposing of and incidentals and for doing all the work involved in preparing the Lead Compliance Plan, including paying the Certified Industrial Hygienist, and for providing personal protective equipment, training and medical surveillance, as specified in the Standard Specifications, these provisions, and as directed by the Engineer shall be included in the contract unit price paid for Lead Compliance item, and no additional compensation will be allowed therefore.

Full compensation for preparing an approved Excavation and Transportation Plan, sampling, analysis, classifying Roadway Excavation (Hazardous Material) as Class I, Class II or Class III, reporting results, and stockpiling as specified in special provisions, and as directed by the Engineer shall be included in various bid items, and no additional compensation will be allowed.

5-1.12 Maintaining Public Convenience and Safety

Attention is directed to Section 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control," of the Caltrans Standard Specifications and these Special Provisions. Adequate ingress and egress shall be maintained through the site for police, fire, and other emergency vehicles. The Contractor shall provide the City with the name and telephone number (business, home, and mobile) of three (3) representatives available at all times for the duration of the contract.

Contractor shall furnish, install and maintain as required by the Engineer, CMS boards and construction area signs at the beginning and end limits of project streets including the end limits of major intersections. The CMS boards and construction signs shall stay at projects sites and shall be maintained by the Contractor until the final phase of the construction. All traffic plans shall conform to the applicable provisions of the latest and amended "California Manual on Uniform Traffic Control Devices (2014)". The Contractor shall submit a construction area traffic control/detour plan for approval by the Engineer before the commencement of any work. Traffic control plan or detour plan shall show the placement of signs, barricades, delineators, and other traffic control devices required by Contractor’s operation.

The Contractor shall furnish, install, and maintain in good working order of all cones, delineators, barricades, arrow boards, direction signs, and flashers until project completion. All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA. It shall be the complete responsibility of the Contractor to protect persons from injury and to avoid property damage. Whenever required, flagmen and pilot car shall be provided to control traffic. The Contractor shall provide for the proper routing of vehicles and pedestrian traffic in a manner that will hold congestion and delay of such traffic to a practicable minimum by furnishing, installing, and maintaining all necessary temporary signs, barricades and other devices and facilities as approved by the Engineer. As the work progresses, the Contractor shall relocate such devices and facilities as necessary to maintain proper routing. Unless otherwise specified, upon conclusion of the need therefore, all temporary traffic routing devices and facilities shall be removed from the site of the work by the Contractor within 48 hours of completion of construction at that site.

During construction, the Contractor shall provide for a minimum of two (2) lane of through traffic in each direction. Each traffic lane shall not be less than twelve (12) feet wide, unless approved by the Engineer in writing. Any deviations from the approved traffic control plan, however minute, must be notified to and approved by the Engineer.
Lane closures for all items of work are allowed only during **8:30 AM to 4:30 PM**. The Engineer may restrict or alter the hours of work on a particular street due to traffic or other considerations. If Contractor chooses to work at night, a request shall be submitted to the Engineer two weeks in advance. No extra pay or premium pay will be allowed for night work. Lane closures during the day are limited to one lane at a time. Lane closures for night time work is limited for two lanes at a time. In addition to the standard lane closure hours, Contractor must adhere to the following:

- 4:30 p.m. to 9 p.m. ……… No Lane Closures Allowed
- 9:00 p.m. to 10:00 p.m. …. 1-Lane Closure Allowed
- 10:00 p.m. to 6:00 a.m. …. 2-Lane Closures Allowed
- 6:00 a.m. to 7:00 a.m. ……. 1-Lane Closure Allowed
- 7:00 a.m. to 8:30 a.m. ……. No Lane Closures Allowed

Contractor cannot close any lanes where there is no construction. Lane closure shall be taken only for the areas needed.

The placement of hot-mix asphalt, regardless of working hours, shall be allowed only when the ambient temperature is above sixty (50) degrees Fahrenheit and rising, and no rain is in the forecast for next 24 hours. The Engineer’s approval is required in any condition.

Contractor shall not have a pavement grinded surface open to public traffic more than 5 days. Contractor shall maintain all grinded surfaces free of dust and loose aggregate at all times. A Vacuum sweeper shall be provided daily. Traffic will not be allowed on a milled surface till the roadway has been properly delineated to the satisfaction of the Engineer.

The unit bid price for various bid items, whether used partially, completely or not, includes full compensation for furnishing all labor, materials, tools, equipment, incidentals, overhead and mark-up, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of traffic control as specified in the Caltrans Standard Specifications and these Special Provisions, and as directed by the Engineer.

Contractor shall install temporary traffic striping and shall be sufficiently maintained as directed by the Engineer. Temporary traffic striping shall include removable traffic stripe tape for stop bars and temporary plastic tabs for lane lines. Materials used for temporary traffic striping shall be approved by the Engineer prior to installation. Any traffic control for work required outside the limits of work shall be considered as included in the price paid for in various bid items.

Full compensation for furnishing, placing, maintaining, and removing temporary traffic striping shall be considered as included in the price paid for various bid items, and no separate payment will be made.

Nothing in these special provisions shall be construed as relieving the Contractor from his responsibility as provided in this section.

**5-1.13 Preservation and Perpetuation of Existing Survey Monuments**

The Contractor shall preserve and perpetuate existing monuments, property pins, chiseled cross and etc., affected by the work included in this project in accordance with Section 8771 of the Professional Land Surveyors Act in the Business and Professions Cod of the State of California.

The Contractor shall perform the survey to preserve any existing survey monuments such as chiseled crosses, survey iron pipes and etc. that may be present on the pavement, round corners and concrete flat work to be improved by
this project. **Monument preservation shall be done by or under the supervision of a Licensed Land Surveyor. Prior to construction work, a new record of survey shall be filed at the San Joaquin County Surveyor’s office, with copies submitted to the Engineer.**

The Contractor shall notify the Engineer immediately if any monument is disturbed. The Contractor shall be responsible for hiring a Licensed Land Surveyor to reset any survey monument disturbed by his/her operations. All survey monument records shall be filed with San Joaquin County Recorder’s Office.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

### 5-1.14 Maintaining Driveway Access

Driveways may be temporarily closed for working periods only. No driveway closures will be permitted at any other time. Working periods shall be interpreted as the time that work is actively in progress at the driveway location. At least one principal ingress/egress driveway to the residence or business must be maintained at all other times. Where there are two (2) or more driveways available, the principal driveway shall be designated at the sole discretion of the Engineer or property owner/tenant.

At locations with less than two (2) ingress/egress driveways, the Contractor shall maintain ingress and egress at all times and phase new improvements at driveway locations to the satisfaction of the Engineer. At the discretion of the Contractor, and without additional cost to the City, rapid-set concrete may be used at driveway locations.

The Contractor shall provide at least five (5) working days advance written notice to the Engineer and property owner/tenant prior to any work requiring the temporary closure of any driveway. The Contractor shall conduct operations to cause the least possible disruption to the property owner/tenant and damage to property. On completion of the construction work shift, unpaved driveway approaches shall be graded with aggregate base and rolled smooth in order to accommodate vehicular traffic, as directed by the Engineer.

All costs incurred by this provision shall be included in the various bid items and no additional compensation will be made.

### 5-1.15 Maintaining Pedestrian Access

Means of passage of pedestrian traffic around and through the work area shall be provided at all times.

Pedestrian walkways shall be surfaced with asphalt concrete, Portland cement concrete, or timber. The surface shall be skid-resistant and free of irregularities. Pedestrian walkways shall be maintained in good condition, and shall be suitable for wheelchair use. Walkways shall be kept clear of obstructions.

At least one (1) continuous walkway along one (1) side of the street shall be available at all times. At locations where work is actively in progress, the pedestrian walkway within a single block may temporarily closed at one (1) end of the block along one (1) side of the street. Pedestrians shall be rerouted to the walkway on the opposite side of the street.

The Contractor shall cause the least possible disruption to the affected properties and restore suitable pedestrian access immediately following completion of the active work in progress. Minor deviations from the requirements of this section, which do not significantly change the cost of the work, may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

Full compensation for maintaining pedestrian access shall be included in the contract price for mobilization, and
5-1.16 Encroachment Permit from City, County, Utilities, Railroads and Others

Attention is directed to Section 5-1.20B, “Permits, Licenses, Agreements, and Certifications,” of the Caltrans Specifications and these Special Provisions. The following is not an all-inclusive list of the required permits and/or licenses, if applicable:

- The Contractor shall obtain an encroachment permit from all affected owners of right-of-way.
- Contractor shall provide traffic handling plans designed by a licensed traffic engineer to the Engineer for review and approval. Once Contractor has obtained approval on the Traffic Handling Plans and Construction Phasing Plans, he will submit such plans to the permit center with the permit application.
- Contractor’s License. Contractor shall possess a valid California Class A Contractor License at the time of bid and maintain it throughout the duration of the contract,
- Business License. Contractor shall possess a valid City of Stockton business license prior to the execution of the contract and maintain it throughout the duration of the contract.
- City of Stockton encroachment permit must be obtained from the City Permit Center (937-8366) before the start of construction.
- Submit Storm Water Pollution Control Plan for construction
- Construction Notification (Dust Control). The Contractor is responsible for the preparation and submittal of the San Joaquin Valley Air Pollution Control District Construction Notification Form. The form and more information can be found at the following web site: [http://www.valleyair.org](http://www.valleyair.org).
- Submit Construction and Demolition Debris Recycling Report. The Contractor must complete the Construction and Demolition (C&D) Debris Recycling Report within 60 days of construction or demolition project completion. The completed form must by accompanied by the official weight tags or receipts verifying the information provided in the report and must be submitted to the City of Stockton Public Works Department, Solid Waste Division, 22 E. Weber Ave. Room 301, Stockton, CA 95202. Failure to provide the C&D Debris Recycling Report form with result in a 5% withholding of the contract amount.
- Construction Water. A water meter is required for the use of City water for construction. A similar permit and water meter is required from California Water Service, if the water is taken from the fire hydrant located in their service area. The Contractor is responsible of obtaining a permit for water from California Water Service, as applicable, for construction water obtained from a City hydrant. This permit shall be approved by the City of Stockton Fire Department.

Full compensation for conforming to the provisions in this section including applicable permit fees, shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.17 Schedule

Attention is directed to Section 8-1.02, “Schedule” of the Caltrans Specifications and these Special Provisions. The Contractor shall submit a baseline schedule of construction to the Engineer prior to the pre-construction meeting. Construction schedule must be approved before any construction may commence.
Full compensation for conforming to the provisions in this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.18  Preconstruction Survey

The Contractor shall perform a preconstruction survey of all existing driveways, mailboxes, fences, structures, survey monuments (including chiseled crosses and iron pipes), pavements and other aboveground facilities adjacent to the project limits prior to the beginning of any work, noting their condition by means of photographs and video tapes supplemented by written documentation, where applicable.

Color photographs shall be taken at minimum of twenty-five (25) feet intervals along each segments of work (block) to show the existing conditions within and around the jobsite. Each photograph shall clearly labeled the date, time, location, viewing direction and any special features noted. Two 4” x 6” copies of each photograph and a copy of videotapes shall be submitted to the Engineer. The photographs shall be indexed, inserted in place viewing folders and submitted in 3-ring binders.

Full compensation for preconstruction survey shall be included in the contract price for mobilization and no additional compensation will be allowed therefore.

5-1.19  Public Notification

The Contractor shall post an Advertisement/Public Education in a local newspaper (The Record) and circulate printed form letters/door hangers, approved by the Engineer, explaining the project to be done and the length of time inconvenience will be caused by the project. Newspaper advertisement shall be done two weeks before the first day of construction. The printed form letters/door hangers must be delivered to the residents and/or businesses to be affected one week in advance, but not later than 24 hours before start of the road work. CMS boards and construction information signs shall be placed two weeks prior to any road work at various locations per Section 5-1.12 of this Special Provision, advertising the pending construction and delays. The Contractor shall install “Road Closed,” arrows, Detour signs, C6 (Loose Gravel) signs, W6 (25 MPH) signs and barricades as necessary.

In addition, the Contractor shall provide temporary ”Tow-away, No Parking” signs posted in advance of the work which signs shall be removed upon completion of the work and the opening of the street to traffic. The signs shall not be less than 12”x18” size, ”Tow-away, No Parking” words shall be in white letters on red background, and must have Stockton Municipal Code 10-011.6, California Vehicle Code 22651(l)(n), Stockton Police Department telephone number 937-9354, and date and time of parking restriction clearly indicated on it. Such signs shall be placed no farther than fifty (50) feet apart. It shall be the Contractor's responsibility to arrange for the removal of any vehicles obstructing his/her operations.

The Contractor shall notify all residents and businesses affected by the construction, Utilities, School Districts, Sunrise Sanitation, Stockton Scavenger, and San Joaquin Regional Transit District at least 48 hours prior to starting the work. Any changes to the schedule would prompt the re-notification by the Contractor at no additional costs to City. Re-notifications will be required if there are any changes in original schedule. A list of agencies with the contact information is available below. Contractor shall maintain access to all businesses and residents at all times. No existing driveways shall be closed due to construction work.

The Contractor shall inform the City FireComm, (209) 464-4648, no later than twenty-four (24) hours before work is to begin. Any changes in the Contractor's schedule shall be promptly reported to the City FireComm, so that they are fully informed at all times of the locations of street closures/construction. Contractor shall keep the Engineer informed of all public notifications. Contractor shall provide a draft of all public notices to the engineer for review and approval prior to publishing.
All cost incurred by this provision shall be included in the various bid items and no additional compensation will be made therefore.

5-1.20 Non-Highway Facilities and Obstructions

Attention is directed to Section 5-1.36, "Property and Facility Preservation" and Section 5-1.36D, "Non-highway Facilities," of the Caltrans Specifications. The Contractor shall protect from damage any utility and other Non-highway facilities that are to remain in place, be installed, relocated or otherwise rearranged.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workers and of the public. Facilities requiring special precautions include, but limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases, natural gas in pipelines 6 inches or greater in diameter or pipelines operating at pressures greater than 60 pounds per square inch (gage); underground electric supply system conductors or cables, with potential to ground of more than 300 V, either directly buried or in duct or conduit which do not have concentric grounded or other effectively grounded metal shields on sheaths.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least two (2) working days, but not more than fourteen (14) calendar days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include but are not limited to the following:

Notification Center Telephone Number
Underground Service Alert-Northern California (USA) 1-800-642-2444 1-800-227-2600
Underground Service Alert-Southern California (USA) 1-800-422-4133 1-800-227-2600
The Contractor shall verify the horizontal and vertical locations of all existing utilities prior to start of construction. The Contractor shall be responsible for the repair and replacement of these or any other facilities damaged during construction. The Contractor shall notify Underground Services Alert (USA) to have existing facilities marked in the field.

If unknown existing facilities is encountered, the Contractor shall notify the Engineer in writing of the situation, request coverage of the work as extra work, and aid the Engineer in determining due diligence.

Payment for complying with this Special Provision shall be included in the various other items of work, and no additional compensation will be allowed therefor.

5-1.21 Site Maintenance and Cleanup

The Contractor shall maintain the work sites in a neat and orderly manner throughout construction. If, in the determination of the Project Inspector, the Contractor has not adequately maintained a clean, neat and orderly work site the Contractor may be required to pay to the City of Stockton the sum of two hundred fifty dollars ($250) per work site. The work shall be conducted in a manner that will control the dust. When ordered to provide dust control, the Contractor shall reduce the dusty conditions to the satisfaction of the Project Engineer. A permit shall be obtained from both, the City Permit Center and California Water Service Company, for construction water that is obtained from a fire hydrant. During and upon completion of construction, the Contractor shall remove all equipment, debris, and shall leave the site in a neat and clean condition to the satisfaction of the Project Engineer. Full compensation for Site Maintenance and Cleanup shall be considered as included in the price paid for the various items of work and no separate payment will be made therefore.

5-1.22 Disposal of Materials

All materials designated to be removed and not salvaged shall become the property of the Contractor and shall be disposed of in accordance with Federal, State and local laws, and ordinances. The Contractor shall file: 1) Construction and Demolition Debris Materials Checklist at the time of permit application, and 2) Construction and Demolition Debris Recycling Report within fifteen (15) days of job completion. Full compensation for conforming to the requirements of this section shall be considered included in the various bid items of work and no additional compensation will be considered therefore.

5-1.23 Pre-construction Meeting

The Engineer will schedule a pre-construction meeting with the Contractor following an award of the contract and prior to commencing construction. Full compensation for any activity associated with this work shall be included in the prices for the various contract items of work, and no additional compensation will be allowed therefore.

5-1.24 Submittals

The following is a list of anticipated submittals for the project to be submitted prior to start of construction. The list is provided to aid the Contractor in determining the scope of work, but is not intended to be all inclusive and additional submittals may be required:

<table>
<thead>
<tr>
<th>NO.</th>
<th>SUBMITTAL</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DAS 140</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DAS 142</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Form CEM1201 (LAPM Exhibits 16-B, certification that Federal Requirements in Form FHWA-1273 have been inserted in the subcontracts and will be incorporated in lower-tier contract, and that written subcontracts have been executed for any subcontracted work. The form is available at <a href="http://www.dot.ca.gov/hq/construc/forms/cem1201.pdf">http://www.dot.ca.gov/hq/construc/forms/cem1201.pdf</a></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pre-construction survey of entire project (Dated photos, identified locations …etc.)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Bird Survey Report</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lead Compliance Plan</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Buy America (Certificate of Compliance for Steel Furnished Materials)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Material Submittal and pertinent MSDS</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SWPPP Plans prepared by a QSD. Best Management Practices</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Construction Phasing Plans highlighting any night time work activities if requested</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Concrete Mix Design</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Asphalt Concrete (AC) Mix Design</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Emergency Contacts / Authorized representatives</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Project Baseline Schedule</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Staging agreement with private property owners</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Construction and Demolition Debris Recycling Report</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Copy of City of Stockton Business License</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>City of Stockton Road Encroachment Permit &amp; all other applicable permits</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Public Notifications (Flyers, News Release letter, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

The Contractor shall submit each submittal to the Engineer for review and approval with the submittal form approved by the Engineer. Submittals shall be sequentially numbered on the submittal form. Resubmittals shall be identified with the original number and a sequential resubmittal suffix letter. The original submittal shall be numbered X. The first resubmittal shall be numbered X-a and so on. Identify on the form the date of the submittal, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and/or special provision number, as appropriate. The Contractor shall sign the form certifying that review, approval, verification of Products required (if any), field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and contract documents. Any incomplete submittals will be returned for resubmittal.
For each submittal for review, allow ten (10) calendar days excluding delivery time to and from the Contractor. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work. When revised for resubmission, identify all changes made since previous submission. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

Submittals not requested either in the Contract Documents or in writing from the Engineer will not be recognized or processed.

All submittals shall be submitted within 10 calendar days from the date the Notice of Award. All above mentioned submittals are required prior to the issuance of the Notice to Proceed.

Except as may otherwise be indicated herein, the Engineer will return prints of each submittal to the Contractor with their comments noted on the submittal. The Contractor shall make complete and acceptable submittals to the Engineer by the second submission of a submittal item. The City reserves the right to withhold monies due to the Contractor to cover additional costs of the Engineer’s review beyond the second submittal.

If a submittal is returned to the Contractor marked “NO EXCEPTIONS TAKEN”, formal revision and resubmission of said submittal will not be required.

If a submittal is returned to the Contractor marked “MAKE CORRECTIONS NOTED”, formal revision and resubmission of said submittal will not be required.

Full compensation for conforming to the requirements of this section shall be considered included in the various bid items of work and no additional compensation will be considered therefore.

5-1.25 Progress Schedule

The Contractor shall provide baseline schedule for the construction of this project. Baseline schedule shall be updated and resubmitted to the Engineer for review and approval when changes in activities occur. Contractor shall submit Construction staging and traffic handling plan to the Engineer for review and approval before commencement of construction. All changes to the plan must be provided to the Engineer for approval. Contractor shall provide a three week look ahead schedule in addition to the original overall Project base schedule. The schedules and other documents can be filed electronically to the Engineer.

Full compensation for furnishing Progress Schedule shall be considered as included in the price paid for the various items of work and no separate payment will be made therefore.

5-1.26 Payments

Attention is directed to Section 9-1.06, “Partial Payments”, and 9-1.07 “Payment after Acceptance” of the Caltrans Specifications and these special provisions. No partial payment will be made for any materials on hand which are furnished but not incorporated in the work.

5-1.27 Unsatisfactory Progress

If the number of working days charged to the contract exceeds 75 percent of the working days in the current time of completion and the percent working days elapsed exceeds the percent work completed by more than 15 percentage points, the City will withhold 10 percent of the amount due on the current monthly estimate.

The percent working days elapsed will be determined from the number of working days charged to the contract divided by the number of contract working days in the current time of completion, expressed as a percentage. The number of contract working days in the current time of completion shall consist of the
original contract working days increased or decreased by time adjustments approved by the Engineer.

The percent work completed will be determined by the Engineer from the sum of payments made to date plus the amount due on the current monthly estimate, divided by the current total estimated value of the work, expressed as a percentage.

When the percent of working days elapsed minus the percent of work completed is less than or equal to 15 percentage points, the funds withheld shall be returned to the Contractor with the next monthly progress payment.

Funds kept or withheld from payment, due to the failure of the Contractor to comply with the provisions of the contract, will not be subject to the requirements of Public Contract Code 7107 or to the payment of interest pursuant to Public Contract Code Section 10261.5.

5-1.28 Noise Control Requirement

Noise control shall conform to the provisions in Section 14-8-02, “Noise Control,” of the Caltrans Specifications and these Special Provisions. Nothing in the Caltrans Specifications or these Special Provisions voids the Contractor’s public safety responsibilities or relieves the Contractor from the responsibility to comply with other ordinances regulating noise level.

The noise level from the Contractor’s operations, between the hours of 8:00 p.m. and 6:00 a.m., shall not exceed 86 dBA at a distance of fifty (50) feet. This requirement shall not relieve the Contractor from responsibility for complying with other ordinances regulating noise level.

The noise level requirement shall apply to the equipment on the job or related to the job, including, but not limited to, trucks, transit 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.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.29 Dust Control

Dust control shall conform to any requirements set forth in the San Joaquin Valley Air Pollution Control District Construction Notification Form, see Section 5-1.15 of these Special Provisions and Section 14-9.03, “Dust Control”, of the Caltrans Specifications.

Use of water except for recycled, reclaimed, or other non-potable water for the purpose of dust control or other construction used unless for health or safety purposes is prohibited.” The last paragraph of Section 14-9.03A of the Caltrans Specifications is deleted and the following substituted: “All dust control operations shall be performed by the Contractor at the time, location and in the amount ordered by the Engineer. The application of either water or dust palliative shall be under the control of the Engineer at all times.” Watering shall conform to the provisions of Section 17, “Watering,” of the Caltrans Specifications and these Special Provisions.

Contractor shall maintain the job site dust free at all times. Contractor shall provide a vacuum sweeper daily on the project and upon the request of the Engineer if additional efforts are needed to maintain the site dust free.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.
5-1.30 Maintaining Existing and Temporary Electrical System

Maintaining existing electrical systems shall conform to the provisions of Section 86-1.06, "Maintaining Existing and Temporary Electrical Systems," of the Caltrans Specifications and these Special Provisions. Existing traffic signal systems shall be kept in effective operation for the benefit of the traveling public during the progress of the work, except when shut down is permitted. The Contractor may request for the temporary shutdown (red flash) of traffic signals. The request shall be given to the Engineer 48 hours in advance. In general traffic signal shutdown is limited to the hours of 9:00 a.m. to 3:30 p.m., unless prior approval is obtained from the Engineer. The Contractor shall provide a list of all intersections requiring temporary shut, dates and times of shut down.

The Contractor shall notify the Police Department 24 hours prior to any operational shutdown of existing signal system.

The contractor shall be responsible for the maintenance of the entire existing signal system from the first day Contractor starts working on it to the final acceptance. The contractor shall respond to the notice of signal failure from, The City of Stockton, within two (2) hours and make repairs to the signal system as necessary. If the contractor fails to respond within the specified time, the City’s maintenance staff will repair the signal system. Any costs associated with the repair shall be billed to the contractor. In addition, a penalty of $500 per occurrence per day shall be charged to the Contractor for each maintenance call-out where the Contractor does not respond within 2 hours of notification.

The Contractor shall notify the Engineer and Police Department 24 hours prior to any operational shutdown of existing signal system.

Full compensation for performing the work in these specifications shall be included in the prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

5-1.31 Staging Areas

The street right of way shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the right of way, or allow others to occupy the right of way for purposes, which are not necessary to perform the required work.

The Contractor shall secure at his own expense any area required for storage of equipment or materials, or for other purposes. A copy of the "use" agreement shall be submitted to the Engineer prior to start of construction.

5-1.32 As-built/Record Drawings

The Contractor shall maintain a complete set of drawings (Red Line) on site for the purpose of keeping up to date all field modifications. This plan set shall be available for review by the project Inspector or the Engineer. These plans shall be provided to the Inspector after the completion of construction at the Post Construction Meeting and prior to the final payment. All revisions, modifications and/or changes shall be marked clearly. Notes and dimensions shall be in red and be clear and legible. These plans will be used by the Design Engineer to mark up the original plan sheets with the revisions made during construction.

Full compensation for furnishing the As-Built/Record Drawings shall be considered included in the various bid items of work and no additional compensation will be considered therefore.

5-1.33 Relations with California Regional Water Quality Control Board

This project lies within the boundaries of the Central Valley Regional Water Quality Control Board (RWQCB).
The State Water Resources Control Board (SWRCB) has issued to the City a permit that governs storm water and non-storm water discharges from City properties, facilities, and activities. The City’s permit is entitled “Order No. R5-2007-0173, NPDES No. CAS083470, Waste Discharge Requirements City of Stockton and County of San Joaquin Stormwater Discharges From Municipal Separate Storm Sewer System San Joaquin County
Copies of the permit may be obtained at: http://www.stocktongov.com/government/departments/municipalUtilities/util.html

The NPDES permits that regulate this project, as referenced above, are collectively referred to in this section as the "permits."

This project shall conform to the permits and modifications thereto. The Contractor shall maintain copies of the permits at the project site and shall make them available during construction.

The Contractor shall know and comply with provisions of Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from the project site and areas of disturbance outside the project limits during construction. Attention is directed to Sections 7-1.02, "Laws" 5-1.36, "Property and Facility Preservation," 7-1.05, "Indemnification", of the Caltrans Specifications.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor, or otherwise access the project site or the Contractor's records pertaining to water pollution control work. The Contractor and the City shall provide copies of correspondence, notices of violation, enforcement actions, or proposed fines by regulatory agencies to the requesting regulatory agency.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.34 Increased or Decreased Quantities

The City reserves the right to make such alterations, deviations, additions to, or omissions from the plans and specifications, including the right to increase or decrease the quantity of any item or portion of the work or to omit any item or portion of the work, as may be deemed by the Engineer to be necessary or advisable and to require such extra work as may be determined by the Engineer to be required for the proper completion or construction of the whole work contemplated, without adjustment in the unit price as bid. Section 9-1.06B and Section 9-1.06C of the Caltrans Standard Specifications shall not apply.

5-1.35 Differing Site Conditions

Differing site conditions shall conform to the provisions in Sections 4-1.06 of the Caltrans Specifications.

5-1.36 Changes and Extra Work

New and unforeseen work will be considered as extra work when determined by the Engineer that the work is not covered by any of the various items for which there is a bid price or by combinations of those items. In the event portions of this work are determined by the Engineer to be covered by some of the various items for which there is a bid price or combinations of those items, the remaining portion of the work will be classed as extra work. Extra work also includes work specifically designated as extra work in the plans or specifications.

Any such extra work will be set forth in a contract change order, which will specify the work to be done in connection with the change made, adjustment of contract time, if any, and the basis of compensation for such work. A contract change order will not become effective until approved by the City Manager and / or
City Council.

The Contractor shall do the extra work and furnish labor and equipment therefore upon receipt of an approved contract change order or other written order of the Engineer. In the absence of an approved contract change order or other written order of the Engineer, the Contractor shall not be entitled to payment for the extra work.

If, in the opinion of the Engineer, such work cannot reasonably be performed concurrently with other items of work, and if a controlling item of work is delayed thereby, an adjustment of contract time will be made.

Payment for extra work required to be performed pursuant to the provisions in this section, in the absence of an executed contract change order, will be made by force account as provided in Section 9-1.04 “Force Account” of the Caltrans Specifications; or as agreed to by the Contractor and the Engineer.

5-1.37 Notice of Potential Claim

The Contractor shall not be entitled to the payment of any additional compensation for any cause, or for the happening of any event, thing, or occurrence, including any act or failure to act, by the Engineer, unless he has given the Engineer due written notice of potential claim as hereinafter specified, provided, however, that compliance with this section shall not be a prerequisite for matters within the scope of the protest provisions under “Changes” or “Time of Completion” or within the notice provisions in “Liquidated Damages” not to any claim which is based on differences in measurements or errors of computation as to Contract quantities. The written notice of potential claim shall set forth the items and reasons which the Contractor believes to be eligible for additional compensation, the description of work, the nature of the additional costs and the total amount of the potential claim. If based on an act or failure to act by the Engineer, written notice for potential claim must be given to the Engineer prior to the Contractor commencing work; in all other cases, written notice for potential claims must be given to the Engineer within 15 days after the happening of the event, thing or occurrence giving rise to the potential claim. Attention is directed to Section 5-1.42, “Request for information” and Section 5-1.43, “Potential Claims and Dispute Resolution”, of the Caltrans Specifications.

It is the intention of this section that potential differences between the parties of this Contract be brought to the attention of the Engineer at the earliest possible time appropriate action may be taken and settlement may be reached. The Contractor hereby agrees that he shall have no right to additional compensation for any claim that may be based on any act or failure to act by the Engineer or any event, thing or occurrence for which no written notice of potential claim was filed.

5-1.38 Stop Notice Withholds

Section 9-1.16E(4) “Stop Notice Withholds” of the Caltrans Specifications is amended to read as follows:

"The City of Stockton, by and through the Department of Public Works, may at its option and at any time retain out of any amounts due the Contractor, sums sufficient to cover claims, filed pursuant to Section 3179 et seq. of the Code of Civil Procedures."

5-1.39 Records

The Contractor shall maintain cost accounting records for the contract pertaining to, and in such a manner as to provide a clear distinction between, the following six categories of costs of work during the life of the contract:

A. Direct costs of contract item work.

B. Direct costs of changes and extra work in character in conformance with Section 4-1.05, "Changes and Extra Work," of the Caltrans Standard Specifications.
C. Direct costs of differing site conditions.

E. Direct costs of work not required by the contract and performed for others.

F. Direct costs of work performed under a notice of potential claim.

G. Indirect costs of overhead.

Cost accounting records shall include the information specified for daily extra work reports. The requirements for furnishing the Engineer completed daily extra work reports shall only apply to work paid for on a force account basis.

The cost accounting records for the contract shall be maintained separately from other contracts, during the life of the contract, and for a period of not less than 3 years after the date of acceptance of the contract. If the Contractor intends to file claims against the City, the Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved, and no additional compensation will be allowed therefore.

5-1.40 Buy America Requirements

Attention is directed to the “Buy America” requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the Intermodal Transportation Efficiency Act of 1991 (ISTEA) Sections 1041(a) and 1048(a) and the regulations adopted pursuant thereto. In accordance with said law and regulations, all manufacturing processes for steel and iron materials furnished for incorporation into the work on this project shall occur in the United States; with the exception that pig iron processed, pelletized and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for such steel and iron materials. The application of coatings, such as epoxy coating, galvanizing, painting, and other coating that protects or enhances the value of such steel or iron materials shall be considered a manufacturing process subject to the “Buy America” requirements.

A Certification of Compliance shall be furnished for steel materials. The certificates, in addition to certifying that the materials comply with the specifications, shall also specifically certify that all manufacturing processes for the materials occurred in the United States, except for the exceptions allowed herein.

The requirements imposed by said law and regulations do not prevent a minimal use of foreign steel materials if the cost of such materials used does not exceed one-tenth of 1 percent (0.1%) of the total contract cost or $2,500, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of foreign steel and iron prior to incorporating such materials into the work.

5-1.41 Post-Construction Meeting

The Contractor shall be required to attend a post construction meeting that will be arranged by the Public Works Department after completion of all work and prior to acceptance of final payment. The Project Engineer and the Project Inspector shall attend this meeting. The purpose of the meeting will be to discuss the project and any related issues that can help improve future Public Works construction projects.

Full compensation for conforming to the requirements of this section shall be considered included in the various bid items of work and no additional compensation will be considered therefore.

SECTION 6 Blank
SECTION 7  Blank

SECTION 8  MATERIALS

8-1.01  Minor Concrete

Minor Concrete shall conform to the requirements of Section 90, “Concrete”, of the Caltrans Specifications and these Special Provisions.

8-1.02  Minor Concrete (Stamped Concrete)

Minor Concrete (Stamped Concrete) in the median shall conform to the provisions in Section 90, “Portland Cement Concrete,” of the Caltrans Specifications, these special provisions and to the details on the contract plans.

Apply “Tile Red” color hardener from Scofield, (916) 715-2717, or Brickform, (800) 483-9628, or approved equal. Seal with two coats of sealer per manufacturer’s recommendation. Apply “Terra Cotta” antiquing release agent from Scofield or Brickform, or approved equal. Use “Running Bond New Brick” pattern from Scofield, or approved equal.

Contractor shall remove existing AC paved areas in median islands and reconstruct stamped concrete in all areas as shown in contract drawings. Stamped concrete in median island between Sta3+75 and Sta10+50 shall match existing centerline crown of existing median island. Contractor shall maintain positive slope (2%) from center line of the median island to top of curb on each side. Contractor shall place ½” weekend plane joints at 20’ o.c. and a longitudinal weekend plane joint along the centerline of the medial island. Curb opening shall be installed at 19’-2” on center to allow proper drainage across the median island. Contractor shall re-construct the curb in areas where existing curb openings have been omitted. At the discretion of the Contractor, asphalt concrete grindings generated from the base failure areas on the project may be used as backfill material in median islands if material is considered suitable. If AC grindings is deemed to be unsuitable, Contractor shall dispose it at his own cost and use Class II aggregate base compacted to 95% relative compaction. Contractor shall credit the contract back the cost of Class II Aggregate base if asphalt grindings are used in the construction of stamped concrete.

Contractor shall adjust existing street lights and pull boxes to finished grade of stamped concrete. Contractor shall remove existing street light foundations and install a new at same location.

Prior to start of construction on the median islands, Contractor shall hire a licensed surveyor to tie down any existing curb chisels or aerial point pins. Contractor shall re-establish all curb chisels and aerial pins once stamped concrete construction has been completed.

MEASUREMENT AND PAYMENT

The contract price paid per square foot for the minor concrete (stamped concrete) includes full compensation for furnishing all labor, materials, tools equipment, cleaning and disposing of all debris, removal / re-installation of signs and incidentals, and for doing all the work involved in constructing the stamped concrete in the median as shown on the plans, as specified in the Caltrans Specifications, City of Stockton Standards and these Special Provisions, and as directed by the Engineer.

8-1.03  Minor Concrete (Extruded Concrete Curb)

Minor Concrete (Extruded Concrete Curb) in the median shall conform to the provisions in Section 90, “Portland Cement Concrete,” of the Caltrans Specifications, these special provisions and to the details on the contract
plans. Extruded curbs shall be placed in the median islands where none exists. Extruded curb shall have curb cut opening to allow for drainage matching existing conditions. Contractor shall retrofit existing extruded curb at median island nose as shown on plans and as directed by the Engineer. Contractor shall transition within a 10’ section from an 8” wide curb on top to a 6” wide curb. Contractor shall re-construct the curb in areas where existing curb openings have been eliminated by saw cutting existing curb and doweling each side.

**MEASUREMENT AND PAYMENT**

The contract price paid per linear foot for the minor concrete (extruded concrete curb) includes full compensation for furnishing all labor, materials, tools equipment, and incidentals, and for doing all the work involved in constructing the extruded concrete curb in the median as shown on the plans, as specified in the Caltrans Specifications, City of Stockton Standards and these Special Provisions, and as directed by the Engineer.

**8-1.04 Minor Concrete (Bus Pads)**

Minor Concrete (Bust Pads) at the two bus transit stops located on Pacific Avenue North bound at Yokuts Avenue and Benjamin Holt Drive shall conform to the provisions in Section 90, “Portland Cement Concrete,” of the Caltrans Specifications, these special provisions and to the details on the contract plans. Minimum compressive strength at 7 days shall be 4000 psi. Contractor shall construct the bus pads monolithically with concrete curb and gutter. Contractor shall use high strength concrete with an accelerator to achieve the required strength. Contractor shall hire a third party licensed laboratory to test the concrete strength and slump of the concrete and provide all test results to the Engineer.

**MEASUREMENT AND PAYMENT**

The contract price paid per square foot for the minor concrete (bus pad) includes full compensation for furnishing all labor, materials, tools equipment, and incidentals, and for doing all the work involved in constructing the two bus pads as shown on the plans located on Pacific Avenue North bound at Yokuts Avenue and Benjamin Holt Drive, as specified in the Caltrans Specifications, City of Stockton Standards and these Special Provisions, and as directed by the Engineer.

**8-1.05 Minor Concrete (Street Lights Foundations)**

Minor Concrete (Street Lights Foundations). Contractor shall replace existing street light foundations located within median islands between March Lane and Robinhood with new concrete foundations matching top of curb elevations and new stamped concrete finished grade. Contractor shall demolish and dispose of all existing foundations and replace them with the most current State Standard type foundation for a type 15 pole. New concrete foundations shall conform to the provisions in Section 90, “Portland Cement Concrete,” of the Caltrans Specifications, these special provisions and to the details on the contract plans. Minimum compressive strength at 28 days shall be 3600 psi.

**MEASUREMENT AND PAYMENT**

The contract price paid per each for the minor concrete (street lights foundation) includes full compensation for furnishing all labor, materials, tools equipment, re-wiring, demolishing of existing concrete foundations and disposal of, removal of existing street lights and re-installation, incidentals, and for doing all the work involved in constructing the new street lights foundations at same location of existing foundations as shown on the plans located on Pacific Avenue between March Lane and Robinhood Drive, as specified in the Caltrans Specifications, City of Stockton Standards and these Special Provisions, and as directed by the Engineer.
FFY 2015-16 Street Resurfacing Project, PROJECT NO. PW1519
FEDERAL PROJECT NO. STPL 5008(147)

SECTION 9 DESCRIPTION OF WORK

9-1.01 Description of Work

The work herein is primarily consisting of base failure repair, grinding, installation of loops installation, installation of PCC curb-ramps, extruded curb, raised median with stamped concrete, PCC work, utility maintenance hole adjustment, removal and replacement of thermoplastic striping, and other associated work, 1.5” and 3” inch AC overlay and re-striping.

The work includes all necessary, supplemental, incidental and related tasks to complete the work, including but not limited to, the furnishing of all labor, materials, tools, and equipment and other miscellaneous work. The order of work consists of the following:

1. Prior to start of construction, provide all submittals listed in Section 5-1.24 to the Engineer for review and approval.

2. Perform bird survey per Specification and submit report for review and approval.

3. Submit Construction staging and traffic handling plans to the Engineer for review and approval. All construction staging and traffic handling plans shall be prepared by a licensed traffic engineer. Contractor shall allow the Engineer a minimum of 14 days for review and approval. Approval of construction staging and traffic handling plans is required prior to the issuance of the notice to proceed. Cost of preparation of construction staging and traffic handling plans shall be included under Traffic Control Bid item.

4. Protect existing utility covers. Tie all utility covers using GPS coordinates or by marking on sidewalk.

5. Existing survey monuments and chiseled cross marks shall be preserved per Special Provisions and City of Stockton requirements for monuments preservation.

6. Remove and replace curb, gutter, sidewalk, curb-ramps with truncated domes as per plan and Engineer’s direction.

7. Remove and dispose of existing pavement within existing median islands

8. Construct extruded curb in median islands per plans.

9. Demolish existing street light foundations within existing median islands located between March Lane and Robinhood Drive and dispose of. Construct new street light foundations at same locations in accordance to State Standard drawings for Type 15 poles.

10. Adjust existing pull boxes within median islands to new finished grade

11. Construct stamped concrete in median islands per plans

12. Retrofit existing median islands nose

13. Construct the two bus pads located at Pacific Avenue and Yokuts Avenue and Benjamin Holt Drive

14. Perform base failure repairs using 3/4” Aggregate HMA mix as shown on the plans and marked on the site. Paving for base failure repair shall be done with a paver machine.
15. Contractor is fully responsible for doing all coordination with all outside utility companies regarding to lowering any existing facilities prior to the start of any grinding operation. Contractor shall be fully responsible for any damages that might occur to other utilities facilities.

16. Remove existing thermoplastic striping, reflectors, buttons and pavement markings.

17. Remove (Grind) existing AC pavement to a depth of one and a half (1 ½) inches. Remove (Grind) existing AC pavement to a depth of three (3) inches at all intersections including 100 linear feet of approaches to the intersections. Only approaches to intersections on Pacific Avenue shall be considered. If Contractor chooses to work at Night, a request must be submitted to the Engineer highlighting days and work hours to be worked. Contractor shall provide proper flood lights and reflective cones for all work. A milled roadway surface must be re-paved within 5 days from the date milling has started. Contractor shall provide paper joint ramps at 1:12 at all approaches to intersections.

18. Remove and replace, or install Loop Detectors, Handholes, and two (2) inch Polyvinyl Chloride conduits (schedule 80) to pull boxes as per the plan and Engineer’s direction.

19. HMA shall be ¾” aggregate PG 70-10 at 3” AC overlay areas (Intersections and 100 LF Approaches). HMA shall be ½” aggregate PG 70-10 at all 1 ½’ AC overlay areas. Contractor shall apply tack coat oil on all milled surfaces and edges prior to paving.

20. Power vacuum sweep and hand clean existing pavement surface and remove all debris and weeds. Vacuum sweeper will be provided to the project daily.

21. Cover all utility covers using thick plastic sheeting and mark the location on the sidewalk. Micro-surfacing shall be installed from the outer rim of the utility cover.

22. Expose all utility covers. Sweep curb, gutter, sidewalk, driveway and street. Install temporary pavement markings.

23. Adjust all existing utility covers (as necessary) to new finished grade after resurfacing as per these special provisions.

24. Install thermoplastic striping with reflectors and pavement markings as existing.

25. Such other items specified and required providing a smooth uniform riding surface and otherwise conforming to the specifications.

All move-in, clearing, grubbing, traffic control and re-moving in (re-mobilization) shall considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed. All extra work authorized by Contract Change Orders shall be paid as per unit price for various bid items, if the Contract Change Order work includes any bid items. All move-in, clearing, grubbing, tree trimming and traffic control for this extra work shall be included for in the unit price for the various bid item.

The following is the list of bid items for the project:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Bid Item Description</th>
<th>Unit of Measure</th>
<th>Estimated Quantity</th>
</tr>
</thead>
</table>

34
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION</td>
<td>LS</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>TRAFFIC CONTROL</td>
<td>LS</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>ADJUST UTILITY COVERS (SANITARY SEWER)</td>
<td>EA</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>ADJUST UTILITY COVERS (STORM DRAIN)</td>
<td>EA</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>ADJUST WATER VALVE AND LAMP HOLE</td>
<td>EA</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>ADJUST STREET CENTERLINE MONUMENT / SURVEY MONUMENT</td>
<td>EA</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>ADJUST DETECTOR HANDHOLE</td>
<td>EA</td>
<td>37</td>
</tr>
<tr>
<td>8</td>
<td>LEAD COMPLIANCE PLAN / REPORT</td>
<td>LS</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>BIRD (MIGRATORY &amp; RAPTORS) SURVEY REPORT</td>
<td>LS</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>SURVEY MONUMENT PRESERVATION AND REPLACEMENT</td>
<td>EA</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>INSTALL DETAIL 9 STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>41,000</td>
</tr>
<tr>
<td>12</td>
<td>INSTALL DETAIL 22 STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>300</td>
</tr>
<tr>
<td>13</td>
<td>INSTALL DETAIL 29 STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>900</td>
</tr>
<tr>
<td>14</td>
<td>INSTALL DETAIL 25A STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>20,700</td>
</tr>
<tr>
<td>15</td>
<td>INSTALL DETAIL 27M STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>1,700</td>
</tr>
<tr>
<td>16</td>
<td>INSTALL DETAIL 32 STRIPING W/ REFLECTORS</td>
<td>LF</td>
<td>200</td>
</tr>
<tr>
<td>17</td>
<td>INSTALL DETAIL 38 AND DETAIL 38A STRIPING</td>
<td>LF</td>
<td>7,800</td>
</tr>
<tr>
<td>18</td>
<td>INSTALL DETAIL 40M STRIPING</td>
<td>LF</td>
<td>600</td>
</tr>
<tr>
<td>19</td>
<td>INSTALL BLUE RETROФLECTIVE MARKER ACROSS FH 2 FEET OFF LANE LINE</td>
<td>EA</td>
<td>17</td>
</tr>
<tr>
<td>20</td>
<td>INSTALL THERMOPLASTIC (YELLOW CROSSWALKS)</td>
<td>SF</td>
<td>1,000</td>
</tr>
<tr>
<td>21</td>
<td>INSTALL THERMOPLASTIC (ARROWS, CROSSWALKS, ALL LEGENDS)</td>
<td>SF</td>
<td>10,900</td>
</tr>
<tr>
<td>22</td>
<td>SAW-CUT PAVEMENT AND INSTALL TRAFFIC SIGNAL LOOPS</td>
<td>EA</td>
<td>270</td>
</tr>
<tr>
<td>23</td>
<td>INSTALL DETECTOR HANDHOLE</td>
<td>EA</td>
<td>32</td>
</tr>
<tr>
<td>24</td>
<td>INSTALL RMC/SCH 80 PVC FROM DETECTOR HANDHOLE TO PULL BOX</td>
<td>LF</td>
<td>750</td>
</tr>
<tr>
<td>25</td>
<td>INSTALL TRUNCATED DOMES (4'X3'), INCLUDE ADA APPROVE SURFACE WORK PRIOR TO INSTALLATION</td>
<td>EA</td>
<td>19</td>
</tr>
<tr>
<td>26</td>
<td>CURB RAMP INCLUDING SAW CUTTING, REMOVAL AND REPLACEMENT OF AC AND PCC PAVEMENT</td>
<td>EA</td>
<td>12</td>
</tr>
</tbody>
</table>
## SECTION 10 CONSTRUCTION DETAILS

### 10-1.01 Adjust Utility Covers and Frames

The Contractor’s attention is directed to Section 15, “Existing Facilities” of the Standard Specifications and these Special Provisions. The Contractor shall protect all existing facilities from damage.

Existing maintenance hole frames and covers, lamp holes, survey monuments, detector handhole covers, monitoring wells, fire hydrant and water valve boxes that are owned by the City shall be lowered and adjusted to the new finish pavement grade as following.

All castings shall be brought to finish grade after the final pavement lift has been installed. The manhole openings shall be temporarily covered by suitable means, preferably with building paper. A circular or square saw cut at least twelve (12) inches deep using diamond pavement cutters shall be made at least twelve (12) inches (six (6) inches for covers less than ten (10) inches diameter size) from the manhole. If square saw cuts...
are used, the diagonal of the square shall align with the direction of travel. Smooth and clean cut of pavement is mandatory. Jackhammer can be used to break and remove the material after the saw cut; however, the use of jackhammer will not be allowed in lieu of pavement saw.

The manholes and valves shall be raised by installing concentric grade rings (pre-cast concrete) and/or leveling mortar. The Contractor shall furnish grade rings fitting the configuration of the existing frame.

The concrete used shall comply with provisions of Standard Specifications section 90-2.01, Minor Concrete. Use of high early-strength modified concrete is recommended. The concrete shall be placed up to one and one-half (1.5) inch lower than the surface of the adjacent pavement and three (3) inches at intersections and 100 LF approaches. A final lift of one and one-half (1.5) inch and three (3) inch of hot-mix asphalt shall be placed only after concrete is cured and have gained enough compressive strength to withstand the force of the compactor.

All finished adjusted frames and covers shall be level with or up to one-eighth (1/8) inch lower than adjacent pavement surface. The work shall be performed to present a neat and thorough workmanlike appearance upon completion, and result in a smooth ride over it. A six-foot straight-edge will be placed over the utility cover to check for this requirement.

Any damage to the existing facilities caused by the Contractor shall be repaired or replaced to the satisfaction of the Engineer at the expense of the Contractor.

The catch basin frame, grate, steel pull box etc., shall be adjusted to grade using new materials, and the existing frame and grate shall be reused to the extent possible as directed by the Engineer. The catch basin shall be raised as directed by the Engineer in the field.

All utility adjustment and valve box replacement, other than the City of Stockton’s, shall be at the expense of the owner of the utility. Contractor shall be responsible for all utility coordination and shall contact each utility company requesting them to lower their facilities prior to grinding and adjust their facilities to finished grade of new pavement. Contractor shall include outside utility companies time frame for utility adjustments within the baseline schedule of the project.

Upon completion of placement of overlay on each street, all utility covers (maintenance hole, water valve, lamp hole, and detector handhole covers, etc.) shall be clean and free of any hot-mix asphalt and shall seat securely in their frames.

The unit price paid for each manhole adjustment shall include the cost of: traffic control; removing and resetting existing frame and cover; concrete encasement; masonry; excavation; hot-mix asphalt surfacing; and furnishing all labor, materials, and equipment necessary to complete the work. No additional compensation will be made for multiple traffic control, mobilization, special labor, materials, equipment, or incidentals needed.

10-1.02 Utility Relocation Work

Contractor shall relocate type 1B pole at the North West corner of Pacific Avenue and Yokuts Avenue to allow room for constructing the wheel chair ramp at this location. Contractor shall refer to the contract drawings for the new pole location. Actual location of the 1B pole shall be verified with the Engineer prior to start of work.

MEASUREMENT AND PAYMENT

The contract price paid per lump sum for utility relocations (type 1B pole relocation) includes full compensation for furnishing all labor, materials, tools equipment, and incidentals, and for doing all the work involved in constructing and relocating the type 1B pole as shown on the plans located at the North West corner of Pacific Avenue and Yokuts Avenue, as specified in the Caltrans Specifications, City of Stockton Standards and these Special Provisions, and as directed by the Engineer.
10-1.03 Detector Loops

Work covered under this specification shall include furnishing all labor, materials, tools, equipment, traffic control and incidentals, and doing all work involved which is required for complete installation of loops. Work, traffic control or equipment not specified that is necessary for the proper operation of the work in this section shall be provided and installed at no additional cost to the City.

Any Contractor requesting changes from specifications should be made in writing to the City. No changes shall be made in the field without the City’s written approval of requested changes.

The Contractor shall grade, dress up all areas disturbed, and shall remove all rubbish, surplus, discarded material, false-work forms, temporary structures, equipment, machinery and shall leave the site in a neat and clean condition.

The Contractor shall notify USA and California Water Service Company at least seventy-two (72) hours in advance of the date of excavation or jacking operations that are to be started, so that these utility companies may assist the Contractor in locating or ascertaining the existence of these utilities.

The Contractor shall provide seventy-two (72) hour written or facsimile notice to the City before starting any work. The City shall mark the loops on the pavements.

Hydrants, valve boxes, curb-stop boxes, fire or police call boxes, or other utility controls shall be unobstructed and accessible during the construction period.

Should the Contractor desire to have any alterations made in any utility or other improvement for his/her own convenience in order to facilitate his/her construction operations and for his/her sole benefit, he/she shall make all necessary arrangements with the owners and bear all expense in connection therewith.

Due care shall be exercised to avoid damage or injury to existing street improvements and utility facilities that are not to be removed. All pipes and conduits broken by the Contractor shall be replaced at Contractor’s expense. Materials used in replacing broken or damaged pipes and conduit shall be the same as the section of broken pipe or conduit unless permission to use other materials is given by the Director of Public Works.

All work mentioned in this article not otherwise provided for, shall be included in the total bid and no additional compensation will be made therefore.

All necessary traffic control for work areas shall be provided and shall comply with most recent edition of “California Manual on Uniform Control Devices”.


New detector loops shall be installed immediately after any roadway grinded surface has been completed. Time delays in the installation of detector loops will not be allowed.

The Contractor can use either: a) saw-cut; or b) pre-formed sub-surface loop installation under the final lift of hot mix asphalt. Loops shall not be cut after the final lift of hot-mix asphalt is placed.

Lead-in Cables
Loop detector lead-in cable, from the pull box for the detector handhole adjacent to the loop to the field terminals in the controller cabinet, shall conform to the following:

Lead-in cable shall be Canoga (3M) detector loop lead-in cable #30003 and consist of 4 number 18 stranded copper conductors with each conductor insulated with polyethylene. The conductors shall be twisted together with a minimum of 5 turns per foot and the twisted pair shall be protected with a shield of aluminum polyester jacket with a thickness of 27 mils, minimum, at any point, and shall be UL listed, Style 2106. The diameter of the cable shall be 0.25 inch maximum. The diagonal pairs shall conform to the following color-coding: White/Black and Red/Green.

Lead-in cable shall be identified and banded by lane in the detector handhole and near the termination of the conduit in the controller. Bands shall conform to the provisions in the Caltrans Specifications.

**Saw-Cut Installation**

The City will mark the location of new loops. The loops shall be installed in six (6) foot by six (6) foot Type A configuration with a Type D loop adjacent to the limit line. A five (5) foot by five (5) foot loop shall be installed for dual left lanes or where there are multiple lanes with presence loops adjacent to each other and are 11 feet wide and narrower.

The spacing between all loops shall be ten (10) feet. All loops shall be wrapped in the slots in a **clockwise direction** only. The loop wire ends MUST be marked START and FINISH with a loop identification number. The Contractor shall mark (using paint) the direction of loop winding on the pavement where the loops are cut. The City reserves the right to check the direction of loop windings later. **If the loop windings are found not to be in compliance with these Special Provisions, the Contractor shall re-install loops at his/her own expense.** No additional compensation shall be allowed for this re-installation.

Slots cut in the pavement shall be immediately cleaned by washing with water to remove all sawing residues and blown out and dried before installation of conductors.

The ends of loop conductors shall be sealed and made waterproof prior to being installed in the conduit and prior to being left for splicing. After conductors are installed in the slots, the slots shall be filled with sealant. The sealant shall be at least one (1) inch thick above the top conductor in the saw cut. Each loop shall be checked and filled with sealant after a minimum elapsed time of one (1) hour. This is due to trapped air pockets and/or settling of the sealant.

The Contractor shall use approved loop detector sealant. Sealant shall be Asphalt Emulsion Induction Loop Sealant, State Spec. No. 8040-41A-15 as manufactured by Reed and Graham of San Jose, California, or City approved alternate. For concrete surface installations, Elastomeric sealant shall be used.

Loop detector sealant must be used at air temperatures above 40 degrees Fahrenheit. Sealant shall be placed one-eighth (1/8) inch below pavement surface. At no time shall the sealant be installed if the ground is wet.

One (1) inch minimum diameter holes shall be core drilled at the loop corner after slots are saw cut. Diagonal corner cuts shall not be permitted. Home run cut must be at a 45-degree angle from any corner of the loop.

**Pre-Formed Sub-Surface Loops Installation (EZY-LOOPS OR APPROVED EQUAL)**

The pre-formed loops shall meet the above specification for saw-cut loop installations except that the pavement will not be cut.

The electromagnetic traffic detection loops shall be pre-formed and encapsulated in a protective, adhesive bandage so that they may be laid within a road pavement as a single unit for designed for installation prior to the final lift of pavement and self-adhere to the existing or an adequate sub-surface layer of pavement. There shall be no splices at any time throughout the continuous wire of the preformed loop system.
The preformed loops shall be capable of being installed beneath a final asphalt layer of one and one-half (1½) inches or greater without showing any indication of product reflection into the finished lift of pavement.

The overall thickness profile of the installed preformed loop shall be no greater than three-eighths (¼) inch. The loops shall not be installed if the ambient working temperature is less than 50 degrees Fahrenheit and/or road surface temperature is less than 68 degrees Fahrenheit. The loop area must be swept thoroughly and remain free from dust during installation. Loops shall be installed by installing a base bandage and over bandage.

The base bandage of the preformed loop shall be a heavy-duty 2.4kg/m² (5.3 lb/3.28 ft²) high strength PVC mat, in the form of a 150mm six (6) inch wide bandage. It shall be impregnated and coated with a tough polymer modified bitumen compound and meet the following specifications.

- Total Thickness: 3 mm (nominal)
- Membrane Tensile Strength: (BD 2782): 19 N/mm²
- Membrane Impact strength Round Tup: (ASTM G14) 10 joule
- Membrane Impact strength Chisel Tup: (BGC/PS/CW2) 5.5 joule

The over-bandage of the preformed loop shall be “TechBand”, or a similar approved woven polypropylene bandage coated with a polymer modified bitumen mastic layer 100mm (4 inches) wide. It shall meet the following specifications.

- Total Thickness: 1.8 mm
- Peel Adhesion: 4.0 N/mm
- Membrane Resistance to Puncture: 900 N
- Elongation: 50%
- Membrane Strength: 25.0 N/mm

The loop lead wires shall be encapsulated and protected the entire length from the loop to the hand hold or pull box utilizing the base bandage beneath the lead wire, and securing the lead wires to the protective base bandage by placing the Tech Bandage over-bandage or similar approved material over the lead wire and base bandage system. The lead-in wires should be sufficiently long (generally about 50 feet) to cover the distance between DH and pull box. The wires shall be twisted as per State standards.

Electrical conductor wire shall be a multi strand, copper wire, zinc annealed, 1x1.5 mm² TAC, utilizing XLPE OR USE-2 insulation loop cable for vehicle detection.

Detector loop conductors shall conform to International Municipal Signal Association, Inc., specification number 51-5-1984 or equal. Wire shall be 14 AWG, 19-strand conductor insulated by a polyvinyl chloride compound. The insulated conductor shall be completely enclosed in a nylon jacket. The wire shall be encased in a tube of either polyvinyl chloride or polyethylene compound. Encasing tube made of polyvinyl chloride shall comply with ASTM D2220. Encasing tube made of polyethylene compound shall comply with ASTM-D1248 for Type II, Class C, Grade P33.

The Contractor shall splice the loop detectors leads at the pull box, and connect into the traffic signal cabinet. All loops must be tested for continuity and measured for series resistance and insulation resistance using a Megohmmeter before splicing. The test shall be made in the presence of the Project Inspector. If the series resistance of a loop assemble is greater than 10 ohm, the Contractor shall inspect the loop assembly to find the cause of the excessive resistance, and correct the cause at no additional cost to the City. If the insulation resistance is found to be greater than 100 ohm, the Contractor shall determine the cause of the problem by isolating it to either the lead-in cable or the loop wire. If the loop wire is found defective, the Contractor shall replace the loop wire at no cost to the City. If the cable is found defective, the City will replace it at no cost to the
Contractor. If the loop is found defective after final installation, the Contractor shall re-install loop at his/her own expense. No additional compensation shall be allowed for this re-installation.

The contract prices paid per unit (each) of detector loop shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing loop, testing, and splicing as shown on the plans, as specified in Standard Specifications and these Special Provisions, and as directed by the Engineer.

Detector Handhole and Conduit
The City will mark the location of new detector handholes (DH). Only Type A or B Traffic Rated detector handholes, Type 4-TT shall be used, with metal triangular lids. The point of the triangle shall face the direction of traffic. If the handhole is located at the lip of gutter, four-inch deep concrete is required around the handhole. Otherwise, the handhold shall be located at the lane line about five (5) feet away from the corner of the loop. All loop wires shall have three (3) feet of slack in the pull box. All loop wires shall be routed through the handhole.

Home run conduit (between DH and PB) shall be a minimum of two (2) inch schedule 80 Polyvinyl Chloride. The conduit shall be installed a minimum depth of two (2') feet from the top of the pavement or curb. The conduit can be bored under existing concrete curb.

All detector loops, conduits and hand-holes must be installed prior to final paving.

The contract price paid per unit (each) of detector hand hold shall include compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing of detector handhole as specified in the Standard Specification and these Special Provision, and as directed by the Engineer.

The contract prices paid per linear feet of pipe installation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing pipe and detector handhole, and routing the loop wires through it to the nearest pull box as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

10-1.04 Temporary Pavement Striping and Markings
The Contractor shall furnish, place, maintain and remove temporary markings (tape) in accordance with the provisions in Section 12-3.01, “General,” of the Caltrans Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the California MUTCD for streets and highways. Temporary pavement delineation shall not be applied over existing markings, and shall be maintained until replaced with permanent one. Any temporary pavement marking conflicting with new traffic pattern shall be promptly removed, or removed as directed by the Engineer.

Full compensation for furnishing, placing, maintaining and removing the temporary pavement marking shall be included in the contract price for various bid items, and no extra payments will be paid therefore.

10-1.05 Thermoplastic Striping and Markings
The work herein provided for consists in general of installing thermoplastic striping and all associated work. The work flow is anticipated as follows:

1. The City marks the limits to be striped.
2. The Paving Contractor installs temporary pavement markers on the pavement.
3. The Contractor establishes the pre-marking as per the existing striping layout and pavement markings, per as-built plans, engineering plans, aerial photos, or photographs and videos, and as directed by the Engineer.
4. The Contractor installs cat-tracking within 72 hours of pavement completion.
5. The Engineer approves the cat-tracking.
6. The Contractor installs longitudinal thermoplastic striping (by ribbon gun or extruded shoe attachment) of minimum thickness of 0.09”.
7. The Contractor installs the retro-reflective pavement markers.
8. The Contractor installs pavement markers, crosswalk, parking Ts, arrows, STOP/YIELD, and other transverse marking and legends.
9. The Contractor removes the temporary pavement markers.

Contractor’s responsibility
The Contractor shall use striping plans, aerial photography, video, photographs, or any other methods to establish **pre-marking** on the pavement as per existing striping. The Contractor shall install **cat-tracking** using these pre-marks and get approval of the Engineer before commencing permanent striping in thermoplastic. It is expected that some changes may occur compared to existing striping.

Within ten (10) working days of approval of the Engineer or his designee, the Contractor shall install all longitudinal thermoplastic striping, reflectors, pavement markers and other transverse markings and legends and provide all labor, materials, equipment and traffic control as per California Manual of Uniform Traffic Control Devices.

The supplied equipment shall be in good working condition at all times. The Engineer shall provide a notice to the Contractor at least 24 hours in advance. No premium shall be paid for night, weekend or holiday work. In general, it is expected that most of the work will be performed during weeknights (Sunday-Thursday) between 9:00 p.m. and 5:00 a.m. However, the working hours can be changed at any time with a 24-hour notice (via telephone, voicemail, fax, e-mail, or mail) to the Contractor. It shall be the Contractor’s responsibility to keep all modes of communication in working conditions at all times.

The Contractor shall follow proper traffic control per Caltrans Standard Plans or current MUTCD Standard during work.

Equipment and processes for installation of long-line thermoplastic traffic striping should include or be capable of:

1. Working in conjunction (including truck-to-truck communication) with support vehicles for installation and protection of newly applied thermoplastic traffic striping within accepted operational guidelines for mobile construction operations during daytime or night time hours.
2. Installing thermoplastic material, with concurrent application of additional retro-reflective glass beads, to install, superimpose, or re-trace existing lines on tangents or curves in the width and dimensions specified.
3. Capability of installing solid and broken lines through the use of a calibrated skip-timer device.
4. The equipment should be able to carry a pre-melter of minimum capacity of 4,000 LB per color, and glass bead capacity of 3,000 LB to ensure continuous operation without interruption.
5. Maintain and prepare thermoplastic material in sufficient quantity and acceptable temperatures for efficient, high production application of thermoplastic material within a vehicle application speed range of 5 to 8 MPH.
6. Operating in conjunction, or concurrently with equipment designed to apply any manufacturer’s recommended primer material required for proper bonding of the thermoplastic material to the road surface or existing traffic marking.

Traffic stripes and pavement marking shall conform to the dimensions and details shown on California MUTCD. Any discrepancies on measurement of completed stripes to their respective California MUTCD details will be a pay deduct of their respective line item unit price. If the discrepancies are substantial, the traffic stripes must be removed and replaced.
The completed traffic stripes must have clean and well-defined edges without running or deformation, must be uniform, must be straight on tangent alignment and must be a true arc on curved alignment. The completed pavement markings must have clean and well-defined edges without running or deformation and must conform to the dimensions shown on the MUTCD standard. Minor variation maybe accepted at the Engineer’s discretion.

The Contractor shall provide a qualified individual in-charge of quality-control during application operations who is not an active member of the installation crew. This requirement may be waived by the Engineer, if work results are satisfactory to the Engineer.

Thermoplastic traffic stripes and pavement markings shall conform to the provisions in Section 84-1, “General”, and Section 84-2, “Thermoplastic Traffic Stripes and Pavement Markings,” of the State Standard Specifications, and to these Special Provisions.

Material
Thermoplastic traffic stripes and pavement markings, where applicable, shall conform to the most current approved pre-qualified and tested signing and delineation materials and products list maintained by the California Department of Transportation. For this project, white and lead-free yellow Alkyd Resin Binder specification number PTH-02ALKYD (dated February 2009, or update) shall be used. The Contractor shall supply all material and provide the manifest of the material, which includes the manufacturing and/or shipping date.

Primer
If the striping is installed on asphalt-concrete surfaces, which have been paved more than two weeks, a primer specified by the manufacturer of thermoplastic material to be used, shall be applied as per the direction.

Striping
For pavement striping, use either ribbon gun or extrusion dies to install lines at a minimum thickness of 0.09 inches on the pavement surface in a melted state at a temperature of 400-440 °F.

The pavement surface to which thermoplastic material is applied shall be completely coated by the material and the voids of the pavement surface shall be filled.

Apply additional glass beads by drop-on or pressure spray methods at a uniform minimum rate of 0.72-0.92 lbs/square yard of markings. The Caltrans Specification Number for glass beads in Section 84-2, "Materials," of the Standard specifications is amended to read "8010-21C-22 (Type II)."

The bead shall be embedded approximately 60 percent for optimal retro-reflection and retention at a maximum striping truck speed of 8 mph. The Contractor shall adjust the striping truck speed so that the bead embedment is maintained at approximately 60 percent. The beads will likely pop out very quickly at less than 60 percent embedment and the light cannot enter the bead or return at 75-100 percent embedment.

10-1.06 Removal of Existing Pavement Striping, Markers, and Markings

Legends, striping, and markings that are to be removed by this contract shall conform to Section 15-2.02C, “Remove Traffic Stripes and Pavement Markings”, of the Caltrans Standard Specifications and shall be removed by grinding or other City-approved method. All removed traffic stripes and pavement markings and excess material shall become the property of the Contractor and shall be disposed of in a legal and proper manner. Contractor shall use his own EPA ID number to dispose all hazardous waste material. Payment described in Section 15-2.02C (3) is not applicable to this contract.

Removal and disposal of existing traffic markings and excess material shall conform to Section 15, "Existing Highway Facilities," of the Caltrans Standard Specifications and as specified herein. Storm drain inlets adjacent to areas to be ground shall be protected from grindings, or any material or runoff entering the storm drain...
Full compensation for removal of striping, marking and markers shall be included in the contract price for various bid items, and no extra payment will be paid therefore.

10-1.07 Pavement Striping and Markings

Thermoplastic traffic stripe (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, “Traffic Stripes and Pavement Markings,” of the Caltrans Specifications and these Special Provisions.

Thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in State Specification PTH-02ALKYD.

Retroreflectivity of the thermoplastic pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic pavement markings shall have a minimum initial retroreflectivity of 250 mcd·m⁻²·lx⁻¹. Yellow thermoplastic pavement markings shall have a minimum initial retroreflectivity of 150 mcd·m⁻²·lx⁻¹.

Thermoplastic pavement markings shall be applied at the minimum thickness and application rate as specified below. The minimum application rate is based on a solid stripe 4 inches in width.

<table>
<thead>
<tr>
<th>Minimum Marking*</th>
<th>Minimum Application Rate (lb/ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (inches)</td>
<td></td>
</tr>
<tr>
<td>0.098</td>
<td>0.34 lb/ft</td>
</tr>
</tbody>
</table>

*Minimum thickness for cross walk markings is 0.12 inches

Thermoplastic pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

Full compensation for furnishing all labor, materials, tools equipment, and incidental as required and doing all work involved in installing various thermoplastic pavement striping and marking, complete in place, will be considered as included in the contract square foot price paid for in placing each type of thermoplastic pavement marking, and no additional compensation shall be allowed.

Thermoplastic Traffic Stripe (Sprayable)

Sprayable thermoplastic traffic stripes (traffic lines) shall be applied in conformance with the provisions in Section 84, “Traffic Stripes and Pavement Markings,” of the Standard Specifications and these special provisions.

Sprayable thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in State Specification NO. PTH-02SPRAY.

Retroreflectivity of the sprayable traffic stripes shall conform to the requirements in ASTM Designation: D 6359-99. White sprayable thermoplastic traffic stripes shall have a minimum initial retroreflectivity of 250 mcd·m⁻²·lx⁻¹. Yellow sprayable thermoplastic traffic stripes shall have a minimum initial retroreflectivity of 150 mcd·m⁻²·lx⁻¹.

At the option of the Contractor, permanent traffic striping and pavement marking tape conforming to the provisions in “Prequalified and Tested Signing and Delineation Materials” of these special provisions may be placed instead of the sprayable thermoplastic traffic stripes. Permanent tape, if used, shall be installed in conformance with the manufacturer’s specifications.
Where striping joins existing striping, as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Sprayable thermoplastic material shall be applied to the pavement at a minimum thickness of 0.098 inches and a minimum rate of 0.34 lb/ft. The minimum application rate is based on a solid stripe of 4 inches in width.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing various thermoplastic pavement striping, complete in place, will be considered as included in the contract lineal foot price paid for placing each type of thermoplastic pavement striping, and no additional compensation shall be allowed.

**10-1.08 Pavement Markers**

Pavement markers shall be placed in conformance with the provisions in Section 85, "Pavement Markers," of the Caltrans Specifications and these Special Provisions.

The Contractor shall furnish the Engineer certificates of compliance.

Retroreflective pavement makers shall be marked as abrasion resistant on the body of the markers.

Retroreflective pavement markers placed in pavement recesses shall be cemented with a flexible, polymer-modified, hot-melt asphaltic adhesive conforming to the following requirements:

<table>
<thead>
<tr>
<th>Specification</th>
<th>ASTM Designation</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penetration, mm, 100 g, 5 seconds, 25°C</td>
<td>D 5</td>
<td>3.0 Maximum</td>
</tr>
<tr>
<td>Softening Point, °C</td>
<td>D 36</td>
<td>93 Minimum</td>
</tr>
<tr>
<td>Brookfield Thermosel Viscosity, Pa s, No. 27 Spindle, 20 RPM, 191°C</td>
<td>D 4402</td>
<td>2.5 - 6</td>
</tr>
<tr>
<td>Ductility, cm, 5 cm/min, 25°C</td>
<td>D 113</td>
<td>15 Minimum</td>
</tr>
<tr>
<td>Ductility, cm, 1 cm/min, 4°C</td>
<td>D 113</td>
<td>5 Minimum</td>
</tr>
<tr>
<td>Flexibility</td>
<td>D 3111&lt;sup&gt;1, 2, 3, 4&lt;/sup&gt;</td>
<td>No breaks or cracks</td>
</tr>
</tbody>
</table>

Notes:

Modify ASTM Designation: D 3111, Paragraph 6, to "The test apparatus consists of a mandrel one inch in diameter by 3 inch to 6 inch in length, supported at each end."

Modify ASTM Designation: D 3111, Paragraph 7, to "The test specimen dimensions are one inch wide, 6 inch long, and 1/8 inch thick."

Modify ASTM Designation: D 3111, Paragraph 8, to "Condition the test specimens
and apparatus for 4 hours at 19° F before testing.

Modify ASTM Designation: D 3111, Paragraph 10.5, to "Bend the test specimens 90° over the mandrel at a uniform rate in 10 seconds while maintaining intimate contact with the mandrel."

See following page
Testing of adhesive bond strength will be performed on sandblasted concrete brick surface in conformance with the requirements in California Test 669 and these special provisions. The concrete brick surface will be sandblasted in conformance with the requirements in California Test 423. The test plugs of 2-inch diameter will be conditioned at 221°F for a minimum of 2 hours before bonding to the sandblasted concrete surface. The adhesive sample will be heated to the application temperature as recommended by the manufacturer and a sample of 3 inch diameter in area will be poured onto the sandblasted concrete surface. The heated plug will immediately be pressed onto the puddle of hot adhesive to squeeze out excess adhesive. The excess adhesive extruding from under the plug will be removed. The assembly will be allowed to cure for 24 hours at 73°F ± 3.6°F and then be tested to bond failure at a crosshead speed of 2 inches per minute. The reported peak load and the bond strength value will be the average of 3 tests, respectively. The same bond strength test will be performed on retroreflective pavement markers. Instead of placing the heated adhesive sample on the sandblasted concrete surface, it will be placed on the bottom of the pavement markers.

Pavement markers shall not be placed on new asphalt concrete surfacing or seal coat until the surfacing or seal coat has been opened to public traffic for a period of not less than 7 days when hot melt bituminous adhesive is used. Existing pavement markers, when no longer required for traffic lane delineation, shall be removed and disposed of as directed by the Engineer.

Pavement markings shall conform to the provisions in Sections 84-1.01, “General,” and 84-3, “Painted Traffic Stripes and Pavement Markings,” of the Caltrans Specifications and these Special Provisions.

Any necessary cat tracks, dribble lines, and layout work as shown on the Plans, as specified in these Specifications and the Special Provisions, as directed by the Engineer shall be considered as included in the price paid for the various items of work, and no separate payment will be made for this work. Payment for pavement markers shall be considered as included in the price paid for the various pavement striping items of work, and no additional compensation will be allowed therefore.

Contractor shall install blue raised reflective pavement markers to mark fire hydrant locations. The blue reflective pavement markers should be placed 2 feet from the centerline stripe or approximately center of the pavement where there is no centerline stripe on the side nearest the fire hydrant. Full compensation for furnishing and placing of the blue raised reflective pavement markers shall be considered as included in the prices paid for the various striping items of work and no separate payment will be made.

10-1.09 Environmental Regulations

Contractor shall comply with the following Best Management Practices regarding storm water regulations.

- All thermoplastic striping and pre-heater equipment shutoff valves shall be inspected to ensure that they are working properly to prevent leaking thermoplastic from entering drain inlets, the storm water drainage system, or watercourses.

- The pre-heater shall be filled carefully to prevent splashing or spilling of hot thermoplastic. Leave six inches of space at the top of the pre-heater container when filling thermoplastic to allow room for material to move when the vehicle is deadheaded.

- Contractor shall not pre-heat, transfer, or load thermoplastic near drain inlets or watercourses.

- Clean truck beds daily of loose debris and melted thermoplastic. When possible recycle thermoplastic material. Thermoplastic waste shall be disposed of in accordance with Section 5-1.11 of these Special Provisions.
10-1.10 Public Safety

The Contractor will be responsible for placing barricades, lights, signs and utilization of flagmen at the job site, if required.

The Contractor is responsible for the safe operation of his equipment at the job site and in transit. The Contractor crew must be trained, knowledgeable and experienced to perform the job. They should have received proper certifications, safety training and must follow relevant state and federal safety regulations, such as OSHA and CalOSHA.

10-1.11 Tack Coat

Asphaltic Emulsion Tack-Coat

A tack coat of asphaltic emulsion shall be furnished and applied at the minimum residual rate of 0.06 gallons/SY to existing asphalt concrete pavement surface prior to overlay or between layers of hot mix asphalt overlay, vertical surfaces of existing pavement, construction joints, curbs, and gutters. The emulsion shall be CRS-2h, PMCRS-2h or other emulsion approved equal by the Engineer. The Contractor shall request in writing for emulsion substitution providing engineering properties and test results of the proposed emulsion before the project begins. No substitution will be allowed once the project is underway.

If you dilute Asphaltic emulsion, mix until homogeneous before application. Apply to vertical surfaces with a residual tack coat rate that will thoroughly coat the surface without running off. Close areas receiving tack coat to traffic. Do not track tack coat onto pavement surface beyond the job site.

Full compensation for the use of asphaltic emulsion tack coat shall be included in the Hot Mix Asphalt Material bid item and various bid items and no additional compensation will be allowed therefore.

10-1.12 Base Failure Repairs (dig-out)

Base failure repairs shall be performed by:

a) Excavating the marked (failed) area of the pavement and removing any wet and unstable material up to six (6) inches, until a solid & dry surface is reached. If existing pavement is still severely cracked and alegated or if existing base layer or subgrade is unsuitable and pumping after eight (8) inches or more of excavation, the Contractor shall notify the Engineer and provide a recommendation. The Engineer or his/her designee has a full discretion to adjust the depth of the base repair depending on the existing condition of the base. Pavement fabric maybe present in the pavement areas to be excavate (or milled). Pavement fabric exposed by this operation shall be completely removed. No additional compensation will be allowed for cold milling based on the presence of paving fabric and for the complete removal of the fabric.

b) Compact the sub-base/base as directed by the Engineer.

c) Spray the tack-coat as per Caltrans Standard Specifications Section 39-1.09C on the milled pavement surface and to all vertical edges. The application rate shall be from 0.06 to 0.10 G/SY and as directed by the Engineer.

d) Construct the base of the street using PG70-10, three-quarter (¾) inch Nominal Maximum Aggregate Size hot-mix asphalt layers. A maximum of three (3) inches is allowed in one lift of hot-mix asphalt. Asphalt Bitumen content in the mix delivered at the site shall not be below 4.9%. The Contractor shall frequently test the material (at a minimum of one sample per 750 tons) for gradation, air voids, asphalt content, and stability at the hot-mix plant. An approved mix design is required. Details are in “Hot Mix Asphalt”, section 11. Base Failure repair work shall comply with
Section 11-1.13 "Spreading Equipment", Section 11-1.14 "Spreading", Section 11-1.15 "Compacting Equipment", Section 11-1.16 "Compacting Base Failure Repair", and Section 11-1.20 "Smoothness" of these Special Provisions.

e) Base failure repairs shall comply with Section 11-1.21 "Acceptance Testing for HMA", and Section 11-1.22 "Contractor’s Quality Control and Acceptance Testing. Base failure repair shall be paid for by the actual area repaired (in square yards). It shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, traffic control, mobilization and doing all work involved in compaction, removal and disposal of materials as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer. No additional compensation will be allowed.

All milled material from the base repair if considered as suitable material, Contractor has the discretion to use it as backfill material in stamped concrete construction on median islands within the limits of the project. The existing pavement may also contain fabric interlayer (petromat, trupave and etc.). Stockpiling of milled material on City streets will not be permitted unless otherwise approved by the Engineer. No additional compensation will be paid for removal of extra material, milled material (or aka as grindings) with interlayer fabric or time used by other resources.

10-1.13 Cold Mill Concrete Pavement (1 ½” and 3”)

Cold milling of asphalt concrete pavement shall conform to Section 42-3 of the Standard Specifications and these Special Provision.

Existing asphalt concrete pavement shall be cold planed at the locations and to the dimensions shown on the Plans and as directed by the Engineer. Pavement fabric are present in the pavement areas to be milled (or excavated). Pavement fabric exposed by this operation shall be completely removed. All milled material from cold milling shall become the property of the Contractor and be disposed outside the limits of the project. A milled roadway surface must be re-paved within 5 days from the date milling has started. Public Traffic shall not be allowed on a milled surface till the roadway has been properly delineated. All detector loops, conduits and hand-holes must be installed prior to final paving. All existing utilities shall be lowered prior to final paving. No additional compensation will be allowed for cold milling based on the presence of paving fabric and for the complete removal of the fabric.

Contractor shall provide paper joint tapers at all approaching streets to intersections. Tapers shall be at a minimum 1:12 slopes to provide a smooth transition between existing pavement and grinded surfaces. Contractor shall post all precautionary signs required due to differential elevations in pavement surface.

Cold Milling Equipment

Cold milling machine must be:
1. Equipped with a cutter head width that matches the milling width unless a wider cutter head is authorized.
2. Equipped with automatic controls for the longitudinal grade and traverse slope of the cutter head and:
   a. If a ski device is used, it must be at least 30 feet long, rigid, and a 1-piece unit. The entire length must be used in activating the sensor.
   b. If referencing from existing pavement, the cold milling machine must be controlled by self-contained grade reference system. The system must be used at or near the centerline of the roadway. On the adjacent pass with the cold milling machine, a join matching shoe may be used.
3. Equipped to effectively control dust generated by the milling operation.
4. Operated so that no fumes or smoke is produced.
5. Capable of completely pulverizing pavements to produce grinding passing the 2” sieve.

The contract price paid per square yard for “Remove and Replace” 1 ½” to 3” depth shall include full
compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in “Remove and Replace” 1 ½” to 3” depth and removing, hauling off, including removal of pavement markers, traffic stripes and pavement marking within the area of “Remove and Replace 1 ½” to 3”” depth, as specified in these Special Provisions and in the Standard Specifications, and as directed by the Engineer. Contractor shall “Remove and Replace” three (3”) inches on all intersections and one hundred (100 LF) of approaches on Pacific Avenue. On all other areas, Contractor shall “Remove and Replace” one and a half (1 ½”) as specified in these special provisions.

10-1.14 Sweeping

Contractor shall sweep gutter, sidewalk, driveways, and street during and after the construction. The Contractor shall remove all debris from the storm water system, whether or not the accumulation of debris is the direct result of his/her operations. It is expected that there would be multiple sweeping of the road after days of the completion of milling and paving operations on the street. If the Contractor fails to response within a day of notice of the request, a $500/day shall be accessed until sufficient sweeping is provided. Full compensation for sweeping, removing and disposing debris shall be included in the various bid items and no additional compensation will be made therefore.

SECTION 11 HOT MIX ASPHALT

11-1.01 Hot Mix Asphalt

Summary
This work includes furnishing and placing PG 70-10, 3/4 “ nominal maximum aggregate size Type A HMA to be used for Base Failure repair and remove and replace areas and at all intersections and 100 LF of approaches to intersections. This works also includes furnishing and placing PG 70-10, ½” nominal size aggregate Type A HMA to be used in all 1 ½” thick AC overlay areas on the project. Contractor shall comply with Section 39, “Hot Mix Asphalt,” of the Caltrans Standard Specifications.

11-1.02 Asphalt

Asphalt shall conform to Section 92, "Asphalts," of the Caltrans Standard Specifications.

General
Only Caltrans-approved asphalt suppliers who currently hold a Certificate of Compliance are eligible to supply bitumen for this project. The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt. The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

11-1.03 Applying Asphalt

Unless otherwise specified, the Contractor shall heat and apply asphalt in conformance with the provisions in Section 93, "Liquid Asphalts" of the Caltrans Specifications. The Contractor shall apply paving asphalt at a temperature between 250°F and 375°F. The Engineer will determine the exact temperature of paving asphalt.

11-1.04 Asphalt Grade

PG 70-10, Type A bitumen shall conform to Section 92-1.02 (B) of the Caltrans Specifications. A certificate of compliance and test results performed by bitumen supplier shall accompany with each load and be presented to the Engineer.
Use of Reclaimed Asphalt Pavement (RAP)
The use of RAP in HMA mix is allowed for up to 15% of the total mix by weight at the option of Contractor.

Requirements for RAP are as follows:

- 100% of RAP material must pass one (1) inch sieve;
- No deleterious materials are allowed in the RAP mix;
- No particle in the mixture made with RAP should exceed the maximum aggregate size at the time of discharge in the transport vehicle;
- The specific gravity of the virgin binder should be used as the specific gravity of the binder in the RAP for mixture design;
- The effective specific gravity of the aggregate in the RAP should be determined and used as the bulk specific gravity of the RAP aggregate for calculation purposes. When the RAP contains highly absorptive materials, the amount of absorbed asphalt should be estimated based on experience and used to back calculate the bulk specific gravity of the aggregate.

Requirements for aggregate properties, gradation and volumetric properties must be met by the blend of virgin and reclaimed materials.

The gradation of the aggregate in the RAP shall be used in calculation of the mix gradation and fractured faces. RAP is treated like a stockpile of aggregate during analysis. Fine aggregate angularity, sand equivalent and flat and elongated particles are not measured on the RAP aggregate.

The percentage of asphalt in the RAP should be considered when determining the trial asphalt content. The trial asphalt content is calculated during the trial blend analysis. The amount of asphalt contained in the RAP should be considered when determining how much virgin asphalt is required.

11-1.05 Aggregate

Aggregate and combined aggregate shall conform to the quality and gradation provisions in these Special Provisions. Aggregates shall be clean and free from decomposed or organic materials and other deleterious substances.

Coarse aggregate is material retained on the #4 (4.75-mm) sieve, fine aggregate is material passing the #4 (4.75-mm) sieve, and supplemental fine aggregate is added fine material passing the #30 (600-μm) sieve, including, but not limited to, lime, cement and stored fines from dust collectors. Fractured faces of the aggregate shall be obtained by crushing. Fine aggregate shall not contain more than ten (10) percent of natural (non-manufactured) sand by mass of the total aggregate.

The Contractor shall design a HMA mixture using a blend of aggregates with ¾" (19-mm) and ½" (12.5-mm) NMAS. The target value for the percent passing each designated sieve size for the aggregate blend used in the proposed hot mix asphalt mix design shall be determined by the Contractor.

\[ \text{¾" Type A Hot Mix Asphalt} \]

\[ \text{Percentage Passing} \]
<table>
<thead>
<tr>
<th>Sieve Sizes</th>
<th>Limits of Proposed Gradation</th>
<th>JMF ± Contract Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-mm {1&quot;}</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>19-mm {3/4&quot;}</td>
<td>90-98</td>
<td>X±5</td>
</tr>
<tr>
<td>12.5-mm {1/2&quot;}</td>
<td>70-90</td>
<td>X±6</td>
</tr>
<tr>
<td>4.75-mm (No. 4)</td>
<td>42-58</td>
<td>X±5</td>
</tr>
<tr>
<td>2.36-mm (No. 8)</td>
<td>29-43</td>
<td>X±5</td>
</tr>
<tr>
<td>600-μm {No. 30}</td>
<td>10-23</td>
<td>X±4</td>
</tr>
<tr>
<td>75-μm (No. 200)</td>
<td>2.0-7.0</td>
<td>X±2.0</td>
</tr>
</tbody>
</table>

\[ \frac{1}{2}" \text{Type A Hot Mix Asphalt} \\
\text{Percentage Passing} \]

<table>
<thead>
<tr>
<th>Sieve Sizes</th>
<th>Limits of Proposed Gradation</th>
<th>JMF ± Contract Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-mm {3/4&quot;}</td>
<td>100</td>
<td>--</td>
</tr>
<tr>
<td>12.5-mm {1/2&quot;}</td>
<td>95-98</td>
<td>X±5</td>
</tr>
<tr>
<td>9.5-mm {3/8&quot;}</td>
<td>72-95</td>
<td>X±5</td>
</tr>
<tr>
<td>4.75-mm (No. 4)</td>
<td>52-69</td>
<td>X±5</td>
</tr>
<tr>
<td>2.36-mm (No. 8)</td>
<td>35-55</td>
<td>X±5</td>
</tr>
<tr>
<td>600-μm {No. 30}</td>
<td>15-30</td>
<td>X±4</td>
</tr>
<tr>
<td>75-μm (No. 200)</td>
<td>2.0-9.0</td>
<td>X±2.0</td>
</tr>
</tbody>
</table>

* The percent passing the 75-μm sieve shall be reported to the first decimal place (tenths).

Nominal Maximum Aggregate Size is defined as "one sieve size larger than the first sieve to retain more than 10% of the material."

In the table above, the symbol "X" is the gradation which the Contractor proposes to furnish for the specific sieve (Job Mix Formula).

Hot mix asphalt shall be Type-A conforming to the Caltrans Standard Specifications for three-quarter (¾") inch Nominal Maximum Aggregate Size and half-inch (½") Nominal Maximum Aggregate Size.

For each hot mix asphalt mix proposed to be used, the Contractor shall submit a plot of the gradation of the aggregate on a Federal Highway Administration 0.45-power gradation chart. It is recommended that the proposed aggregate gradation should not vary from the low limit on one sieve size to the high limit on the adjacent sieve size, or vice versa, and should be free of any "sand hump." A sand hump is defined as a deviation of more than 3% upward from a straight line drawn from the origin of a 0.45-power gradation chart to the point at which the gradation line crosses the #4 (4.75-mm) sieve line.

During hot mix asphalt production, aggregate gradation shall be within the limits specified in the tables above. The combined aggregate shall conform to the following quality requirements prior to the addition of the bitumen:

**Aggregate Quality Requirements**

---

52
### Quality Requirements

<table>
<thead>
<tr>
<th>Quality</th>
<th>Test</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Crushed Particles 1 (Min.)</td>
<td>CT 205</td>
<td>90% 70%</td>
</tr>
<tr>
<td>Coarse Aggregate (Passing no.4 sieve, Retained on no. 8 sieve)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Aggregate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fine Aggregate Angularity 1 (Min.)</td>
<td>AASHTO T304 Method A</td>
<td>45%</td>
</tr>
<tr>
<td>Los Angeles Rattler 1</td>
<td>CT 211</td>
<td>12% 45%</td>
</tr>
<tr>
<td>Loss at 100 Rev. (Max.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss at 500 Rev. (Max.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand Equivalent 1 (Min.)</td>
<td>CT 217</td>
<td>47</td>
</tr>
<tr>
<td>Flat and elongated particles (%max. by weight @5:1)</td>
<td>CT 235</td>
<td>10</td>
</tr>
</tbody>
</table>

**Notes:**
1. Reported value shall be the average of three (3) tests from a single split sample.

Changes in aggregate source shall be considered a change in mix design and shall require a new mix design proposal before work can proceed. New mix design must be tested, reviewed and approved by the Engineer prior to commencing work.

Aggregates shall be treated in conformance with the provisions in "Anti-Strip Treatment" of these Special Provisions.

### 11-1.06 Anti-strip Agents

Care must be taken in using anti-strip agents as they may react to additives used in bitumen, especially polymer-modified bitumen. The Contractor shall request and received information from the supplier of bitumen about any incompatibility or performance issues arising from the proposed use of anti-strip agent. If needed, a test batch should be made and tested for performance criteria.

### 11-1.06 Anti-strip Treatment

Provided the results of the plasticity index of the aggregate blend under California Test 204. Do not use an aggregate blend with a plasticity index greater than ten (10).

1. If the result of CT 204, "Method of Tests for Plasticity Index of Soils," is less than or equal to 10, the contractor shall treat the HMA with Liquid anti-strip at minimum 0.5 percent and proceed with production. If the anti-strip manufacturer recommends using higher percentage of liquid anti-strip than the above minimum, then the manufacturer recommendation shall be followed.

2. The contractor shall test the HMA, treated with anti-strip during mix design using CT 371 and report the results, which are for information only and are not be used in contract compliance decisions.

3. During production start-up and at least once every 5,000 tons of production, the contractor shall test the HMA using CT 371 and report the results.
11-1.06 Contractor Mix Design Proposal

Mix designs shall conform to Section 39-1.03, "Hot Mix Asphalt Mix Design Requirements", of the Caltrans Standard Specifications and these Special Provisions. The Contractor shall submit for the Engineer's review a proposed hot mix asphalt mix design for each hot mix asphalt mixture to be used at least fourteen (14) days prior to production of that hot mix asphalt mixture. A laboratory (or laboratories) whose proficiency has been reviewed and qualified in conformance with the Caltrans’ Independent Assurance Program shall prepare the hot mix asphalt mix design.

Aggregate quality and hot mix asphalt design test results shall be no more than twelve (12) months old when production of the hot mix asphalt starts. The mix design shall indicate the target values (X) proposed for gradation, asphalt content, percent air voids, and Percent Voids in Mineral Aggregate. This submittal shall include test results for aggregate and asphalt mixture quality; plots of the combined gradings showing the production tolerances; plots of unit weight, stability, and percent air voids versus asphalt content for the asphalt contents considered in the design process. In addition, this submittal shall include test results for stability, percent air voids, and swell for three (3) briquettes constructed using the submitted aggregate and asphalt blended at the proposed target values for each hot mix asphalt to be used.

The Contractor shall submit the following for each hot mix asphalt mixture proposed:

A. Aggregate and mineral filler:
   1. Target values for percent passing each sieve size for the aggregate blend.
   2. Results of tests for aggregate quality requirements.
   3. Source of each aggregate to be used, including producer, location and California Mine Identification number.
   4. Percentage of each aggregate stockpile, cold feed or hot bin to be used.
   5. Gradation of each aggregate stockpile, cold feed or hot bin to be used.
   6. Plots of Power 45 curve for representative sample.

B. Bitumen:
   1. Bitumen source and target value.
   2. Results of the bitumen quality tests conforming to the provisions in Section 92, "Asphalts," of the Standard Specifications.
   3. Certificate of compliance from the bitumen supplier certifying conformance with the requirements of the requirements for the type and grade of binder.
   4. Material Safety Data Sheets. The proposed hot mix asphalt mix design submittal will be considered complete only when the mix design letter, test results, plots, and samples have been received by the Engineer.

11-1.07 Engineer Review of Hot-Mix Asphalt Design

The Engineer, in consultation with the Contractor, shall decide the optimum bitumen content (after considering stability of mix and other factors) and acceptable tolerance during production. The production tolerance shall not exceed +0.45 and -0.45 from approved optimum bitumen content. Certification from the asphalt plant, periodic inspection of plant during production, and supervision and documentation of all quality control test results performed at the plant shall be provided to the Engineer. All records of production and quality control must be kept for at least two (2) years.

11-1.08 Contractor Quality Control

Quality control, sampling, testing, and inspection shall be provided during hot mix asphalt work. Sampling, testing, and inspection shall be performed at a rate sufficient to ensure that the hot mix asphalt product conforms to the requirements in these Special Provisions and Caltrans Standard Specifications. Sampling for testing to be
reported to the Engineer shall be performed at the minimum frequency specified in the following table (see next pages):
<table>
<thead>
<tr>
<th>Quality characteristic</th>
<th>Test method</th>
<th>Minimum sampling and testing frequency</th>
<th>HMA type A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate gradationa</td>
<td>California Test 202</td>
<td></td>
<td>JMF ± Toleranceb</td>
</tr>
<tr>
<td>Sand equivalent (min)c</td>
<td>California Test 217</td>
<td>1 per 750 tons and any remaining part</td>
<td>47</td>
</tr>
<tr>
<td>Asphalt binder content (%)</td>
<td>California Test 379 or 382</td>
<td></td>
<td>JMF ± 0.45</td>
</tr>
<tr>
<td>HMA moisture content (%)</td>
<td>California Test 226 or 370</td>
<td>1 per 2,500 tons but not less than 1 per paving day</td>
<td>1.0</td>
</tr>
<tr>
<td>Percent of maximum theoretical density (%)(^c)</td>
<td>ASTM D-2041 or California Test 309</td>
<td>3 per 750 (min.)</td>
<td>91–96</td>
</tr>
</tbody>
</table>
| Stabilometer value (min)\(^d\)^\(^f\)  
  No. 4 and 3/8” gradings 1/2” and 3/4” gradings | California Test 366                             | One per 4,000 tons or 2 per 5 business days, whichever is greater | 30                         |
| Air void content (%)\(^g\)                                  | California Test 367                             | 2 per day during production                                     | 37                         |
| Aggregate moisture content at continuous mixing plants and RAP moisture content at continuous mixing plants and batch mixing plants\(^h\) | California Test 226 or 370 |                                                                  | 4 ± 2                      |
| Percent of crushed particles coarse aggregate (%., min)     | California Test 205                             |                                                                  | 90                         |
| Fine aggregate (%., min)  
  (Passing no. 4 sieve and retained on no. 8 sieve.) One fractured face | ASTM D-2041 or California Test 309              | As designated in the QC plan. At least once per project          | 75                         |
| Los Angeles Rattler (%., max)                               | California Test 211                             |                                                                  | 12                         |
| Flat and elongated particles (%., max by weight @ 5:1)      | California Test 235                             |                                                                  | 45                         |

\(^{a}\) California Test 202

\(^{b}\) JMF ± Toleranceb

\(^{c}\) Maximum theoretical density

\(^{d}\) California Test 309

\(^{e}\) ASTM D-2041 or California Test 309

\(^{f}\) California Test 366

\(^{g}\) California Test 367

\(^{h}\) California Test 226 or 370

\(^{i}\) California Test 205

\(^{j}\) ASTM D-2041 or California Test 309

\(^{k}\) California Test 211

\(^{l}\) California Test 235
<table>
<thead>
<tr>
<th>Fine aggregate angularity (% min)</th>
<th>California Test 234</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voids filled with asphalt (%) &lt;sup&gt;1&lt;/sup&gt;</td>
<td>California Test 367</td>
<td>76.0–80.0</td>
</tr>
<tr>
<td>No. 4 grading</td>
<td></td>
<td>73.0–76.0</td>
</tr>
<tr>
<td>3/8&quot; grading</td>
<td></td>
<td>65.0–75.0</td>
</tr>
<tr>
<td>1/2&quot; grading</td>
<td></td>
<td>65.0–75.0</td>
</tr>
<tr>
<td>3/4&quot; grading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voids in mineral aggregate (% min) &lt;sup&gt;1&lt;/sup&gt;</td>
<td>California Test 367</td>
<td>17.0</td>
</tr>
<tr>
<td>No. 4 grading</td>
<td></td>
<td>15.0</td>
</tr>
<tr>
<td>3/8&quot; grading</td>
<td></td>
<td>14.0</td>
</tr>
<tr>
<td>1/2&quot; grading</td>
<td></td>
<td>13.0</td>
</tr>
<tr>
<td>3/4&quot; grading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dust proportion &lt;sup&gt;1&lt;/sup&gt;</td>
<td>California Test 367</td>
<td>0.9–2.0</td>
</tr>
<tr>
<td>No. 4 and 3/8&quot; gradings</td>
<td></td>
<td>0.6–1.3</td>
</tr>
<tr>
<td>1/2&quot; and 3/4&quot; gradings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoothness</td>
<td>Section 39-1.12</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-foot straight-edge, must grind, and Pl&lt;sub&gt;0&lt;/sub&gt;</td>
</tr>
<tr>
<td>Asphalt rubber binder viscosity @ 350 °F, centipoises</td>
<td>Section 39-1.02D</td>
<td>Section 39-1.04C</td>
</tr>
<tr>
<td>Asphalt modifier</td>
<td>Section 39-1.02D</td>
<td>Section 39-1.04C</td>
</tr>
<tr>
<td>CRM</td>
<td>Section 39-1.02D</td>
<td>Section 39-1.04C</td>
</tr>
</tbody>
</table>

<sup>a</sup> Determine combined aggregate gradation containing RAP under California Test 367.
<sup>b</sup> The tolerances must comply with the allowable tolerances in section 39-1.02E.
<sup>c</sup> Report the average of 3 tests from a single split sample.
<sup>d</sup> Required for HMA Type A if the specified paved thickness is at least 0.15 foot.
<sup>e</sup> Determine maximum theoretical density (California Test 309) at the frequency specified for Test Maximum Density under California Test 375, Part 5.D.
<sup>f</sup> California Test 304, Part 2.13.
<sup>g</sup> Determine the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A, and theoretical maximum specific gravity under California Test 309.
<sup>h</sup> For adjusting the plant controller at the HMA plant.
<sup>i</sup> Report only if the adjustment for the asphalt binder content TV is less than or equal to ±0.3 percent from OBC value submitted on a Contractor Hot Mix Asphalt Design Data form.
<sup>j</sup> Voids in mineral aggregate for RHMA-G must be within this range.

For any single quality characteristic except smoothness, if two consecutive quality control test results do not comply with the action limits or specifications:

1. Stop production.
2. Notify the Engineer.
3. Take corrective action.
4. Demonstrate compliance with the specifications before resuming production and placement.

11-1.09 Engineer Quality Assurance
The Engineer will assess conformance to contract specifications by review of the Contractor's mix design proposal, by inspection of the Contractor's procedures, by oversight of the Contractor's quality control inspection and records, by splitting and testing samples with the Contractor during evaluation of the plant production start-up and the nuclear density test strip, and by independent verification sampling and testing of the hot mix asphalt and aggregates during hot mix asphalt production. The Engineer may test the asphalt, aggregates or hot mix asphalt mixture to determine conformance with these Special Provisions. Bitumen, aggregates or hot mix asphalt that does not conform to these Special Provisions will be rejected.

11-1.10 General Requirements

Hot mix asphalt paving shall be done with asphalt paver (paving machine). Hot mix asphalt shall be handled, spread, and compacted in a manner which is in conformance with these Special Provisions and the Caltrans Specifications. Hot mix asphalt shall be placed in such a manner that cracking, shoving, and displacement will be avoided. Hot mix asphalt shall be placed only when the ambient temperature is above 50°F.

Hot mix asphalt shall not be placed when the underlying layer or surface is frozen or not dry or when weather conditions will prevent proper handling, finishing or compaction of the mixture.

During transporting, spreading and compacting, petroleum products such as diesel fuel and kerosene shall not be used as a release agent on trucks, spreaders or compactors in contact with the hot mix asphalt. The Engineer shall approve the release agent.

Segregation shall be avoided. Surfacing shall be free from pockets of coarse or fine material. Hot mix asphalt containing hardened lumps shall not be used. Longitudinal joints in the top layer of hot mix asphalt shall correspond with the edges of planned traffic lanes. Longitudinal joints in other layers shall be offset not less than six (6) inches nor more than 12 inches alternately each side of the edges of traffic lanes.

At locations where the number of lanes is changed, the top layer for the through lanes shall be paved first. Tracks or wheels of spreading equipment shall not be operated on the top layer of hot mix asphalt until final compaction has been completed. At locations where the hot mix asphalt is to be placed over areas inaccessible to spreading and rolling equipment, the hot mix asphalt shall be spread by practical means to obtain the specified results and shall be compacted thoroughly to the required lines, grades, and cross sections by means of pneumatic tampers or by other methods that will produce the same degree of compaction as pneumatic tampers.

11-1.11 Spreading Equipment

Asphalt pavers shall be self-propelled mechanical spreading and finishing equipment provided with a screed or strike-off assembly capable of distributing the material to not less than the full width of a traffic lane unless otherwise approved by the Engineer. Screed action shall include cutting, crowding or other practical action that is effective on the hot mix asphalt mixture without tearing, shoving or gouging and that produces a surface texture of uniform appearance. The screed shall be adjustable to the required section and thickness. The screed shall be provided with a suitable full width compacting device.

Pavers that leave ridges, indentations or other marks in the surface shall not be used unless the ridges, indentations or marks are eliminated by rolling or prevented by adjustment in the operation. When end dump haul vehicles are used, the asphalt paver shall operate independently of the vehicle being unloaded or shall be capable of propelling the vehicle being unloaded. The load of the haul vehicle shall be limited to that which will insure satisfactory spreading. While being unloaded, the haul vehicle shall be in contact with the machine and the brakes on the haul vehicle shall not be depended upon to maintain contact between the vehicle and the machine.
No portion of the mass of hauling or loading equipment, other than the connection, shall be supported by the asphalt paver. No vibrations or other motions of the loader that could have a detrimental effect on the riding quality of the completed pavement shall be transmitted to the paver.

11-1.12  Spreading

Layers shall be spread with an asphalt paver, unless otherwise specified or approved by the Engineer. Asphalt pavers shall be operated in such a manner as to insure continuous and uniform movement of the paver. Hot mix asphalt shall be spread by mechanical means that will produce a uniform smoothness and texture.

Before placing the top layer adjacent to cold transverse construction joints, the joints shall be trimmed to a vertical face on a neat line. Transverse joints shall be tested with a twelve (12) foot straightedge and shall be cut back for surface smoothness as required in conformance with "Compacting," of these Special Provisions. Connections to existing surfacing shall be feathered to conform to the requirements for smoothness. Longitudinal joints shall be trimmed to a vertical face and on a neat line if the edges of the previously laid surfacing are, in the opinion of the Engineer, in such a condition that the quality of the completed joint will be affected.

11-1.13  Compacting Equipment

A sufficient number of rollers shall be provided to obtain the specified compaction and surface finish required by these Special Provisions. Rollers shall be sized to achieve the required results. A minimum 10-ton roller shall be used to achieve the required compaction. Rollers shall be equipped with pads and water systems that prevent sticking of the hot mix asphalt mixtures to the pneumatic or steel-tired wheels. Power driven front drums rollers are recommended to be used to eliminate the development of bumps formations on the paving mat. A parting agent that will not damage the hot mix asphalt mixture may be used to aid in preventing the hot mix asphalt mixture from sticking to the wheels. Petroleum products such as diesel fuel and kerosene shall not be used as a parting agent. The parting agent must be approved by the Engineer.

11-1.14  Compacting – Base Failure Repair

Compacting equipment shall conform to the provisions in these Special Provisions and Caltrans Standard Specifications. Rolling shall commence at the lower edge and shall progress toward the highest portion. No rolling will be permitted after the hot mix asphalt temperature is below 140°F.

The goal of this compaction specification is to achieve a minimum density of 92.0 percent of maximum theoretical density (Rice density) as practicable as possible with minimum rolling and aggregate breaking. A rolling pattern will be established on a test trip to achieve the end result using Multicool, Pavecool, or similar computer program which can calculate the time available for compaction based on actual weather conditions in the field and HMA delivery temperature behind the paving machine. The Contractor shall extract cores and calibrate the nuclear gauge for this purpose. Once the rolling pattern is established, it should not be changed unless further cores or nuclear gauge measurements indicate a need of change. Cores shall be extracted daily at random locations for quality control and calibration. In-place density of hot mix asphalt will be determined prior to opening the pavement to public traffic using a calibrated nuclear gauge.

Upon completion of rolling operations, if ordered by the Engineer, the hot mix asphalt shall be cooled by applying water. Applying water shall conform to the provisions in Section 17, "Watering," of the Caltrans Standard Specifications. The completed surfacing shall be thoroughly compacted, smooth, and free from ruts, humps, depressions or irregularities. Ridges, indentations or other objectionable marks left in the surface of the hot mix asphalt by blading or other equipment shall be eliminated by rolling or other suitable means. The use of equipment that leaves ridges, indentations or other objectionable marks in the hot mix asphalt shall be discontinued.
When a straightedge twelve (12) feet long is laid on the finished surface and parallel with the centerline, the surface shall not vary more than .01 foot from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than .02 foot are present when tested with a straightedge twelve (12) feet long in a direction transverse to the centerline and extending from edge to edge of a twelve (12) foot traffic lane.

The Contractor shall use a minimum ski length of 24 feet on one side and a joint matching control on the opposite side. Automatic grade controls are required to be utilized in conjunction with ski and joint matching devices.

New paving shall tie smoothly into previously resurfaced mats and existing pavement.

11-1.15  Hot Mix Asphalt Paving

A one and a half (1.5") inch compacted thickness of hot mix asphalt (HMA) overlay shall be installed in one lift and a three (3") inch compacted thickness of hot mix asphalt (HMA) overlay shall be placed at all intersections and one hundred (100 LF) of approaches to the intersections on Pacific Avenue. Quantities shown on the bidding schedule are approximate and are given for estimating purposes only.

Pay quantities for hot mix asphalt will be based on the gross weight less the tare weight of each loaded vehicle delivering said material to the job site, provided the gross weight does not exceed the legal weight limit for the particular vehicle being used. No payment will be made for the quantity in excess of the legal gross weight limit for each load of material delivered to the job site.

It is the Contractor’s responsibility to accurately estimate the required HMA on the days paving work is scheduled. Excess HMA at the end of the work day will be considered as waste and will not be compensated.

HMA will be measured by the ton and will be paid for at the contract price per ton. This payment shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing hot mix asphalt, complete in place, including tack-coat application, as shown on the Plans and as specified in the Specifications and these Special Provisions, and as directed by the Engineer.

11-1.16  Warm Mix Asphalt (WMA)

At the option of the Contractor, WMA technology may be used at no additional cost. Acceptable WMA technologies include water injected foam, chemical additive or organic additive technologies. You may produce HMA Type A, using an authorized warm mix asphalt (WMA) technology per Caltrans Approved Products Web site: http://www.dot.ca.gov/hq/esc/approved_products_list/

Warm mix asphalt technology may be used as a compaction aid or WMA. When used as a compaction aid the plant production temperature will be 276 F -- 325F. When used to produce WMA the temperature range will be 240F – 275F. Initial. Unless otherwise stipulated WMA technologies may be used to produce HMA having plant production temperatures of 240F. – 325F.

When a WMA technology is used the Job Mix Formula (JMF) submitted to the Engineer for approval shall not incorporate the WMA additive. Provide information on the WMA manufacturer and dosage rate with the JMF submittal. When required, JMF verification testing will be performed on plant-produced material. When testing plant-produced WMA to determine mix volumetrics, moisture susceptibility or stability condition the mix for 15 to 18 hours at 140 ± 5˚ F or for 2 to 3 hours at 295 ± 5˚ F in accordance with California Test Method 304M (August 2008) prior to testing. WMA may be cooled to room temperature prior to conditioning. Mixture conditioning is not required for the Theoretical Maximum Specific Gravity (RICE) test.
11-1.17 Conform Tapers

New paving shall tie smoothly into previously resurfaced mats, existing pavement and to private drives. Additional HMA overlay may be placed to create smooth conform taper. Up to twenty-five (25) feet of side street overlay may be performed as per specifications and as directed by the Engineer. No extra compensation shall be paid for extra traffic control, time, equipment, manpower, slow progress, or delays due to removal and installation of frequent traffic control, or any other contingencies required for the side street work. It is anticipated that side street work may slow down the paving operation on the main street.

11-1.18 Smoothness

General
Determine HMA pavement smoothness with a 12-foot straightedge. In special circumstances such as excessive bumps formation on the finish pavement, the Engineer may request the use of Profilograph in lieu of the 12-foot straightedge. The use of Profilograph shall be in accordance with the Caltrans Standard Specification and at the contractor’s expense.

Straightedge
The HMA pavement top layer must not vary from the lower edge of a 12-foot long straightedge:

1. More than 0.01 foot when the straight edge is laid parallel with the centerline
2. More than 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. More than 0.02 foot when the straightedge is laid within 24 feet of a pavement conform

Smoothness Correction
If the top-layer of HMA pavement does not comply with the smoothness specification, the contractor shall correct the problem at his or her own expense. The following are the correction methods:

1. Micro (Fine-tooth) grind or Diamond grind the pavement to within tolerance. Grinding shall not gouge out the aggregates of the finish pavement. Micro-surfacing must be applied on the ground areas per Caltrans Standard Specification.
2. Remove and replace the pavement.
3. Place a layer of HMA.

The Engineer must authorize the choice of correction before the work begins. Corrected HMA pavement areas must be uniform rectangles with edges:

1. Parallel to the nearest HMA pavement edge or lane line
2. Perpendicular to the pavement centerline

Measure the corrected HMA pavement surface with a 12-foot straightedge and/or Profilograph and correct the pavement to within specified tolerances. If a must-grind area or straight edged pavement cannot be corrected to within specified tolerances, remove and replace the pavement.

11-1.19 Acceptance Testing for HMA

Hot mix asphalt shall be compacted between a minimum of 92 percent and a maximum of 96 percent of Maximum Theoretical Density (Rice Density) as determined by the American Society of Testing Materials (ASTM) D-2041 or Caltrans test 309.

Pavement density will be determined by comparing the average density of cores taken from the compacted
pavement to the density of Maximum Theoretical Density as determined by the American Society of Testing Materials (ASTM) D-2041 or Caltrans test 309.

Core samples for determination of the density of completed pavements shall be obtained by the Contractor at his/her own expense, and no additional compensation will be allowed therefore. The core samples shall be four (4) or six (6) inches in diameter. In order for the Contractor to monitor their performance, the Contractor shall utilize a nuclear density gauge for preliminary testing, which shall be correlated to core density obtained at the project site. The cores shall be extracted within 24 hours of paving. A Caltrans certified geotechnical lab that can evaluate the density of the cores must be used. The Contractor shall have a representative with the roller at all times checking density of the compacted mat of the hot-mix asphalt. Dry ice may be used for cooling the pavement prior to coring. The number and locations of the samples will be as agreed upon in the field by the Engineer and the Contractor. Samples shall be neatly cut with a saw, core drill, or other approved equipment. The Engineer shall meet in the field with the Contractor and mutually agree on several locations for compaction testing for the given lot and tie them out to the sidewalk or side of the road. The actual test location(s) will be randomly selected from the several agreed upon locations. At least one (1) core must be taken from the wheel path area. The Contractor shall secure the core samples with proper label for at least two (2) months.

All cost of coring, labor, equipment, traffic control, incidentals etc., shall be included in various bid items.

<table>
<thead>
<tr>
<th>Compaction Results</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>96.1% and greater</td>
<td>Work shall not be continued. A mandatory meeting shall be held between the Contractor and the Engineer. The Contractor shall propose adjustments to his/her materials and/or procedures in order to meet required compaction to the satisfaction of the Engineer. Paving may then resume, after the 24-hour mandatory waiting period, with a 500-ton maximum secondary test section.</td>
</tr>
<tr>
<td>91.9% and less</td>
<td>The Engineer shall stop the work. At the Contractor’s expense, an independent engineering consultant acceptable to the Engineer shall be hired to analyze mix design, structural adequacy of existing road and overlay, placement and/or compaction methods, and test data. Working days shall cease for a maximum period of ten (10) calendar days while the engineering consultant is selected and the investigation performed. Paving may then resume by incorporating the recommended changes of the engineering consultant with a 500-ton maximum secondary test section.</td>
</tr>
</tbody>
</table>

No more than one (1) secondary test section shall be allowed. If compaction results from the secondary test section do not fall within 92% to 96%, and at the sole discretion of the Engineer, all remaining paving work and any associated work (striping, shoulders, etc.) may be terminated. Payment for work performed to this point shall be per Section 9-1.06D of the Caltrans Standard Specifications.

11-1.20 Contractor’s Quality Control and Acceptance Testing

Quality control, sampling, acceptance testing, and inspection shall be provided during hot mix asphalt work. Sampling, testing, and inspection shall be performed at a rate sufficient to ensure that the hot mix asphalt product conforms to the requirements in these Special Provisions and Caltrans Standard Specifications. Sampling for testing to be reported to the Engineer shall be performed at the minimum frequency specified in the following table (see following pages):
<table>
<thead>
<tr>
<th>Quality characteristic</th>
<th>Test method</th>
<th>Minimum sampling and testing frequency</th>
<th>TYPE A HMA Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate gradation</td>
<td>California Test 202</td>
<td>1 per 750 tons but not less than 1 per day</td>
<td>JMF ± tolerance c</td>
</tr>
<tr>
<td>Sieve 3/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/8&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 8</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. 200</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand equivalent (min) d</td>
<td>California Test 217</td>
<td>1 per 750 tons but not less than 1 per day</td>
<td>47</td>
</tr>
<tr>
<td>Asphalt binder content (%)</td>
<td>California Test 379 or 382</td>
<td>1 per 750 tons but not less than 1 per day</td>
<td>JMF ± 0.45</td>
</tr>
<tr>
<td>HMA moisture content (% , max)</td>
<td>California Test 226 or 370</td>
<td>1 per 750 tons but not less than 1 per day</td>
<td>1.0</td>
</tr>
<tr>
<td>Percent of maximum theoretical density (%)</td>
<td>California Test 308/ California Test 309</td>
<td>3 per 750 tons but not less than 3 per day/ 1 per 750 tons but not less than one per day</td>
<td>92–97</td>
</tr>
<tr>
<td>Stabilometer value (min)g</td>
<td>California Test 366</td>
<td>1 per 4,000 tons or 2 per 5 business days, whichever is greater.</td>
<td>30 37</td>
</tr>
<tr>
<td>Air void content (%)</td>
<td>California Test 367</td>
<td>1 per 4,000 tons or 2 per 5 business days, whichever is greater.</td>
<td>4 ± 2</td>
</tr>
<tr>
<td>Percent of crushed particles Coarse aggregate (% , min)</td>
<td>California Test 205</td>
<td>Minimum of 1 per project.</td>
<td>90 75 70</td>
</tr>
<tr>
<td>Los Angeles Rattler (% , max)</td>
<td>California Test 211</td>
<td>Minimum of 1 per project.</td>
<td>12 40</td>
</tr>
<tr>
<td>Fine aggregate angularity (% , min)</td>
<td>California Test 234</td>
<td>Minimum of 1 per project.</td>
<td>45</td>
</tr>
<tr>
<td>Flat and elongated particles (% , max by weight @ 5:1)</td>
<td>California Test 235</td>
<td>Minimum of 1 per project.</td>
<td>Report only</td>
</tr>
<tr>
<td>Voids filled with asphalt (%)</td>
<td>California Test 367</td>
<td>Minimum of 1 per project.</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>No. 4 grading</td>
<td></td>
<td>76-80</td>
<td></td>
</tr>
<tr>
<td>3/8&quot; grading</td>
<td></td>
<td>73-76</td>
<td></td>
</tr>
<tr>
<td>1/2&quot; grading</td>
<td></td>
<td>65-75</td>
<td></td>
</tr>
<tr>
<td>3/4&quot; grading</td>
<td></td>
<td>65-75</td>
<td></td>
</tr>
<tr>
<td>Voids in mineral aggregate (% min)</td>
<td>California Test 367</td>
<td>Minimum of 1 per project.</td>
<td></td>
</tr>
<tr>
<td>No. 4 grading</td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>3/8&quot; grading</td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>1/2&quot; grading</td>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>3/4&quot; grading</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Dust proportion</td>
<td>California Test 367</td>
<td>Minimum of 1 per project.</td>
<td></td>
</tr>
<tr>
<td>No. 4 and 3/8&quot; gradings</td>
<td></td>
<td>0.9-2.0</td>
<td></td>
</tr>
<tr>
<td>1/2&quot; and 3/4&quot; gradings</td>
<td></td>
<td>0.6-1.3</td>
<td></td>
</tr>
<tr>
<td>Smoothness</td>
<td>Special Provision and/or Caltrans Standard</td>
<td>As often as required 12-foot straight-edge, must grind, or PIₐ</td>
<td></td>
</tr>
<tr>
<td>Asphalt binder</td>
<td>Special Provision and/or Caltrans Standard</td>
<td>1 per 500 tons but not less than 1 per project</td>
<td>Caltrans Standard Section 92</td>
</tr>
<tr>
<td>Asphalt rubber binder viscosity @ 350 °F, centipoises</td>
<td>Special Provision and/or Caltrans Standard</td>
<td>Minimum of 1 per each blend or as directed by the Engineer --</td>
<td></td>
</tr>
<tr>
<td>Asphalt modifier</td>
<td>Special Provision and/or Caltrans Standard</td>
<td>1 per 23 tons but not less than 1 per project --</td>
<td></td>
</tr>
<tr>
<td>CRM</td>
<td>Special Provision and/or Caltrans Standard</td>
<td>1 per 225 tons but not less than 1 per project --</td>
<td></td>
</tr>
</tbody>
</table>

b "X" denotes the sieves the tests for the specified aggregate gradation.
c The tolerances must comply with the allowable tolerances
d Reports the average of 3 tests from a single split sample.

e California Test 304, Part 2.13.
h Determine the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A, and theoretical maximum specific gravity under California Test 309.
i Report only if the adjustment for the asphalt binder content TV is less than or equal to ±0.3 percent from the OBC value submitted on a Contractor Hot Mix Asphalt Design Data form.
j Voids in mineral aggregate for RHMA-G must be within this range.
No single test result may represent more than 750 tons or 1 day's production, whichever is less. For any single quality characteristic except smoothness, if two (2) consecutive acceptance test results do not comply with the specifications:

1. Stop production.
2. Take corrective action.
3. Take samples and split each sample into 4 parts in the Engineer's presence. Test 1 part for compliance with the specifications and submit 3 parts to the Engineer. The Engineer tests 1 part for compliance with the specifications and reserves and stores 2 parts.
4. Demonstrate compliance with the specifications before resuming production and placement.

Contractor shall hire a licensed third party certified laboratory to provide the Engineer all independent materials testing necessary to determine conformance with the requirements specified in the Special Provisions. Contractor is responsible for all costs of testing. Costs of material testing shall be distributed over entire bid items list.

11-1.21 Pay Factor for HMA

HMA shall be compacted between a minimum of 92 percent and a maximum of 96 percent of Maximum Theoretical Density (Rice Density) as determined by the American Society of Testing Materials (ASTM) D-2041 or Caltrans Test 309.

It has been recognized that improper compaction (or void content) is the most significant factor affecting mix performance. An increase in void content leads to a decrease in modules, fatigue life, and resistance to permanent deformation. These reduced factors equate to a great reduction in pavement life. A decrease in void content beyond an optimum range leads to flushing and reduced skid resistance. As such, all finished hot-mix asphalt pavements which do not conform to the specified relative compaction requirements will be paid for using the following pay factors:

<table>
<thead>
<tr>
<th>In-Place Relative Compaction</th>
<th>Pay Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>99% or higher (Unacceptable over-asphalted mix)</td>
<td>Remove and Replace</td>
</tr>
<tr>
<td>96.1 - 98.9% (Less Ideal)</td>
<td>95% Pay factor</td>
</tr>
<tr>
<td>92 - 96.0% (Ideal)</td>
<td>100% Pay factor</td>
</tr>
<tr>
<td>90 - 91.9% (Less Ideal)</td>
<td>95% Pay factor</td>
</tr>
<tr>
<td>89 - 89.9% (Marginal air voids)</td>
<td>87% Pay factor</td>
</tr>
<tr>
<td>88.9% or less (Unacceptable air voids)</td>
<td>Remove and Replace</td>
</tr>
</tbody>
</table>
Pavement density will be determined by comparing the average density of cores taken from the compacted pavement to the density of Maximum Theoretical Density as determined by the American Society of Testing Materials (ASTM) D-2041 or Caltrans Test 309.

a. **Lot Sizes:** The pavement will be accepted for density on a lot basis. A lot will consist of 750 tons or portions thereof.

b. **Laboratory Density:** Bituminous mixture for laboratory-compacted specimens will be sampled on a lot basis per Caltrans test 125. The lot size will be the same as indicated in paragraph (a). One sample shall be taken from each lot on a random basis. One sample (CT 309) shall be done per lot.

c. **Core Density:** Cores for determining the density of the compacted pavement will be taken on a lot basis, a minimum of three (3) cores per lot. The lot size shall be the same as indicated in paragraph (a). A minimum of three (3) cores shall be taken from each lot on a random basis. The cores shall be taken in accordance with these Special Provisions and as directed by the Engineers Representative. The density of each core shall be determined in accordance with ASTM D 2726-89 or Caltrans Test 308.

Core samples for determination of the density of completed pavements shall be obtained by the Contractor at his/her own expense, and no additional compensation will be allowed therefore. The core samples shall be four (4) or six (6) inches in diameter.

11-1.22 **Measurement and Payment**

HMA will be measured and paid for by the ton in the same manner specified for hot-mix asphalt in Section 39-6, "Payment," of the Caltrans Standard Specifications.

The contract price paid per ton of hot-mix asphalt shall include full compensation for traffic control, multiple mobilizations, furnishing all labor, materials, tack coat, tools, equipment and incidentals, and for doing all the work involved in placement and compaction of hot-mix asphalt as shown on the plans, as specified in Caltrans Standard Specifications and these Special Provisions, and as directed by the Engineer.

The contract price paid per square area of base-failure repairs shall include full compensation for dig-out of damaged areas, multiple move-ins and traffic control, furnishing all labor, materials, tack coat, tools, equipment and incidentals, and for doing all the work involved in preparing the area for the placement of hot-mix asphalt, as specified in Caltrans Standard Specifications and these Special Provisions, and as directed by the Engineer.

14-1.01 **Contractor Work Procedure**

Following field marking of precise limits by the Engineer, the Contractor shall comply with the steps listed below:

The Contractor shall perform the survey to preserve any existing survey monuments such as chiseled cross, survey iron pipe and etc. that may be present on the pavement, round corners and concrete flat work to be improved by this project. Monument preservation shall be done by or under the supervision of a Licensed Land Surveyor. Prior to construction work, a new record of survey shall be filed to San Joaquin County Surveyor's office, which copies shall be submitted to the Engineer.
1. The Contractor shall perform the survey to preserve any existing survey monuments such as chiseled cross, survey iron pipe and etc. that may be present on the pavement, round corners and concrete flat work to be improved by this project. Monument preservation shall be done by or under the supervision of a Licensed Land Surveyor. Prior to construction work, all applicable documentation shall be filed to San Joaquin County Surveyor’s office, which copies shall be submitted to the Engineer.

2. Upon notification by the City, the Contractor shall mark the location and notify Underground Service Alert, USA at (800) 227-2600 for utility markings immediately. Remove curb, gutter, sidewalk, AC pavement, curb-ramp and miscellaneous flat work as specified. The excavation shall be ten (10) inch minimum from the top of the curb-ramp grade.

3. Compact sub base and aggregate base.

4. Construct curb, gutter, curb-ramp and miscellaneous flat work. Sidewalks shall be at least six (6) inches thick. Replace asphalt-concrete as required.

5. All associated work and cleanup required to complete the project.

14-1.02 Concrete Curb, Gutter, Sidewalk, and Curb-Ramp

Use City of Stockton Standard Specifications numbered 25-32 with the following exception: Sand is to be replaced with Class 2 aggregate base, or approved equal.

Flow line for curb and gutter shall be established by the Contractor so that the water runoff would not puddle and can flow to the nearest catch-basin.

All concrete shall conform to minor concrete of Caltrans Standard Specification section 73. For sidewalks, the concrete shall contain two (2) pints of liquid dispersed lamp black per cubic yard except when adjacent concrete is of a different color or texture. In that case, it shall be matched in color and quality at no additional cost to the City. Score marks shall match those of existing adjacent walkways where applicable. Concrete shall be saw cut at score marks prior to removal. The color, quality and texture of the new sidewalk shall match the existing adjacent walk. The Contractor is required to replace any expansion joints removed during sidewalk repair.

Contractor shall accurately tie out and leave adequate marks in the field for his/her concrete crew to accurately stamp utility curb markings, e.g., W for water, S for sewer in sidewalk. The contractor shall accurately tie out property crosses in accordance to 5-1.15 “Preservation and Perpetuation of Existing Survey Monuments” of these Special Provisions and shall replace these marks once work is completed and shall file new survey records with the County Recorder’s Office. New concrete curb that is adjacent to catch basin shall be stamped with "NO DUMPING DRAINS TO DELTA" message with fish symbol per the attached drawing.

Curb-ramps shall be constructed as per direction by the Engineer and as specified in the Standard Specifications, Standard Plan, C.O.S. Standard Specification No.’s R64 and R65. The construction shall include saw cut, removal and replacement of the asphalt-concrete, curb, gutter, and sidewalk from BCR to ECR. Additional sidewalk may need to be removed outside the BCR/ECR to establish proper compliance with ADA standards, no extra payment will be made therefore. If the installation of dual ramps (two ramps in one corner) is warranted, it shall be considered as one curb-ramp and paid as one unit of bid item. The limit may be extended up to the nearest score mark as per the Engineer’s direction. The contractor is responsible for establishing the limits of the curb-ramps, no extra payment will be made for additional concrete removed if proper limits are not established.
The demolition of existing corner may require the removal of asphalt-concrete pavement up to five (5) feet from the lip of the gutter. No extra payment shall be made for this extra asphalt-concrete removal and replacement, or any tasks associated with this operation.

If the existing condition required, catch basins shall be reset at no additional cost. Field directive of the Engineer shall supersede all specifications and plans. Contractor shall be responsible for installing curb-ramp such that the runoff does not accumulate at the flow line.

Curb-ramps shall have a truncated dome panel(s) for a total width of four feet and length of three feet (4'x3'). The minimum size of each panel is 2’x3’. Up to two panels can be put together for a total width of four feet and length of three feet (4’x3’) dimension. The following list of panels are pre-qualified and approved by the City for this project.

1. Vitrified polymer composite, embedded type, manufactured by Armor Tile Tactile Systems;
2. Replaceable composite (wet-set) tiles, manufactured by ADA Solutions, Inc.;
3. Stainless steel cast-in-place manufactured by Advantage Tactile Systems; and,
4. Concrete base polymer, manufactured by Tekway Dome Tiles.

If the contractor wants to use other products, he/she shall request to the Engineer for “approved equal” product at least fifteen (15) days before commencement of the project. Proper documentation and samples must be submitted with the request. A sample installation may be required at no cost to the City. All truncated dome panels shall be cast-in-place and embedded in the concrete. The decision of the Engineer to approve or disapprove the product will be final.

The ramps shall be constructed as per the most current and updated (presently September 1, 2006) Caltrans Standard Plan RSP A88A, RSP A88B, and the Engineer’s direction. For the locations that do not have existing curb, gutter & sidewalk, truncated domes shall be installed with level pad surface concrete. The color of the detectable warning surface is preferred to be yellow conforming to Federal Standard 595B, Color number 33538, or similar. Other colors may be accepted, only if approved by the engineer.

The manufacturer shall provide a five-year material and labor warranty for prefabricated detectable warning surfaces guaranteeing removal and replacement in full, when there is a defect in the dome shape, color, fastness, sound-on-cane acoustic quality, resilience, or attachment. The warranty shall also include damage due to cracking, chipping and/or imperfect installation, including but not limited to, air pockets under the tiles. The warranty period shall begin on the date of acceptance of the project.

The contract price paid per unit (each) of curb-ramp shall include full compensation for multiple traffic control and mobilization; saw cutting, removal and replacement of existing PCC and AC curb, gutter, sidewalk, pavement, curb, ramp; furnishing all labor, materials, tools, equipment and incidentals; and for doing all the work involved in placing of truncated dome and concrete, finishing, brooming, curing, and protecting it for at least seven days after placement, as shown on the plans, as specified in Standard Specifications and these Special Provisions, and as directed by the Engineer.

14-1.03 Detectable Warning Surface

The Contractor shall retrofit existing concrete curb-ramps with detectable warning surface (truncated dome panel) in accordance with the construction details on plans, Caltrans Standard Specifications Section 73 and these Special Provision. The color of the detectable warning surface is preferred to be yellow conforming to Federal Standard 595, color number 33538, or similar. Other colors may be accepted, only if approved by the Engineer.

Truncated dome shall be cast-in-place and embedded in the concrete or surface mounted. If the Contractor wants to use other method, he/she shall request to the Engineer for “approved equal” method at least fifteen
(15) days before commencement of the project. The decision of the Engineer to approve or disapprove the method will be final.

The manufacturer shall provide a five-year material and labor warranty for prefabricated detectable warning surfaces guaranteeing removal and replacement in full, when there is a defect in the dome shape, color, fastness, sound-on-cane acoustic quality, resilience, or attachment. The warranty shall also include damage due to cracking, chipping and/or imperfect installation, including but not limited to, air pockets under the tiles. The warranty period shall begin on the date of acceptance of the project.

The contract unit price paid per unit (each) of truncated dome shall include full compensation for multiple traffic control and mobilization; saw cutting, furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in placing of truncated dome, finishing, brooming, curing, and protecting if for at least seven days after placement, as shown on the plans, as specified in Standard Specifications and these Special Provisions, and as directed by the Engineer.

14-1.04 Temporary Concrete Washout (Portable or on Trucks)

GENERAL

Summary
This work includes removal and disposal of concrete waste by furnishing, maintaining, and removing portable temporary concrete washouts.

SWPPP must describe and include the use of a portable temporary concrete washout as a water pollution control practice for waste management and materials pollution control.

Submittals
At least five (5) business days before concrete activities start, submit:

1. Name and location of off-site concrete waste disposal facility to receive concrete waste
2. If applicable, a copy of permit issued by RWQCB for off-site commercial disposal facility
3. Copy of license for off-site commercial disposal facility
4. Copy of permit issued by state or local agency having jurisdiction over disposal facility if disposal site is located outside of the State of California

Quality Control and Assurance
Retain and submit records of disposed concrete waste including:

1. Weight tickets
2. Delivery and removal of temporary concrete washouts

MATERIALS

Portable Temporary Concrete Washout
Portable temporary concrete washout must:

1. Be a commercially available watertight container.
2. Have sufficient capacity to contain all liquid and concrete waste generated by washout activities without seepage or spills.
3. Have at least 55-gallon capacity.
4. Be labeled for the exclusive use as a concrete waste and washout facility. Stencil "Concrete Waste material" in three-inch (3") high letters on white background. Top of stenciling must be 12 inches from the top of the container.
Concrete Washout Sign
Concrete washout sign must comply with the provisions in Section 12-3.06B, “Portable Signs” of the Caltrans Specifications and:

1. Be approved by the Engineer
2. Consist of base, framework, and sign panel
3. Be made of plywood
4. Be minimum 2’ x 4’ in size
5. Read "Concrete Washout" with three-inch (3”) high black letters on white background

CONSTRUCTION

Placement
Place portable temporary concrete washouts at job site:

1. Before concrete placement activities start
2. In the immediate area of concrete work as approved by the Engineer
3. No closer than 50 feet from storm drain inlets, open drainage facilities, ESAs, or watercourses
4. Away from construction traffic or public access areas

Install a concrete washout sign adjacent to each portable temporary concrete washout location.

Operation
Use portable temporary concrete washouts for:

1. Washout from concrete delivery trucks
2. Slurries containing Portland cement concrete or hot mix asphalt from saw cutting, coring, grinding, grooving, and hydro-concrete demolition
3. Concrete waste from mortar mixing stations

Relocate portable temporary concrete washouts as needed for concrete construction work.

Replace portable temporary concrete washouts when filled to capacity. Do not fill higher than 6 inches below rim.

Your WPCM must inspect portable temporary concrete washouts:

1. Daily if concrete work occurs daily
2. Weekly if concrete work does not occur daily

Maintenance
When relocating or transporting a portable temporary concrete washout within the job site, secure it to prevent spilling of concrete waste material. If any spilled material is observed, remove spilled material and place it into portable temporary concrete washout.

Removal
Dispose of concrete waste material at a facility specifically licensed to receive solid concrete waste, liquid concrete waste, or both. When portable temporary concrete washout is full, remove and dispose of concrete waste within 2 days.
Final Cleanup
Upon completion of the work, the Contractor shall remove all equipment, debris, and shall leave the site in a neat clean condition to the satisfaction of the Engineer. The Contractor shall clean the area of all construction related materials and sweep the entire project area including sidewalk and gutter thoroughly. All construction signs, cones, barricades, and conflicting markings shall be removed. A punch list will be provided to the Contractor within one (1) week from the date of request to the engineer. A final Notice of Completion will be issued once the Contractor completes the punch list items to the satisfaction of the Engineer.

Payment
The contract lump sum price paid for Curb Ramp includes full compensation for furnishing portable temporary washout and all the work involved in furnishing all labor, materials, tools, equipment, incidentals, maintenance, and removal of the portable temporary concrete washout, including removal and disposal of concrete waste, as specified in the Caltrans Specifications and these special provisions, and as directed by the Engineer.

SECTION 15  BLANK

SECTION 16  FEDERAL REQUIREMENTS

See next page.